

COUNCIL CORRESPONDENCE UPDATE TO FEBRUARY 16, 2022 (8:30 a.m.)

Correspondence

- (1) 6 submissions, February 4-10, 2022, regarding Proposed Relocation of Pickleball Courts**
- (2) February 10, 2022, regarding “More Light pollution at sewells westbank”**
- (3) 3 submissions, February 10-12, 2022, regarding Proposed Rezoning and Development Permit for Tantalus Gardens (Referred to the March 7, 2022 Public Hearing)**
- (4) February 10, 2022, regarding “Support for Coastal Marine Mgt Plan and Proposed Foreshore Development Permit Area” (Referred to the March 29, 2022 Public Hearing)**
- (5) February 12, 2022, regarding “Fwd: Art work at 19th St and the Seawall”**
- (6) G. Mclsaac, February 12, 2022, regarding “Traffic gridlock”**
- (7) February 13, 2022, regarding “WV Council, Feb. 14, 2022 - Item 5 Coastal Marine Management Plan, Item 6 Proposed Foreshore DPA, and Item 6.1 2022 Budget” (Referred to the March 29, 2022 Public Hearing)**
- (8) February 14, 2022, regarding “Fwd: Concerns about the Coastal Marine Management Plan - Agenda Item 5 on Feb 14 2022”**
- (9) J. Baxter, February 14, 2022, regarding “BYLAW TO SUPPORT LOCAL ECOMONY” (Referred to the March 29, 2022 Public Hearing)**
- (10) February 14, 2022, regarding Proposed 2022 Operating and Capital Budgets**
- (11) West Vancouver Chamber of Commerce, February 15, 2022, regarding Upcoming Events and Programs**
- (12) Committee and Board Meeting Minutes – Art Museum Advisory Committee meeting January 11, 2022; Arts & Culture Advisory Committee meeting January 13, 2022; and Design Review Committee meeting January 13, 2022**

Correspondence from Other Governments and Government Agencies

- (13) P. Weiler, M.P. (West Vancouver-Sunshine Coast-Sea to Sky Country), February 10, 2022, regarding “Letter from MP Patrick Weiler - Government of Canada launches a Call for Proposals for the Canada Service Corps”**

Responses to Correspondence

- (14) Director of Engineering & Transportation Services, February 14, 2022, response regarding “slowing down traffic at Irwin Park School and in Dundarave”**

From: [REDACTED] s. 22(1) >
Sent: Friday, February 4, 2022 3:18 PM
To: correspondence
Subject: Need for more Pickleball courts in North and especially West Vancouver.

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With community centre is closed or with less people able to play at one time we definitely need more outdoor Pickleball courts especially in west van.

[REDACTED] s. 22(1)
[REDACTED]
West Vancouver

Sent from my iPhone

From: [REDACTED] s. 22(1)
Sent: Friday, February 4, 2022 5:35 PM
To: correspondence
Cc: mbooth@westvancouver.com; camwong@westvancouver.ca;
cangamboli@westvancouver.ca; Craig Cameron; Peter Lambur; Sharon Thompson;
[REDACTED] s. 22(1); Bill Soprovich
Subject: Pickleball courts at Marine/29

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My family and friends are very disappointed with the possible closure of these Pickleball courts; as it is there are very few courts available and the interest in laying this sport is rising dramatically. We urge you to reconsider.

[REDACTED] s. 22(1)
[REDACTED]
West Vancouver

From: [REDACTED] s. 22(1)
Sent: Saturday, February 5, 2022 11:23 AM
To: correspondence
Subject: Pickleball court

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Please consider that Pickleball is a fast growing sport, we need your support to build suitable courts in your community in west Vancouver, north Vancouver Murdo Fraser courts are already saturated we appreciate your consideration and commitment to make your community a better plac for Pickleball thank you.

[REDACTED] s. 22(1) north Vancouver bc [REDACTED] s. 22(1)

From: s. 22(1)
Sent: Monday, February 7, 2022 9:03 PM
To: correspondence
Subject: Pickleball courts closure at 29th

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Mary Ann Booth-Mayor of West Vancouver
Councillors Cameron , Lambur, Soprovich, Gambioli, Thompson, and Wong,

My name is s. 22(1) and I have been a West Van resident for s. 22(1) years . I am writing in response to the decision to close the 29 th street pickleball courts on April 30th. I ha^s been a competitive tennis player my whole life and have had the fortunate experience of playing for s.22(1) teams.

Just before covid took the world by storm s.22(1) and was unable to play tennis. My friend told me about pickleball and I decided to try the sport. I was immediately hooked and was so pleased that it did not s.22(1). I have since made so many wonderful friends and have been able to keep fit and active even in the winter months as pickleball can be played all year round .

It has a huge advantage over tennis in that it is easier to learn , far more gentle on the body , takes up less room and is more social. I truly love tennis too but I see this sport as the wave of the future as it appeals to a much larger group of people of all ages and abilities.

s.22(1) was a very high level tennis player and played university tennis s.22(1) has completely switched over to the sport. He resides in s.22(1) which does not have a huge population but has hundreds of pickleball courts along with many beautiful indoor facilities. Their tennis courts are mostly empty now and very few people are playing any more.

It seems incredible in a community like West Vancouver that has a large percentage of retired people and is an affluent community and yet the only pickleball courts we have are now being shut down. I am aware of so many people in particular , seniors that will be impacted by this decision . We all desperately need recreation in these stressful times. Pickleball is such a great sport that is so accessible for everyone that I beg you to reconsider your decision to close the courts until a separate facility is open for use. Pickleball is definitely the sport of the future and I really hope it will get the recognition it deserves!

Thank you for your consideration,

s. 22(1)
West Vancouver s.22(1)
Sent from my iPhone

M 7 Feb 2022

Mary-Ann Booth, Mayor of West Vancouver

Councillors Cameron, Gambioli, Lambur, Soprovich, Thompson, Wong

As a member of the North Shore Pickleball Club, I strongly urge you to reconsider your decision to close the pickleball courts at 29th Street as of April 30th, 2022.

West Vancouver is already underserved for pickleball with many players already making use of crowded courts in North Vancouver. We had all hoped for an increase in the number of courts in West Vancouver. Instead, shutting down the only 3 pickleball courts in West Vancouver BEFORE alternate courts are operational is a devastating situation for ALL North Shore pickleball players.

There is no Plan B and we fear the entire 2022 Spring/Summer/Fall pickleball season is in jeopardy. Not only will you be displacing hundreds of passionate pickleball players (70% over the age of 60) who socially engage in a physical activity in an outdoor setting, you will be unfairly overloading the other already extremely busy facilities in North Vancouver.

We strongly urge you to hold off on shutting down the 29th Street courts until at least an equivalent facility is OPERATIONAL.

Names: [Redacted]
Address: [Redacted]

North Van, BC
[Redacted]

s. 22(1)

s. 22(1)

From: [REDACTED] s. 22(1)
Sent: Thursday, February 10, 2022 11:08 AM
To: correspondence
Cc: Marcus Wong; Craig Cameron; Nora Gambioli; bsopovich@westvancouver.ca; Sharon Thompson; Mary-Ann Booth; Peter Lambur; [REDACTED] s. 22(1)
Subject: pickleball courts at 29th

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to the Mayor and Council members of West Vancouver

I have been a resident of West Vancouver for over 20 years.

I adopted the sport of pickleball around five years ago. In the dry weather I started playing at 29th street on weekday mornings with a group of seniors. At the time there were no dedicated pickleball courts we used the two tennis courts with added lines for pickleball. The sport has become very popular with many West Van residents who played other racquet sports but are unable to due to age related health issues especially with arthritic joints. These West Van seniors have always been active and wish to remain so. Pickleball became so popular that for many years the district was lobied for a location with dedicated pickleball courts. your council chose the 29th street location.

Our tax dollars paid for the three permanent courts to be build.

Weekday mornings, West Van seniors meet and play. The sport itself is noisy but at no time are we shouting and being distrubtive as the neighbours claim. We have made many local social connections and our friendships have spilled over into meets at

local coffee shops and restaurants.

During the last two years of covid this outdoor activity has been a lifesaver for our physical and mental well being. We feel safer in an outdoor environment. During this covid time I have been playing on the two tennis courts marked with pickleball lines.

One at Benbow, the other at Burkehill. These are not adequate as an alternative place to play. They are busy with tennis players and also private individuals giving tennis lessons (for a fee).

There are signs on the courts forbidding anything but recreational play but the district doesn't seem to enforce this.

I implore Mayor and council to reconsider the closing of the 29th courts until another site is in place. You can maintain the restricted opening to 9 to 6 pm that you have in place. The partying that the neighbours complain about is not happening during those hours.

It is not fair that more than 150 West Van taxpayers who want to enjoy pickleball (our exercise) are being ignored in favor of the residents of 29th.

I am very upset that our tax dollars were spent on the 29th courts.

What a waste of money to move them. Why were these issues addressed before the courts were installed. The game is not new.

The noise it generates is well documented. Why wasn't a better location chosen to begin with.

I, along with the other players would like you to reconsider your decision and keep the 29th courts open, with restricted hours until a new location is operational.

Sincerely

s. 22(1)



From: [REDACTED] s. 22(1)
Sent: Thursday, February 10, 2022 12:39 AM
To: correspondence
Subject: More Light pollution at sewells westbank
Attachments: 20220209_220839.jpg; 20220113_061123.jpg; 20220209_122408.jpg

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What is happening can best be described as Insane

Newly installed Lights that are supposed to light up only the stairs and sidewalks on Nelson ave are instead sending bright white light in every direction 360 degrees

Into drivers driver's eyes

Into pedestrians eyes

Which is obviously dangerous

Also Into all the neighbors apartments including 100 ft up

And the flood lights which are supposed to light up only the trees are aimed directly [REDACTED] s. 22(1) next door at libby lodge including 100 ft up

Please direct someone to fix the obvious problem of massive light pollution coming from this developer

We should not have to be writing to you on this obvious mistake , it should have been seen in the design stage but now IT NEEDS TO BE FIXED

Also this is a construction site and all unnecessary lights should be turned off by 5 30 PM or ticketed

[REDACTED] s. 22(1) west Vancouver





From: [REDACTED] s. 22(1)
Sent: Thursday, February 10, 2022 4:27 PM
To: correspondence
Subject: Support for Tantalus Gardens

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Hello Council,

I hope you are all well.

I'm a North Vancouver resident, but I frequent Horseshoe Bay very regularly [REDACTED] s. 22(1).

In 2019, I showed vocal support for Tantalus Gardens and attended several (and even spoke at) councils meetings.

I think it's a tragedy the original Tantalus design was defeated given the broad support of most local residents, broad support from City staff and alignment with the needs of the community to improve density in a way that deeply respected the neighbors.

Now that Tantalus is up for consideration again, I wanted to voice my support and implore council to swiftly approve the development.

Thank you.

Regards,

[REDACTED] s. 22(1)

North Vancouver, BC

[REDACTED] s. 22(1)

From: [REDACTED] s. 22(1)
Sent: Saturday, February 12, 2022 3:05 PM
To: correspondence
Subject: Tantalus Garden

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To whom it may concern

I am in favour of the Tantalus Gardens housing development going ahead.

I was in favour of first the design but this is even more sensitive toward the community spirit.

It will fit in well with the future plans for Horseshoe Bay.

[REDACTED] s. 22(1)

[REDACTED] year West Vancouver resident

[REDACTED] s. 22(1)

West Vancouver BC

[REDACTED] s. 22(1)

[REDACTED] s. 22(1)

From: [REDACTED] s.22(1)
Sent: Saturday, February 12, 2022 5:17 PM
To: correspondence
Subject: Tantalus Gardens Horseshoe Bay
Attachments: tantalus gardens.rtf

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s.22(1)

, West Vancouver, BC,

s.22(1)

To whom it may concern

My Name is s.22(1) and I have owned s.22(1). I have followed the progress of the Official Community Plan, Tantalus Gardens and the Horseshoe Bay Local Area Plan. It seems that the community has asked for alternative housing and that Tantalus Gardens is just that. I did support the original 14-home version of Tantalus Gardens and support this 10-home version as well.

For businesses in the Bay, the option of secondary suites in the basements of the 10 new homes of Tantalus Gardens would be amazing! Being within walking distance to the shops in the Bay, the basements suites could be beneficial for a number of reasons, but having them as potential homes for the work force in the Bay would be incredibly helpful. We struggle with staffing and if even one or two of our main staff could live closer to their work place it would make it easier on everybody. It will always be a struggle for housing in our community until we start being more creative and bring more housing options forward.

I understand that there is some concern about the loss of Public Assembly space. To some there is an argument that with all the new people moving into the Sewell's Sanctuary there needs to be more places for weddings and gatherings in general. Part of the Sewell's Sanctuary includes a large amenity room above the boathouse. I believe it is over 2,500sf on the water. I feel that that space will be a much more desirable space for weddings and other gatherings. Of course there is still the Gleneagles Rec Centre and Clubhouse that are still incredibly underutilized.

Finally, I know there is some sentimental value to the church, the beams and stained glass in the sanctuary in particular. I know Peter has some creative ideas to deconstruct the buildings on the property and re purpose them. I look forward to seeing what he plans on building with that material in the future.

Thank you very much

s.22(1)

From: [REDACTED] s. 22(1)
Sent: Thursday, February 10, 2022 5:05 PM
To: correspondence
Subject: Support for Coastal Marine Mgt Plan and Proposed Foreshore Development Permit Area

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February 10, 2022

Dear Mayor and Council,

At your February 14, 2022 meeting, I urge you to approve the Coastal Coastal Marine Management Plan and the Proposed Foreshore Development Permit Area proposed by the Coastal Marine Management Plan Working Group. The Coastal Marine Plan should also be included in the WV budget discussions now underway.

Climate change is real, and recent devastating storms have wreaked havoc on our foreshore. The recommendations proposed by the Working Group are thoughtful, thorough, based on fact, and represent positive action toward mitigating climate uncertainty in the future.

The Marine Management Plan set a framework for the management, protection, and enhancement of our coastal areas and recommends:

- Adaptive and dynamic measures to manage erosion, coastal flooding, intertidal area change, and restoring natural habitats.
- Management and protection of our built Infrastructure, parks and natural assets to be resilient to coastal hazards.
- Establishment and clear communication to property owners with the responsibility for coastal management on private property.

Likewise, the Proposed Foreshore Development Permit Area objectives and recommendations are reasoned, comprehensive, and represent positive, responsible action.

Thank you for all of your work, and for approving these important proposals.

[REDACTED] s. 22(1)
[REDACTED]
West Vancouver, BC [REDACTED] s. 22(1)
[REDACTED]

From: [REDACTED] s. 22(1)
Sent: Saturday, February 12, 2022 4:33 PM
To: correspondence
Subject: Fwd: Art work at 19th St and the Seawall

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From: [REDACTED] s. 22(1)
To: "mayorandcouncil" <mayorandcouncil@westvancouver.ca>
Sent: Saturday, February 12, 2022 3:11:11 PM
Subject: Art work at 19th St and the Seawall

Dear Mayor and Council,

I was surprised, and disappointed in the choice of artwork adorning the Seawall at 19th St.

It features a description in Farsi, but more so, blocks the view of the stream, which is the attraction to that particular spot.

To cover up this view, with a plexiglass tribute to the Persian community, strikes me as odd, and cannot understand why one group, regardless of ethnicity, is allowed to use public lands to congratulate themselves.

I would like to see this artwork removed, and maybe if the Persian community wants to make a donation to the community at large, they could see this artwork at thier own community centre or Park Royal Mall.

At the very least, we are questioning why this piece of artwork was installed with absolutely no public consultation that I'm aware of.

Regards,

[REDACTED] s. 22(1)
[REDACTED]
West Vancouver, BC

[REDACTED] s. 22(1)

From: Graham McIsaac [REDACTED] s. 22(1)
Sent: Saturday, February 12, 2022 8:00 PM
To: Mary-Ann Booth; correspondence; Peter Lambur; Marcus Wong; Sharon Thompson; Bill Soprovich; Nora Gambioli; Craig Cameron
Cc: [REDACTED] s. 22(1)
Subject: Traffic gridlock

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Dear Mary- Anne and Council,

Tonight February 12 I had to abandon my car around 5:45PM as I could not get to my home. It had taken me 45 minutes to get from the British Properties to within two blocks of my home. The traffic remains gridlocked in all directions at 8PM and if I had a medical emergency no ambulance would be able to reach my house.

At 5:45PM traffic was gridlocked on upper levels highway from second narrows bridge west to the Cypress Bowl turn off. Traffic was gridlocked from the British Properties south on Taylor Way to Marine Drive. Traffic at 12th and Esquimalt was and still is gridlocked from at least 15th street east to Taylor Way. Same for Fulton Avenue. Traffic on 15th street was gridlocked North and a South from British Properties to Marine Drive.

This is happening more frequently- an hour closure of Lionsgate Bridge was apparently the cause but really increasing traffic volumes on an inadequate road and bridge infrastructure are the real reason and it seems there are no plans to do anything about this.

And rapid transit will NOT help solve this. The vehicles today were people travelling to Cypress Bowl, Whistler, Squamish, Ferries etc. Rapid Transit is not a solution for their journeys. In fact I spent time at our gridlocked intersection and spoke to those going nowhere. All confirmed that rapid transit would be of no use to their current journey and nor was the current bus system.

It should be clear to anyone that we desperately need additional traffic lanes on and off North Shore. (whether added to existing bridges or a third crossing). We have added ZERO traffic lanes to or from the North Shore since the 1950's despite significant increases in population on the North Shore and in the Lower Mainland. Since the 1950's many new Bridges have been built elsewhere in the Lower Mainland but nothing for the North Shore which has become a choke point for access to Vancouver Island, Sunshine Coast, Squamish, Whistler as well as to Provincial Parks (Cypress in particular).

When I have raised this issue (additional traffic lanes) I have been told by some of our politicians that extra traffic lanes to and from North Shore will never happen. That is correct if there is no political will from our elected leaders to make it happen. We need leaders who will lead on important issues such as this. Will any of you?

Ps it is now 20:00 and traffic remains gridlocked outside my house which I cannot leave by car in any direction. Already abandoned one car two blocks from our home at 17:45.





Graham McIsaac

s. 22(1)

West Vancouver BC

s. 22(1)

Canada

From: [REDACTED] s. 22(1)
Sent: Sunday, February 13, 2022 11:08 AM
To: Bill Soprovich; Craig Cameron; Marcus Wong; Mary-Ann Booth; correspondence; Nora Gambioli; Peter Lambur; Sharon Thompson
Cc: [REDACTED] s. 22(1)
Subject: WV Council, Feb. 14, 2022 - Item 5 Coastal Marine Management Plan, Item 6 Proposed Foreshore DPA, and Item 6.1 2022 Budget

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To Mayor and Council:

Item 5: Coastal Marine Management Plan and Item 6: Proposed Foreshore Development Permit Plan and Item 6.1: Proposed 2022 Operating and Capital Budgets

Climate change is real and it has literally hit our coastline with increased intensity year after year. We have all seen the bladders and access bridges around old waterfront arts facilities in an attempt to 'save' them from flood damage. And the recent storm surges has continued to literally batter our seawall and piers to an extent rarely seen before. The forecast is that these storms will only intensify.

The message is clear – we are in an emergency situation and West Vancouver must do something positive now to manage the impact on our shores. We must enhance our coastal ecosystems, protect built infrastructure and parks, and manage the public-private interface. We need to adapt to a forecasted sea level rise of over half a metre within 30 years.

To meet this challenge, District endorsed a **WV Coastal Marine Management Plan Working Group** over three years ago – and tonight, I strongly support Council's approval of this Plan. I also support this Plan's full integration into District plans and the budget process for 2022 and onward. Literally, what we pay for now will be far less than what we would pay for if we do nothing today.

I would like to acknowledge the immense effort by this volunteer working group, District Staff and Councillor Soprovich for crafting an excellent Coastal Marine Management Plan. WV is privileged to have many committed and talented residents available to volunteer with our very capable staff.

Tonight, WV Council is also considering a **Proposed Foreshore Development Permit Area (DPA)** to manage coastal flooding and foreshore protection. This DPA will increase resiliency of WV's coastal properties and infrastructure, manage the risk and impacts of coastal hazards, guide development to preserve and support coastal ecosystems, and establish area-specific flood construction levels and setbacks. I support a Council decision to move this DPA ahead with changes to related Bylaws and implementation of these guidelines.

Of further note is our District Finance team who lead a responsible strategy to recognize the value of our environment from inclusion of our Natural Capital Assets to the proposed **Environmental Levy**. As the **2022 WV Budget** evolves, I urge all residents to educate yourselves on the Climate Emergency -- what it means for our future, and why it is a priority now -- and support the recommended Environmental Levy. Climate Change is not going away, in fact, the effects in West Vancouver are accelerating – we are in an Emergency that we cannot ignore and one that we must respond to very quickly. If we don't pay for it now, we will pay for it later. West Vancouver needs to do their part....not just when we will be forced to. Tonight, I support Council decision to approve the 1% Environmental Levy.

In closing, I would like to encourage WV Council to continue to educate yourselves on our Climate Emergency, to focus on what you can do to ensure our very survival, and to intentionally cast your vote for a healthy environment - our very lives depend on it. The need to take positive action to build resilient communities is imperative – and it will take all of us working together, it will take skilled, educated and committed residents and staff and Council, and it will take financial support. Our environmental action today will be our environmental legacy tomorrow.

Thank you,

s. 22(1)

WV

From: [REDACTED] s. 22(1)
Sent: Monday, February 14, 2022 10:38 AM
To: correspondence
Subject: Fwd: Concerns about the Coastal Marine Management Plan - Agenda Item 5 on Feb 14 2022
Attachments: Surf Smelt study by Fisheries Canada 2002.pdf

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----- Forwarded message -----

From: [REDACTED] s. 22(1)
Date: Mon, Feb 14, 2022 at 8:52 AM
Subject: Concerns about the Coastal Marine Management Plan - Agenda Item 5 on Feb 14 2022
To: MayorandCouncil <mayorandcouncil@westvancouver.ca>, Mary-Ann Booth <mbooth@westvancouver.ca>, Sharon Thompson <sthompson@westvancouver.ca>, Bill Soprovich <bsoprovich@westvancouver.ca>, Peter Lambur <plambur@westvancouver.ca>, Marcus Wong <mwong@westvancouver.ca>, Craig Cameron <ccameron@westvancouver.ca>, Nora Gambioli <ngambioli@westvancouver.ca>

I have reviewed the Coastal Marine Management Plan and am concerned about a significant gap in the report regarding the ongoing threat to surf smelt and the marine food chain by a relatively small number of surf smelt fishers. Surf smelt naturally reside close to shore off West Vancouver and spawn on the gravel beds of "Navy Jack" gravel named after West Vancouver's first colonial settler. Historically surf smelt populations were particularly high off Ambleside to Dundarave. Not surprisingly their numbers have dramatically fallen over the last one hundred years.

Surf smelt are important to the food chain because they serve an important role in supporting marine mammals and shore birds. Otters, harbour seals and sea lions all feed off the surf smelt as well as Pacific Blue Herons, cormorants and other wild birds. The more surf smelt there are, then the more marine mammals and birds can be supported, and don't worry about fueling too high a population of marine mammals because if that happens, the Orcas will come in and bring those numbers down. The mammalian food chain relies on surf smelt or salmon fry. If surf smelt are abundant then there is less demand on the salmon fry which helps them.

So what is the threat? Surf smelt fishers usually fish early in the morning so they are not visible to most Seawall users but the nets they cast can literally strip the shoreline of smelt over time. This is not a commercial fishery so federal Fisheries have little interest in it (see report attached). Other than crude restrictions on fishing times there are no volume restrictions on the catch. The fishers can take as much as they want every weekend except during spawning season so practically speaking they will harvest until the site is depleted, go away until the stocks can rebuild again, at which time the fishers will come back to deplete the stocks again. This form of "management" will keep the stocks in a depleted state much of the time and a reduced state all of the time. Therefore the wild birds and marine mammals have less to feed on.

Right now residents of West Vancouver derive great pleasure from viewing wildlife off the Seawall between Ambleside and Dundarave. Whenever you see a large group of people stopped and looking towards the water you are sure to see otters, seals or other marine mammals frolicking, sometimes right on the shoreline. **If we maintain a rich feeding**

ground of surf smelt, this will increase the marine mammals, wild birds and wildlife viewing opportunities. We have made great progress in reducing pollution on our shores but we need to protect the bottom of the food chain from the needless human predation that is going on right now off Ambleside to Dundarave. A relative handful of fishers should not be allowed to deplete the feeding grounds that the birds and mammals rely on.

I am asking Council to use the powers it has with its foreshore lease to restrict the access of fishers along our waterfront. Staff have suggested to me that it is federal jurisdiction but I disagree. The feds can issue licences to fish but those licences do not allow licensees to fish anywhere they want. The municipality controls the foreshore through a lease and therefore can restrict access and uses of the foreshore such as by banning fishing with nets.

This report does not address this at all so I am asking Council to direct staff to take action towards preventing access by non-native net fishers over the shoreline that we control. The time to do this is now. Please do not delay this any longer. **If the Coastal Marine Management Plan is the only step you take then you will have done nothing meaningful to protect the surf smelt.** Staff need to be directed to do this or it will not happen. I believe this community supports the political direction of ensuring these shores become what they once were, rich feeding grounds for the native birds and mammals that have lived here for millenia.

As for the science around this, the last study done specifically on surf smelt by Fisheries and Ocean Canada said in 2002 the following: "It is unclear whether current harvest levels are sustainable in British Columbia since there has been little research and no formal assessment to estimate current catch or spawning biomass." The report goes on to say that we do know that numbers are way down from historic levels. The commercial catches in the early 1900's exceeded 200 mt but now rarely exceeds 10mt. The report confirms that surf smelt are "an important prey item for many marine fish, birds and mammals...". I am attaching the report for your review as it is the best scientific assessment of the state of surf smelt in BC.

Please make a motion to direct staff to prepare a Bylaw to prohibit net fishing on the foreshore areas being leased by the municipality except when done by Squamish, Tsleil Waututh or Musqueam peoples in the exercise of their indigenous rights.

We are a seaside community living next to nature and proud of it. Let's protect the rich feeding grounds of surf smelt immediately off our shore so as to best protect that natural ecosystem and the wildlife that rely on it. The one suggestion in the CMMP of enhancing spawning grounds is not good enough. That is like promising to plant trees after you cut them all down. The best way to save the surf smelt is to stop the net fishers from stripping the shoreline of them.

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West Vancouver, BC

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Review of Surf Smelt (*Hypomesus pretiosus*) biology and fisheries, with suggested management options for British Columbia

Document de recherche 2002/115

Ne pas citer sans
autorisation des auteurs *

Examen de la biologie et des pêches de l'éperlan argenté (*Hypomesus pretiosus*) et options de gestion suggérées pour la Colombie-Britannique

T.W. Therriault, A.N. McDiarmid, W. Wulff, D.E. Hay

Fisheries and Oceans Canada
Pacific Biological Station
3190 Hammond Bay Road
Nanaimo, B.C. V9T 6N7

* This series documents the scientific basis for the evaluation of fisheries resources in Canada. As such, it addresses the issues of the day in the time frames required and the documents it contains are not intended as definitive statements on the subjects addressed but rather as progress reports on ongoing investigations.

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Abstract

Surf smelt (*Hypomesus pretiosus*) occur throughout temperate coastal regions of the northeast Pacific. Despite small local fisheries operating for over a century, primarily in Washington State and British Columbia, notably Burrard Inlet, San Juan Inlet and Prince Rupert Harbour, the distribution and abundance of this species has been poorly described. During the early 1900s most smelt were taken in small, commercial fisheries for local consumption. The commercial fishery peaked in 1904 with a coastwide catch of over 230mt. Since then the commercial fishery has largely disappeared and is being replaced by a growing recreational fishery that peaks during spring and summer months at surf smelt spawning beaches. This rapidly expanding recreational fishery has raised concerns that the fishery might not be sustainable, especially if an increased proportion of the recreation catch is intended for commercial markets. Therefore, we provide a precautionary management strategy for surf smelt in British Columbia including recommendations.

Résumé

L'éperlan argenté (*Hypomesus pretiosus*) est présent dans l'ensemble des régions côtières tempérées du Pacifique nord-est. On ignore largement la répartition et l'abondance de cette espèce malgré le fait qu'elle fasse l'objet de petites pêches locales depuis plus d'un siècle, surtout dans l'État de Washington et en Colombie-Britannique (notamment dans les bras de mer Burrard et San Juan et le havre de Prince Rupert). Au début des années 1900, on capturait surtout l'éperlan pour la consommation locale dans le cadre de petites pêches commerciales, lesquelles ont atteint leur apogée en 1904 lorsque les captures ont dépassé 230 tm pour l'ensemble de la côte. Depuis, la pêche commerciale a largement disparu, et une pêche récréative qui se pratique surtout les mois d'été et d'automne sur des plages de fraie de l'éperlan argenté gagne en popularité. L'expansion rapide de cette pêche récréative soulève des préoccupations selon lesquelles elle ne serait pas durable, surtout si une fraction accrue des prises récréatives est destinée à la vente commerciale. Par conséquent, nous proposons une stratégie prudente et des recommandations pour la gestion de l'éperlan argenté de la Colombie-Britannique.

Introduction

Surf smelt are small, silvery, pelagic schooling fish belonging to the family Osmeridae. They are an important prey item for many marine fish, birds, and mammals but little research has focused on their basic biology or distribution. Surf smelt occur throughout coastal regions of the eastern Pacific Ocean from Prince William Sound, Alaska to Monterey Bay, California but little is known of their distribution in British Columbia. Penttila (1978; 2001) surveyed bays and inlets of northern Washington State and Levy (1985) conducted similar surveys in Burrard Inlet, British Columbia to better understand their regional distribution. No biological or distribution data for surf smelt is available for regions of British Columbia outside of Burrard Inlet despite active recreational fisheries in the Lower Mainland, San Juan Inlet and Prince Rupert Harbour and a minor localized, commercial fishery in Burrard Inlet. Both recreational and commercial fisheries coincide with spawning during spring and summer at spawning beaches. The largest commercial catches occurred during the early 1900s with catches exceeding 200mt. Since then the fishery, operating with a Category Z8 licence or a vessel based Schedule II licence, has steadily declined such that current commercial catches rarely exceed 10mt.

It is unclear whether current harvest levels are sustainable in British Columbia since there has been little research and no formal assessment to estimate current catch or spawning biomass. Wildermuth (1993) estimated catch and biomass for a small research area in Washington State, but data for Canadian beaches is lacking. The purpose of this report is to provide managers with a source of information for surf smelt, with special reference to British Columbia populations. We review surf smelt biology and the history of commercial and recreational fisheries for this species. The policy governing new and developing fisheries is to proceed through three developmental stages (Perry et al. 1999). This report represents “Phase 0”: a review of the available biological and fisheries information on the target species (or similar species elsewhere) using a variety of sources. Thus, the three main objectives of this report are:

1. review relevant biological and fisheries data for surf smelt, with emphasis on populations in British Columbia and Washington State;
2. identify data deficiencies relevant to management needs, especially in British Columbia; and
3. recommend alternate management strategies based on available biological and fisheries data.

A Review of Surf Smelt Biology

Surf smelt (*Hypomesus pretiosus*) belong to the family Osmeridae, a small family distributed throughout cold and temperate waters of the Northern hemisphere whose center of origin is thought to be the eastern Pacific Ocean (McAllister 1963). Osmerids are small, soft-rayed fishes with an adipose fin living in marine, estuarine, and freshwater habitats. The Osmeridae is composed of 6 genera and 15 species with 7 species found in British Columbia: whitebait smelt, *Allosmerus elongatus*; capelin,

Mallotus villosus; rainbow smelt, *Osmerus mordax*; night smelt, *Spirinchus starksi*; longfin smelt, *S. thaleichthys*; elachon, *Thaleichthys pacificus*; and surf smelt. Surf smelt are beach spawning fish with cycloid scales reaching a maximum length of 22.2cm in British Columbia, although they are slightly larger in California, 30.5cm (Hart 1973). Diagnostic characteristics include a small mouth, presence of a dark bar down either side of the body, a small, curved adipose fin, an incomplete lateral line, and the insertion point of the pelvic fin beneath or behind the dorsal fin (Hart 1973). This species displays sexual dimorphism. Males have numerous nuptial tubercles on the sides, head and fins, a brown back and yellowish belly while females have no tubercles, a bright green back, and white belly (Schaefer 1936; Hart and McHugh 1944). Kilambi (1965) hypothesized that coastal ocean and estuarine populations from Puget Sound were genetically distinct based on glacial movements and resultant division and distribution of osmerid populations over 13 000 years ago. Spawning time, parasite incidence, meristic and morphological characteristics, and serological analyses each support this hypothesis (Kilambi et al. 1965; Kilambi and DeLacy 1967).

Fertilization occurs immediately after spawning. The first stage of incubation is marked by the rupture and folding back of the outer egg membrane. This fold forms an extremely adhesive 'peduncle' that attaches to the beach substrate. Adherence of only the peduncle is a unique characteristic of surf smelt eggs that make them easily distinguishable from other demersal fish eggs that are adhesive all around. Subsequent wave action buries the eggs to a depth between 2–15cm in the upper tidal zone. Development can take up to 56 days depending on spawn timing and water and air temperatures (Penttila 1982). Key developmental stages and their timing are summarized for summer spawned individuals. After 7 hours rudimentary organs become visible. Between 92 and 97 hours embryo length has increased such that it wraps once around the yolk. By 145 hours eyes of the larvae are visible. At 8 days movement may be detected with agitation. Around 10 days eggs detach from beach substrates and hatching starts. Most larvae hatch after 11 days. Newly hatched planktonic larvae are approximately 3mm long and active. They have a small yolk sac and a transparent continuous medial fin that stretches from the back of the head to the anal fin. Pelvic and pectoral fins are undeveloped at this stage. Some evidence exists to suggest larvae might move into estuaries during this stage to complete their development (Yoklavich et al. 1991). Larval and juvenile growth is fairly rapid, attaining lengths between 45 and 100mm by late fall or early winter when scales begin to develop (Loosanoff 1937). By late winter all scales have developed, but remain small.

Scales are generally used to estimate length-at-age of smelts from 1–5 years (Penttila 1978). Two year old smelt dominate all populations studied to date in both Washington State and British Columbia, with average standard lengths of 138mm for males and 146mm for females. No other aging structures (i.e., otoliths) have been validated, and to our knowledge, surf smelt have not been aged in British Columbia.

Surf smelt feed on a variety of zoobenthos and zooplankton (i.e., amphipods, copepods, crab larvae, shrimp, aquatic insects, worms, fish eggs and larvae, and jellyfish). Surf smelt are important prey for larger predatory fish (i.e., salmon), marine

mammals (i.e., harbour seals), and birds (i.e., mallards, blue herons and bald eagles) (Penttila 1995).

Surf smelt are a coastal marine species distributed from Prince William Sound, Alaska to Long Beach, California. Adults are nearshore pelagic fishes and it is hypothesized that juveniles remain nearshore as well. The failures of offshore acoustic and ichthyoplankton surveys to collect or report surf smelt at any age, including juveniles, supports this hypothesis. Data on the distribution of surf smelt in British Columbia is sparse. Limited observations have been made during spawning events (Loosanoff 1937) with Fishery Inspector reports supplementing observations (i.e., Mowat 1890). Historical reports suggest surf smelt were abundant and could be easily caught nearly year-round in the southern part of their range. This includes the Strait of Georgia and Whiterock, with additional reports from Rivers and Smith Inlets and near the mouth of the Skeena River (Hart and McHugh 1944). Other spawning sites in British Columbia included beaches between Port San Juan and Point no Point on the West Coast of Vancouver Island (H. Dunn, pers. comm.) and Prince Rupert Harbour from inside Digby Island to the mainland (K. Kristmanson, pers. comm.). McAllister (1963) examined individuals from Vancouver, Saturna Island, Goose Island, and Barkley Sound (Vancouver Island). In Washington State, detailed shoreline surveys have revealed many previously unknown surf smelt spawning locations over the last 25 years (i.e., Penttila 1978; 1982; 1995; 1997; 2001; Moulton and Penttila 2001). The initiation of systematic surveys in British Columbia might reveal previously unknown surf smelt spawning beaches. Currently, due primarily to logistical constraints, most surf smelt data for British Columbia come from popular fishing beaches of the Lower Mainland (Hart and McHugh 1944; Levy 1985). It is probable that more than one genetic population of surf smelt is found in British Columbia given the large geographical range of this species. Molecular markers could be developed to test this hypothesis.

Populations have an approximately equal sex ratio (i.e., 1:1), except when spawning. During spawning (see below) a single female may be pursued inshore by up to five males resulting in higher captures of males (maximum 9.5:1, average 8:1) in both recreational and commercial fisheries (Schaefer 1936; Loosanoff 1937; Penttila 1978; Levy 1985). In Puget Sound, surf smelt spawn throughout the year with heaviest spawning between June and September (Thompson et al. 1936; Schaefer 1936; Loosanoff 1937; Penttila 1978). Winter spawning populations also occur throughout Juan de Fuca (Hart 1973; Penttila 1978) with several locations supporting both winter and summer spawns. In contrast, surf smelt of the Lower Mainland spawn only during the summer months from early May until the end of September (Hart and McHugh 1944; Levy 1985). The San Juan population in southern British Columbia also spawn during summer but specific spawning times are not available (H. Dunn, pers. comm.). Evidence from Fishery Officers and commercial fishermen indicate the Prince Rupert population spawns during the spring, between mid-February and April. Winter spawning does not occur on beaches exposed to open ocean surf (Hart and McHugh 1944).

Spawning activity has been observed and described extensively (Schaefer 1936; Thompson et al. 1936; Loosanoff 1937; Yap-Chiongco 1941). Spawning time is affected by tidal and lunar cycles with marked increases in the number of spawners during high evening tides during full moons (Levy 1985). During the spawning season, surf smelt concentrate just offshore, adjacent to spawning beaches of fine to coarse gravel (1–7mm in diameter) (Schaefer 1936; Penttila 1978; 2001). Approximately one to two hours prior to high tide, single ripe females begin swimming onshore (0–5cm depths). Several males pursue each female and position themselves parallel to and slightly behind the female. Nuptial tubercles on the male help maintain its position relative to the female (Thompson et al. 1936). Milt and a small number of eggs are released, at which time the female, followed by the males, rejoins deeper water schools adjacent to the spawning beach. This process takes less than 20 seconds with each female repeating the process over several days until all eggs have been spent. It is unknown whether males spawn once or several times. Between 1440 and 29 180 eggs (each 1.0–1.2mm in diameter) are released by a single female during the spawning period (Schaefer 1936). Spawn densities tend to be higher on beaches with afternoon shade and freshwater seepage, generally on or near the mouth of a river (Penttila 2001). Surf smelt eggs have moderate resilience to prolonged periods of exposure or warm temperatures (Loosanoff 1937), but overexposure will desiccate and kill developing embryos as will mechanical compression (i.e., walking on the spawning beach). Eggs that are kept moist and cool during low tides and/or high temperatures and have increased water circulation around developing embryos have improved egg to larvae survival rates (D. Penttila, pers. comm.). Some Burrard Inlet beaches (e.g., Kitsilano, Jericho) have little afternoon shade and this may increase egg and larval mortality rates.

Schaefer (1936) reports the only data on spawning frequency and fecundity for surf smelt. Multiple modes of egg maturity (immature, intermediate and maturing) were observed and it was suggested that smelt might spawn more than once during the season. However, it was not possible to determine whether the intermediate mode developed to maturity and was spawned or was reabsorbed. Fecundity estimates were based on counts of maturing, but not fully ripe, eggs. Females produced between 1440 and 29 180 eggs, corresponding to length and ages of 105mm and 2 years and 175mm and 4 years, respectively. This data is consistent with Hart and McHugh (1944) that suggest most surf smelt produce between 15 000 and 20 000 eggs (with a range between 2500 and 37 000). Schaefer (1936) showed fecundity increased linearly with weight as:

$$\text{Fecundity} = 396.2 \bullet (\text{length [in mm]}) - 402$$

Also, longer females produce larger eggs such that a negative correlation exists between the number of eggs per gram and length (Schaefer 1936).

Using scales for age determination, Penttila (1978) concluded that recruitment to the fishery and spawning population may occur as early as age one, but only late in the season, when the fish would be entering their second year. Early in the spawning (and

fishing) season, catches consist mainly (> 90%) of 2-year-olds, almost all males and juveniles. As the season progresses, the age profile shifts to reflect a larger influx of 1-year-old males and some 1-year-old females (Table 1). This apparent age distribution matches the length frequency data from 531 surf smelt collected at 3 different locations and times: 132 from June 2001 and 218 from October 2001 from the Fraser River estuary, 40 from Spanish Banks spawning beaches in September 2001 and 141 from Alaska in October 2001. Using length-weight data, these samples cluster into distinct categories, regardless of origin or time of catch (Figure 1A). In all samples there is one peak around 120mm, a second around 150–160mm and a third around 180mm (Figure 1B). If these 3 peaks correspond to age classes, they would correspond to age 1+, 2+, and 3+ fish, respectively. Thus, another peak corresponding to age 0+ should occur at sizes less than 100mm. Such a peak has been identified for other species collected in the Strait of Georgia using fine mesh nets (Fulton et al. 1982). The observed size modes correspond closely to size modes observed for another smelt, the eulachon, collected from rivers and adjacent offshore locations (Hay and McCarter 2000).

Estimates of Spawning Biomass

There is insufficient data to estimate spawning biomass for any location in British Columbia. However, using available data (published reports from Washington State, research collections, and personal communications) and making some general assumptions, a methodology is presented that could be used for future assessments of surf smelt spawning biomass. The following is not intended to provide “usable” estimates, but rather to show how the procedure could be used if appropriate data were available and how uncertainty in measured parameters affect final estimates of spawning biomass.

A time-series of egg density deposition, combined with data from recreational catches could be useful as general indicators of surf smelt abundance in specific regions, such as the heavily fished beaches of Burrard Inlet. Penttila (2001) developed a method to determine presence/absence of eggs and the related spawning biomass. For more than 20 years this approach has been used to monitor spawning patterns of surf smelt in Washington State. The method for collection and analysis of substrate for estimating egg density for known surf smelt spawning beaches is provided in Appendix 1. This method was adapted from herring egg density surveys conducted by Fisheries and Oceans Canada for herring spawn surveys in British Columbia (Wildermuth 1993).

Egg density surveys are based on three independent estimates: a) spawning area; b) egg density; and c) relative fecundity. For this sample calculation, we report the mean and range, minimum and maximum, for each variable used in the model. To estimate spawning area we used information from commercial fishermen and published reports (i.e., Levy 1985) to identify spawning beaches and the corresponding length of spawning shoreline around Burrard Inlet (DFO Statistical Management Area 29). Also, we used data from biophysical surveys of Burrard Inlet to estimate the approximate width of spawning locations with suitable spawning substrate (Casher and Roberts 1992). The estimated total potential spawning area is provided in Table 2 and represents the maximum area available. Furthermore, geographical information

systems (GIS) corroborate our estimates of available habitat within 20%, a range we will use in our example calculations. It is believed that surf smelt only use approximately 20% of available substrate (D. Penttila, pers. comm.). Therefore, the estimate of actual spawning area used in any year would be about 5967.51m^2 (or 20% of $29\,837.57\text{m}^2$) ranging between 4774.01m^2 and 7161.02m^2 . Based on Washington State surveys, the estimated egg deposition depth is about 0.0254m so the corresponding volume of spawning substrate would be 151.57m^3 ($5967.51\text{m}^2 \times 0.0254\text{m}$). However, eggs might be deposited shallower or deeper depending on actual beach conditions. Thus, we assume a range between 0.0127m and 0.0381m , a range that allows eggs deposited too shallow to die due to limited protection from the elements and those deposited too deep to die due to physiological stress. The corresponding volume of spawning substrate then ranges between 60.63m^3 and 272.83m^3 . Egg density surveys have not been conducted for British Columbia populations but in Puget Sound, Wildermuth (1993) observed an egg density around 1.24 eggs cm^{-3} at Ross Point. Penttila (1978) reported much higher densities in other areas, between 15 and 150 eggs cm^{-3} . Due to changes in spawning activity over time (see above) we assume the mean density of eggs to be 75 eggs cm^{-3} ranging between 1.24 and 150 eggs cm^{-3} . It should be noted this variable introduces considerable uncertainty due to the wide range of measured egg densities reported in the literature. The corresponding egg deposition would be 1.14×10^{10} eggs, ranging between 7.52×10^7 eggs (based on smaller available area, shallower egg deposition depth, and minimum egg density) and 4.09×10^{10} eggs (based on larger available area, greater deposition depth, and maximum egg density).

Relative fecundity for Fraser River surf smelt was estimated as 556.5 eggs g^{-1} (Table 3) for females, data that corresponds to $278.25\text{ eggs g}^{-1}$ for both sexes assuming a 1:1 sex ratio and approximately equal weights for each sex. The observed range in relative fecundity was $454.51\text{ eggs g}^{-1}$ female to $670.99\text{ eggs g}^{-1}$ female (Table 3), which corresponds to a range of $227.26\text{ eggs g}^{-1}$ to $335.50\text{ eggs g}^{-1}$ for both sexes based on the above assumptions. Therefore, the estimated spawn deposition would correspond to a spawning biomass of 41mt ($1.14 \times 10^{10}\text{ eggs}/278.25\text{ eggs g}^{-1}$), ranging between 0.2mt (minimum number of eggs deposited and maximum relative fecundity) and 180mt (maximum number of eggs deposited and minimum relative fecundity). Admittedly, this range is very large and of limited use to a fisheries manager but it shows the methodology is sound and a priority of future research should be to measure parameters for variables used in the model.

A Review of Surf Smelt Fisheries

Historical First Nations Use

There is a long history of First Nation's usage of surf smelt throughout the Pacific Coast. Patchedat First Nation on the West Coast of Vancouver Island historically fished surf smelt for food, social, and ceremonial purposes. They continue to utilize this species today and have made a request to Fisheries and Oceans Canada to commercially harvest surf smelt (H. Dunn, pers. comm.). Dipnets and gillnets were used historically but, more recently, a recreational gillnet is used. Haida First Nations of

Masset (*qaiian*) and Skidegate (*kiina*) also harvested surf smelt although historically a rake was used rather than a net (Jones 1999). A number of small pelagic forage fishes, including anchovy, perch and eulachon have been identified from archaeological sites in Nuu-Chah-Nulth territories on the West Coast of Vancouver Island, but surf smelt has not been identified from samples collected to date (D. Hall, pers. comm.). However, given the extensive utilization of marine resources by Nuu-Chah-Nulth First Nations, and the ease of capture of surf smelt, it is likely Nuu-Chah-Nulth First Nations harvested surf smelt in the past.

Quillihute First Nations of northern Washington State also relied heavily on surf smelt. Historically, the Quillihute people used a parallelogram shaped dipnet with a curved handle, a frame that was 2m long by 1.25m wide and a net of 2–3m deep (Swan 1880). The netting itself was composed of fiber derived from stinging nettle. The shape of the net and handle were designed for use in the surf. Fishing involved placing the net firmly in the sand while waves broke onto the beach, forcing smelt into the net. As the wave receded, the net was pulled up and turned around, to catch additional smelt in the falling water. These smelt were strung and dried, similar to salmon.

Historical Fishery

Although no sales or catch records exist until 1886, evidence of the popularity of surf smelt as a local delicacy was mentioned frequently prior to this date. Beginning in 1876, Fisheries Inspectors noted “The smelt of this coast is a valuable fish, highly esteemed for the table, and produced in incredible numbers” (Anderson 1880). Based on historical accounts, we assume fishing for smelt has occurred since the settlement of Vancouver in the mid-1800s. There was a lack of export demand for smaller fish species, such as smelt, so catches were used primarily for personal consumption or local demand (Motherwell 1923). The British Columbia smelt fishery was not as commercially important as the Atlantic coast smelt fisheries, especially those in New Brunswick (Kendall 1926).

Current Fisheries

An Integrated Fisheries Management Plan (IFMP) has been initiated for smelt in the Pacific Region (<http://www.pac.dfo-mpo.gc.ca/ops/fm/mplans/plans02/Smelt02pl.PDF>). Currently, there are two fisheries for surf smelt in British Columbia, a recreational fishery and a commercial one. Recreational fishing for surf smelt has increased significantly over the last decade, especially on beaches of the Lower Mainland, rivers of Alberni Inlet, and docks in the Prince Rupert area (C. Nelson, pers. comm.). In Canada, the laws governing foreshore rights provide the public unlimited access to most beaches in British Columbia. Easy access and ample fishing opportunities make gillnetting for surf smelt a popular recreational fishery. Sport smelters will line the more popular sections of south shore Burrard Inlet beaches, including Kitsilano, Jericho, Wreck, and Spanish Banks, every 1.5m on summer evenings with a high tide (D. Levy, pers. comm.).

The recreational fishery is regulated through the ‘British Columbia Tidal Waters Sport Fishing Guide’. All smelt species, excluding eulachon, are classified together. A Tidal

Sport Fishing Licence is required which permits a coastal daily limit of 20kg and a possession limit of 40kg. Permitted gear are dipnets (no restriction on mesh size or frame size) and gillnets (maximum length of 7.5m, mesh size greater than 25mm and less than 50mm) with no maximum on the number of nets fishing at a time. The preferred gear is a 'smelt net' which is 7.5m hung length with a 60mm-mesh depth and a mesh size of 30.2mm. It is common practice for recreational fishermen on the Lower Mainland beaches to 're-rig' the regulation size gillnets after a 'cast' net or string multiple nets together. This allows fishers to harvest spawners further offshore, thereby increasing their catch since smelt school just offshore with only a small percentage coming inshore with each wave cycle to spawn (D. Penttila, pers. comm.).

There are seasonal closures in Statistical Management Areas 28 (Howe Sound and northern shores of Burrard Inlet, including Gambier and Bowen Islands) and 29 (Southern shores of Burrard Inlet, and all mainland beaches south to the Canada–US border) from June 15 to August 15. Recreational fishing is further restricted to four days per week from 8:00am Thursday to 8:00am Monday. The remainder of the week is reserved for commercial fishing. Prior to 1982, Statistical Management Areas 28 and 29 were open seven days a week with a seasonal closure from July 5 to August 5. Both fishery officers and recreational users of the resource established the stricter regulations due to increased fishing pressure and conservation, and salmon by-catch concerns.

There is no harvest log system or creel in place to estimate catches. A creel was conducted in late May–June of 1981 and summarized by Levy (1985). Unfortunately, weaknesses in the sampling design (i.e., multiple surveying of individuals, uneven sampling distribution over time) limit the usefulness of the data collected. There is no data and sparse anecdotal information regarding recreational harvests outside Statistical Management Areas 28 and 29. For example, the commercial surf smelt fishery in Prince Rupert has been closed for several years despite repeated requests to re-open this fishery while a successful recreation fishery operates in this region.

Vessels with a Schedule II Part II Other Species or a Category Z8 smelt licence eligibility can commercially harvest surf smelt in British Columbia. Schedule II species include spiny dogfish, flounder, sole, pacific cod, sturgeon, eulachon, skate, lingcod, tuna, and smelt (all species). The Schedule II privilege is issued in respect of a commercial fishing vessel and any vessel that holds a vessel based licence (e.g., salmon, halibut or groundfish trawl) is authorized to fish for smelt using a gillnet. Currently, approximately 4000 vessels hold Schedule II privileges. Management protocols stipulate that a vessel wishing to harvest Schedule II species make a formal request to the Department of Fisheries and Oceans Canada by variation order. Licence conditions allow for the unlimited capture of smelts by unspecified gillnets but there is a harvest log requirement when fishing for smelt.

The second type of commercial licence for surf smelt in British Columbia is a Category Z8 licence. This is an unlimited entry, person based licence and permits harvest without a vessel using either seine nets (maximum length of 275m and minimum mesh

size of 19mm) or gillnets (maximum length of 275m and mesh size between 25 and 50mm). There is no maximum number of licenses issued under this category. Individuals who apply for issuance of a smelt licence also must apply to obtain a Fishers Registration Card (FRC).

The Z8 fishery is closed all year in Statistical Management Areas 0–27 opened only by variation order. A variation order for those areas has not been issued for several years. Statistical Management Areas 28 and 29 are closed June 15 to August 15 due to the same conservation concerns raised by the recreational fishery, and open the remainder of the year Monday 8:00am until Thursday 8:00am (alternate days with the recreational users). All fishers are required to maintain logs of daily harvest operations and submit them to Fisheries and Oceans Canada according to licence conditions. Harvest logs have been collected since 1984 with limited success (see below).

Washington State

Recreational harvest of smelt in Washington State is regulated by the 'Forage Fish Management Plan' that also includes herring, eulachon, and sand lance and encompasses both recreational and commercial fisheries (Washington State Department of Fish and Wildlife 1998). In contrast to Canadian law, in Washington State, foreshore rights belong to the property owner and not the citizen. As a result, there is a lack of suitable access to many known surf smelt spawning beaches and this has resulted in poor knowledge and utilization of the resource as a whole.

Conservation concerns stem from proposed shoreline development, not over-utilization of the resource as in British Columbia. Recreational guidelines for surf smelt fall under the category of 'Forage Fish' that also covers Pacific herring, northern anchovy, Pacific sardine and Pacific sand lance. There is a coast-wide possession limit of 4.5kg and due to salmon by-catch concerns, gear is restricted to jig (maximum 3 treble or 9 single hooks) or dipnet (no mesh size restriction, bag frame not to exceed 0.9m). In addition to the recreational fishery, there is a commercial fishery (not regulated by Washington Department of Fish and Wildlife, WDFW) that use primarily drag (beach) seine or dipnet, but other gears include round haul, purse seine, gillnet and otter trawl. This commercial fishery harvests approximately 45mt per year from northern Washington State with most landings from inside Puget Sound (Washington State Department of Fish and Wildlife 1998).

Surf Smelt Fisheries

Historical Catch Records 1886–1981

Various provincial and federal agencies have been responsible for the collection and reporting of surf smelt catch data in British Columbia since 1886 (all sources used in this report). Fishery information from Fisheries Inspectors was reported in Annual Fisheries Reports between 1886 and 1967. Catch and sales information was recorded by Fishery Statistics of Canada between 1920 and 1970. Catch has been reported by British Columbia Catch Statistics based on sales slips submitted to Statistics Canada between 1971 and present. Additional catch data has been reported in various

documents including Canada Department of Fisheries (1887–1918), Dominion Bureau of Statistics (1922–1949 and 1952–1972), Department of Fisheries and Environment (1977–1979), Department of Fisheries and Oceans (1980–1982), and Department of the Environment (1972–1973).

Historically, data were recorded as combined “smelt” catches, excluding eulachon for which a distinct fishery existed. Surf smelt were the only targeted smelt species in British Columbia during these fisheries (Hart 1973), thus; we assumed that all reported smelt catch was surf smelt. Therefore, our bias is in overestimating commercial catches since other species might have been classified as “smelt”. Levy (1985) refined existing catch data and suggested smelt catches from Statistical Management Areas 28 and 29 could be confidently identified as surf smelt while those from other management areas could contain additional smelt species. Therefore, for clarity, we present data separately for Statistical Management Areas 28 and 29 and those from the entire British Columbia coast. Also, some harvest records were converted to pounds when actual catch estimates reported by harvesters were in pieces. Without having any method of determining which records were piece counts versus weights, we maintained catch data as recorded, in pounds, contributing to potential overestimation of actual catches. We converted imperial measures to metric and all catch data are reported in kilograms. For a few records, the weight unit was ‘unknown’ so we assumed these weights to be pounds since pounds were used more frequently, and we converted these to kilograms.

Current Catch/Sales Records 1984–1999

Since 1984, commercial fishermen (Z8 licence) are required to submit harvest logs to fisheries managers. These logs provide catch data (weight) by area. In addition, when fish are sold, there is a requirement to submit a record of each transaction to the Catch Statistics Branch of Fisheries and Oceans Canada. However, there is no relationship between sales records and harvest logs for the surf smelt fishery. For example, examination of sales records indicated commercial sales to processors but no record of these catches in harvest logs. Similarly, review of harvest logs indicated catches but no record of sales slips were identified.

To estimate total catch for the years 1984 to 1999 harvest logs were reviewed noting date, catch weight, and comments regarding sale of the catch. Sales records also were reviewed and catch records with no licensee information compared to harvest records. To avoid “double-counting” catches, we examined both harvest logs and sales slips for potential overlap. For cases where weight, date, and location were identical between records, overlaps were eliminated. It is not uncommon for catch to be sold one or two days after harvest such that sales slips correspond to multiple harvest logs. Where buyers were indicated in harvest logs, we matched the relevant data in sales records thereby eliminating “overlapping” reports of the same catch.

Commercial Catch

Landings from British Columbia commercial fisheries between 1886 and 2001 have been variable over time. Catches increased during the late 1800s and early 1900s with a maximum catch of 230 158mt in 1904 (Table 4, Figure 2). Since this peak, the fishery

has steadily declined, most notably since the mid-1950s. A combination of increased fishing pressure and habitat loss due to increased human population and industrialization (i.e., oil refineries, mills) have contributed to the reduction of surf smelt around the Lower Mainland, especially English Bay and Burrard Inlet since the 1920s (Table 4, Figure 2; Motherwell 1922). Also the percentage of smelt landed from the Vancouver area has changed over time. Early in the fishery, large quantities of surf smelt were landed from areas other than Vancouver (Figure 2) but between the 1920s and present, almost the entire catch comes from this area (Figure 2).

There is a clear discrepancy between catch data from sales slips and catch data from harvest logs (Table 5). There is a significant difference between the number of Z8 licenses issued and the number of harvest logs received. Between 1984 and 2001 compliance averaged 37.9%. Thus, the current data collection method makes it impossible to accurately estimate commercial surf smelt catches for British Columbia. Furthermore, there is no method to determine recreational landings for this species. No commercial licenses have been issued for Statistical Management Areas 0–27 since the early 1980s but catches are routinely made in these areas, either via the Schedule II licence, for First Nations food, social, ceremonial (FSC), or illegally (Table 6).

Estimates of Recreational Harvest

Since the current management plan does not estimate recreational harvest, likely a significant portion of surf smelt landings, we provide a working estimate of the recreational harvest using some general assumptions. As with estimating spawning biomass, this is a methodological approach and parameters must be measured to provide reasonable estimates of the recreational harvest. High evening and weekend tides attract the greatest number of fishermen (D. Levy, pers. comm.). There are 77 evening and weekend high tide events (Monday to Friday, 3:00pm–8:00pm, Saturday and Sunday 8:00am–8:00pm), between mid May and the end of September in Burrard Inlet. Of those 77 fishing opportunities, 27 fall during the fishery closure leaving 50 possible fishing opportunities. Weather also affects the ability and desire to fish. Assuming that an additional 25% of these opportunities will be lost due to weather, 37.5 fishing opportunities remain. There is an estimated 13 800m of shoreline used by recreational fishermen. On a good night, nets are set every 2m (D. Levy, pers. comm.). However, not every location is used equally, as some locations are very popular while others are less popular. Thus, we assume one fisherman every 50m. Using an average catch of 56 fish per trip (D. Levy, pers. comm.) and an average weight of 22.67g per fish, the estimated recreational harvest would be 13.2mt. It is important to note that this estimate does not take into account several important elements. First, average catches used in this estimate come from an area known to be one of the most productive for recreational fishing and it is unknown whether this level off fishing success would be equalled in all areas. Also, this estimate assumes no fishing opportunities during the conservation closure and there are many reports by fishermen, the GVRD, and Conservation and Protection (DFO) that fishing during the closure is common so estimated landings likely underestimate the actual landings. And, it is likely many users are fishing outside of the preferred fishing areas used in our harvest

estimate, an assumption that would tend to underestimate the actual recreational harvest in British Columbia.

Interviews

Formal interviews were conducted with commercial Z8 licence holders from the Lower Mainland of British Columbia to supplement data not included in harvest logs using a standard questionnaire (after Nakashima and Clark 1999; Appendix 2). Five of 25 licence holders contacted agreed to be interviewed. These individuals had different backgrounds and experience in the fishery. Questions were designed to ascertain knowledge about regulations, general trends in catch and effort over time, and comment on the overall state of the surf smelt fishery in the Lower Mainland. Informal interviews were conducted with retired commercial fishermen and Fishery Officers in the Prince Rupert area and with Lower Mainland and GVRD Parks staff.

Surveys provide information on general trends and views but can not be used quantitatively in management decision making. Results suggest enforcement is inadequate, with many users abusing regulations (i.e., illegal gear, fishing during close times, and fishing without a licence). Currently, surf smelt are often captured only for personal consumption; almost none is sold commercially. Individuals purchased commercial licences to avoid competition with recreational fishers rather than to profit from this fishery. Fishers indicated the average length of fish caught was approximately 140mm, with larger fish captured earlier in the season and smaller ones later. Also, there is concern about by-catch, especially juvenile salmon near the Capilano hatchery.

Limitations in manpower have resulted in reduced knowledge of the surf smelt fishery due to decreased monitoring efforts. Fishery Officers in the Lower Mainland make limited observations while the GVRD (no enforcement capability) monitor the fishery in Pacific Spirit Park (Spanish Banks, Wreck Beach) and the University of British Columbia Campus beaches. Fishery Officers confirm serious compliance issues with this fishery, notably 1998 when many charges were laid for fishery violations including multiple gear use, fishing without a licence, and fishing during fishery closures. Fewer complaints and charges have been noted in more recent years. Unfortunately, enforcement opportunities are limited as the surf smelt fishery peaks during evening hours when Fishery Officers and park staff are off duty.

Discussion

Burrard Inlet

Due to current commercial and recreational fisheries in Burrard Inlet, management of this stock should be a priority. This stock has decreased dramatically since its peak in the early 1900s with landings of only 51kg in 2000 (Figure 1; Table 4). Due to limited available data, it is unclear if this drastic decline is due to decreases in biomass or effort, unreported catches, or a combination. Hart and McHugh (1944) also noted

decreased catches and believed the demand was high but fish abundance was low. Since 1963 reported catches have averaged 2.6mt, with a maximum harvest of 9.5mt in 1976. There are several management implications due to the current policy for surf smelt in British Columbia. Currently, this fishery operates as an unlimited entry commercial fishery with no catch limits, poor enforcement, no by-catch management, and poor compliance to the harvest log submission requirement (average 38%). In addition, although there is perceived limited commercial demand for the product, there is a high incidence of illegal fishing both recreationally and commercially. One management option is to reduce fishing pressure on females. Altering the current regulations on mesh size could accomplish this due to size differences between sexes (Levy 1990).

Commercial catch data, estimated recreational harvest, and estimated spawner biomass for Burrard Inlet indicate potential over-utilization of the resource. Admittedly these values are approximate and caution should be exercised for management decisions but continuation of both commercial and recreational fisheries under the current management strategy in Burrard Inlet is not recommended. The current management plan is inconsistent with the precautionary approach to fisheries management. In accordance with the guidelines for new and developing fisheries in British Columbia, insufficient data exist to reasonably manage the resource. It should be noted that these guidelines apply to ongoing data limited commercial fisheries, an example of which is the current surf smelt fishery. Thus, it is necessary to gather pertinent data for future resource development. This is one of the management issues outlined in the IFMP for surf smelt. Currently, there is no biological basis to support an unlimited entry, unlimited quota fishery where biological data are sparse or non-existent and formal assessments are not possible.

For successful management of Burrard Inlet surf smelt additional biological and fisheries data are required. Better estimates of spawning biomass and refined catch data are essential. With the introduction of Area Based Management, there exists an opportunity to include local stakeholders. For example, interest groups could easily collect spawn data (see Appendix 1) and user effort data via creel surveys. Data collected would provide much needed information on inter-annual variability in population biomass, spawning biomass, and catch, data that could be used by managers and scientists for assessment decisions. Burrard Inlet is geographically compact, lending itself to implementation of these suggestions. Also, the GVRD maintains a security patrol that operates throughout Pacific Spirit Park, including Point Gray and Spanish Banks, two of the most popular fishing areas in Burrard Inlet. Staff has expressed interest in collecting and supplying user information to the Department of Fisheries and Oceans Canada.

Other Coastal Areas

There is negligible biological and fisheries information available for surf smelt in all other Statistical Management Areas in British Columbia. Thus, sound management decisions cannot be made at the current time. We recommend continued restricted commercial access in these areas until adequate assessments can be made.

Recreational fishing pressure is probably small based on human population concentrations and recreational fishing for surf smelt might be possible. Opportunities exist to collect data from potential commercial users, by providing limited fishing in return. This exchange could benefit both commercial users and scientists if properly implemented (i.e., scientists would have biological data and fishers would have an opportunity to test potential markets for surf smelt) and should be considered for Statistical Management Areas outside of Greater Vancouver where resources are limited.

Recommendations

Our knowledge and understanding of surf smelt in British Columbia is extremely limited. To make proper assessments for this species, basic biological data is required. Major data deficiencies for surf smelt include limited information on distribution, biomass and spawning biomass, fishing and natural mortality rates, and the impact of commercial and recreational fishery gear, including by-catch of non-target species (i.e., salmon, perch). The most extensive surf smelt fisheries in British Columbia occur in Statistical Management Areas 28 and 29 where harvester impacts are unknown. We advocate the adoption of a precautionary management plan for both commercial and recreational users (Fisheries and Agriculture Organization 1995). Such a plan should include strict enforcement of regulations, limited effort and catches for both commercial and recreational users, and the inclusion of a biologically based sampling program.

There is some indication that surf smelt stocks in British Columbia have been declining for four decades and a precautionary management plan should be initiated, especially given inadequate assessment data. Although estimates of spawning biomass and recreational harvest were provided only as working examples, there is some indication that surf smelt are currently being over-harvested in British Columbia. Therefore, we suggest the following recommendations for the current surf smelt fishery.

1. Determine the number of populations of surf smelt in British Columbia. In order to make informed management decisions, genetic studies should be undertaken to determine the amount of gene flow between putative populations in British Columbia given the confined fishing locations (isolated by considerable geographic distance). Also, early studies in Washington State suggested the Puget Sound populations of surf smelt were reproductively isolated.
2. The current surf smelt fishery should be limited given a high probability of overexploitation and limited biological data for surf smelt in British Columbia. Given that current management is based on unlimited entry, the current fishery could rapidly expand with potentially devastating consequences.
3. Develop an assessment program to determine the status of surf smelt in British Columbia, especially with respect to biomass and distribution. Initial data collection should focus on determining baseline data that will need to be interpreted with caution as a fishery is currently in operation.

4. Establish a monitoring program to determine both commercial and recreational harvest of surf smelt in British Columbia and any associated by-catch, especially potentially vulnerable species such as juvenile salmon or herring.
5. Establish a long-term program capable of evaluating the effects of harvest strategies on growth and recruitment of surf smelt in British Columbia. This would be consistent with a "Phase 1" report based on the guidelines of Perry et al. (1999) and could be initiated via a switch to scientific licenses.
6. Consult with various user groups, including First Nations, to determine the expected use and potential interest in surf smelt fisheries in British Columbia. Current effort has focused on the greater Vancouver area, but surf smelt would likely attract interest from other areas in British Columbia, notably Prince Rupert and the West Coast of Vancouver Island.

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Table 1: Seasonal changes in surf smelt spawning abundance as percentage of total fish at a surf smelt spawning beach in LaConner Washington in 1978 (after Penttila 1982).

Fish	June	July	August	September	October
Age-1 male	0.0	0.1	17.1	49.5	56.9
Age-2 male	70.6	77.5	62.6	31.5	30.3
Age-3 male	1.0	0.4	0.2	0.2	0.2
Age-4 male	0.1	0.1	0.1	0.0	0.0
Age-1 female	0.0	0.0	0.2	4.9	3.7
Age-2 female	12.5	11.6	17.4	12.3	7.8
Age-3 female	2.3	1.0	1.7	1.0	0.9
Age-4 female	0.2	0.3	0.5	0.7	0.2
Juvenile	13.4	9.0	0.2	0.0	0.0

Table 2: Estimated surf smelt spawning areas in Burrard Inlet. Spawning lengths and widths are indirect and approximate.

Spawning Location	Length (m)	Width (m)	Area (m ²)
Point Gray to Jericho	1666.8	4.63	7717.28
Spanish Banks to Jericho	3426.2	4.54	15554.95
Jericho to Kitsilano	4074.4	1.02	4155.89
Stanley Park	2037.2	0.20	407.44
Capilano to Ambleside	926.0	0.83	768.58
Ambleside to Dundarve	1666.8	0.74	1233.43
Potential Total Area			29 837.57

Table 3: July female surf smelt fecundity estimates from the Lower Fraser River Estuary.

Sample Location	Weight (g)	Standard Length (mm)	Fork Length (mm)	Total Fecundity (eggs)	Relative Fecundity (eggs/g)
Fraser River	42.7	148	--	23766	556.59
Fraser River	49.3	159	168	27174	551.20
Fraser River	34.7	138	147	20570	592.80
Fraser River	35.9	144	--	19470	542.35
Fraser River	29.0	133	141	15286	527.11
Fraser River	34.3	142	152	20315	592.29
Fraser River	44.5	146	155	23408	526.02
Fraser River	38.6	148	155	21282	551.34
Fraser River	35.1	139	148	23552	670.99
Fraser River	44.3	142	150	20135	454.51
Mean					556.52

Table 4: Recorded smelt catch data for Statistical Management Areas 28 and 29 (Vancouver area) and all other Statistical Management Areas combined (entire British Columbia coast) between 1886 and 2001. Data from: Mowat 1887-1891; Whitcher 1879; McNab 1892; 1898; Sword 1903; 1905; Canadian Department of Fisheries 1877-1918; Halladay 1917; Dominion Bureau of Statistics 1922-1949; 1952-1972; Department of the Environment 1972-1973; Department of Fisheries and the Environment 1977-1979; Department of Fisheries and Oceans 1980-1982.

Year	Catch (kg)		Total
	Areas 28 and 29	All Other Areas	
1886	6 893	1 724	8 617
1887	62 206	15 551	77 757
1888	2 902	726	3 628
1889	21 361	2 222	23 583
1890	38 889	6 803	45 692
1891	29 932	6 803	36 735
1892	50 612	20 408	71 020
1893	22 676	13 605	36 281
1894	12 653	11 338	23 991
1895	12 698	13 606	26 304
1896	11 338	13 605	24 943
1897	13 605	18 141	31 746
1898	17 007	18 594	35 601
1899	15 873	17 687	33 560
1900	20 408	18 821	39 229
1901	27 211	18 821	46 032
1902	71 655	104 989	176 644
1903	82 794	121 315	204 109
1904	95 238	134 921	230 159
1905	81 633	96 054	177 687
1906	90 703	96 372	187 075
1907	113 379	96 916	210 295
1908	90 703	83 401	174 104
1909	113 379	29 342	142 721
1910	N/A	N/A	N/A
1911	114 739	58 957	173 696
1912	84 535	64 082	148 617
1913	83 220	16 100	99 320
1914	79 683	17 233	96 916
1915	104 444	10 431	114 875
1916	74 150	9 025	83 175
1917	42 231	10 558	52 789
1918	N/A	N/A	N/A
1919	N/A	N/A	N/A

1920	56 508	5 669	62 177
1921	72 517	9 887	82 404
1922	14 286	3 855	18 141
1923	45 215	1 769	46 984
1924	47 075	4 626	51 701
1925	30 476	4 898	35 374
1926	51 610	6 485	58 095
1927	43 356	6 712	50 068
1928	30 249	5 216	35 465
1929	27 528	4 218	31 746
1930	60 091	5 895	65 986
1931	63 039	8 208	71 247
1932	40 408	6 667	47 075
1933	18 322	4 762	23 084
1934	43 175	2 766	45 941
1935	41 315	3 129	44 444
1936	35 011	3 946	38 957
1937	15 102	2 358	17 460
1938	31 655	1 769	33 424
1939	20 272	1 860	22 132
1940	37 868	499	38 367
1941	31 111	0	31 111
1942	7 211	0	7 211
1943	1 995	0	1 995
1944	11 156	0	11 156
1945	19 048	0	19 048
1946	34 467	998	35 465
1947	26 485	6 622	33 107
1948	20 317	5 080	25 397
1949	48 980	12 244	61 224
1950	42 812	10 703	53 515
1951	61 315	15 329	76 644
1952	34 104	8 526	42 630
1953	7 256	0	7 256
1954	5 896	453	6 349
1955	1 361	453	1 814
1956	N/A	N/A	N/A
1957	4 082	0	4 082
1958	2 721	0	2 721
1959	20 862	0	20 862
1960	6 349	0	6 349
1961	3 628	0	3 628
1962	12 336	3 084	15 420
1963	726	181	907
1964	3 991	998	4 989
1965	3 991	998	4 989

1966	2 902	726	3 628
1967	2 177	544	2 721
1968	363	91	454
1969	N/A	N/A	N/A
1970	N/A	N/A	N/A
1971	1 451	363	1 814
1972	1 633	408	2 041
1973	2 268	566	2 834
1974	N/A	N/A	N/A
1975	N/A	N/A	N/A
1976	9 524	453	9 977
1977	6 009	1 020	7 029
1978	1 361	0	1 361
1979	2 748	0	2 748
1980	2 748	0	2 748
1981	707	91	798
1982	2 761	1 730	4 491
1983	3 580	902	4 482
1984	1 690	139	1 829
1985	592	610	1 202
1986	853	147	1 000
1987	2 477	0	2 477
1988	1 578	1 649	3 227
1989	1 440	446	1 886
1990	1 987	175	2 162
1991	1 884	9	1 893
1992	6 340	18	6 358
1993	5 971	144	6 115
1994	5 513	1 552	7 065
1995	4 529	0	4 529
1996	1 976	68	2 044
1997	195	22	217
1998	750	18	768
1999	1 061	0	1 061
2000	51	0	51
2001	N/A	N/A	N/A

Table 5: Commercial landings of surf smelt between 1982 and 2001 in British Columbia and Washington State. Canadian reporting compliance also is shown.

Year	Total Recorded Catches (kg)			Canadian Compliance		
	Canada		Washington*	Number of Z8 Licences	Number of Harvest Logs	Percent Compliance
	Sales Slips	Harvest Logs				
1982	4491	--	40 659	--	--	--
1983	4482	--	28 060	--	--	--
1984	1734	94	41 677	40	3	8
1985	1078	123	41 382	30	3	10
1986	988	12	60 405	34	1	3
1987	1870	597	61 698	44	8	18
1988	1187	2010	72 273	67	17	25
1989	467	1397	45 221	66	22	33
1990	337	1796	27 047	54	22	41
1991	110	1756	32 613	58	26	45
1992	2124	4168	34 278	93	58	62
1993	1504	4542	76 047	120	71	59
1994	3171	3268	107 689	120	46	38
1995	966	3421	71 027	112	48	43
1996	1115	835	77 600	42	18	43
1997	9	215	55 292	23	6	26
1998	131	631	67 924	15	9	60
1999	5	1040	61 789	17	5	29
2000	N/A	55	65 121	16	2	13
2001	N/A	N/A	16 942	25	5	20
Total	16 796	25 960	1 084 741	976	370	38

* M. Stanley, Washington Department of Fish & Wildlife (pers. comm.)

Table 6: Landings of surf smelt between 1982 and 2001 in British Columbia reported by Statistical Management Area. 0) West Coast of Queen Charlotte Islands; 1) North Coast of Queen Charlotte Islands; 2) East Coast of Queen Charlotte Islands; 4) Skeena; 17) Nanaimo; 18) Cowichan; 20) Juan de Fuca; 23) Barkley Sound; 28) Howe Sound; and 29) Fraser River.

Year	Total Catch (kg)										Total
	0	1	2	4	17	18	20	23	28	29	
1982		39		1691			39			2761	4491
1983					163		699		112	3468	4482
1984	96				10	34			254	1436	1829
1985					270			340	434	158	1202
1986					147				164	689	1000
1987									1327	1150	2477
1988	989						660		1188	390	3227
1989	313						132		681	759	1886
1990		175							1512	475	2162
1991	9								1191	693	1893
1992	18								4937	1402	6358
1993	43		95		5				4401	1571	6115
1994	1552								3562	1951	7065
1995									4015	514	4529
1996	68								1904	71	2044
1997				23					195		217
1998				19					704	45	768
1999									1061		1061
2000									51		51
Total	3088	214	95	1732	595	34	1530	340	27694	17534	

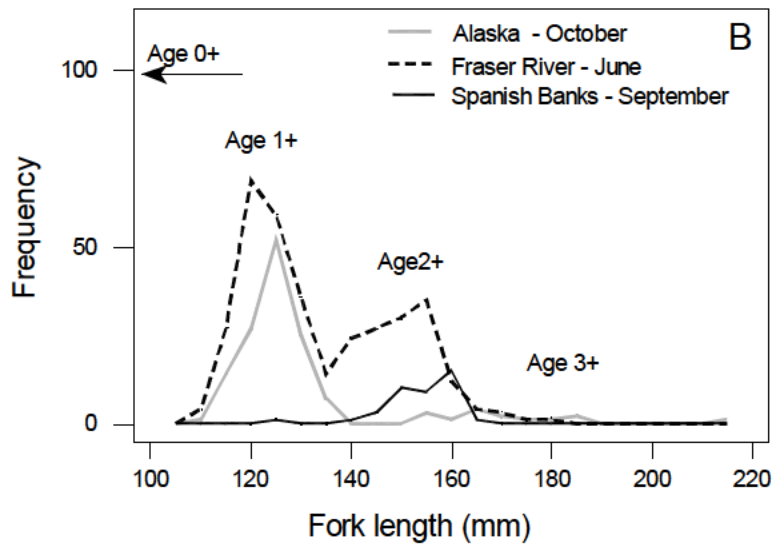
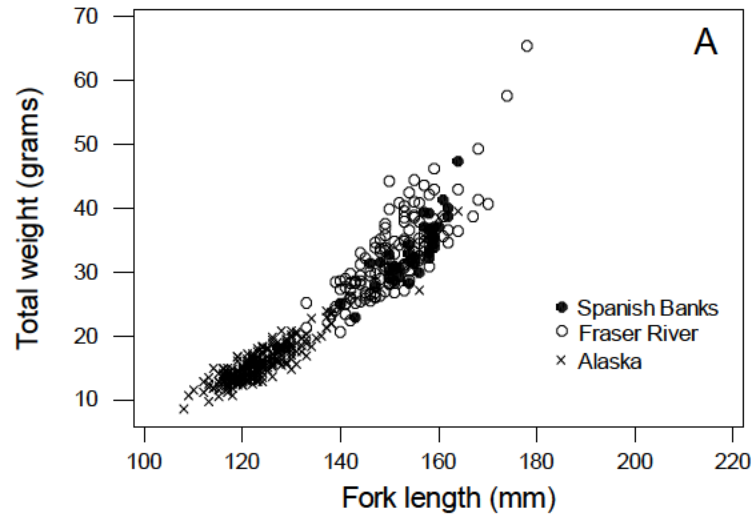


Figure 1: Length-weight relationships between three populations of surf smelt (A) and their corresponding size-frequency distribution (B).

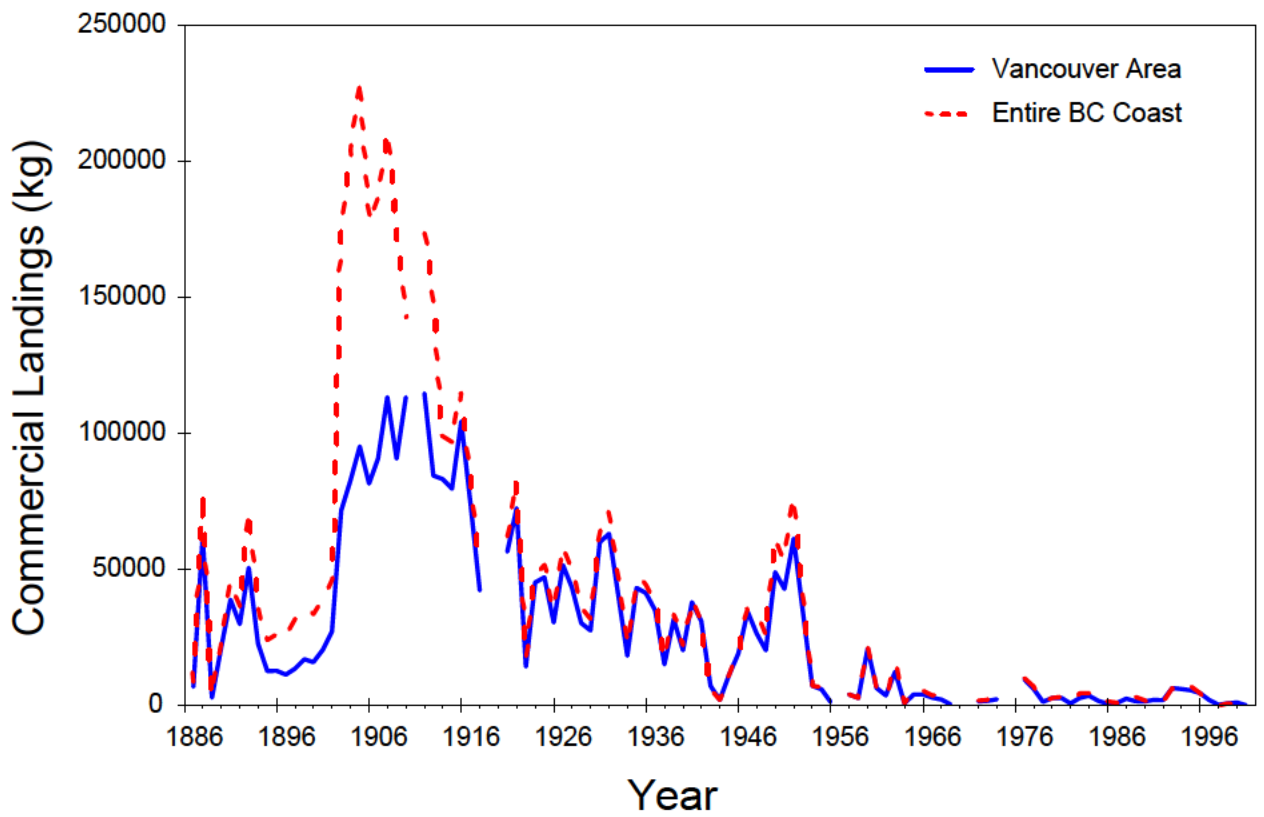


Figure 2: Reported surf smelt catches for Statistical Areas 28 and 29 (Vancouver Area) and for the entire British Columbia coast between 1886 and 2000.

Appendix 1: Protocols for Sampling Intertidal and Nearshore Regions in British Columbia (modified from Penttila 2000 for Washington State).

Objectives

- 1) To identify and map areas that are being utilized as spawning areas by surf smelt.
- 2) Collection of bulk egg samples to estimate egg density and spawner biomass.

Note: Planning will need to consider spawning time when designing surveys intended to identify spawning locations.

Site Selection

Not all beaches represent ideal spawning conditions for surf smelt. However, several indicators can be used to effectively predict which sites are most suitable. First, look for sand or gravel (pea sized) with crushed shell fragments. Egg incubation and spawning sites are generally located 2–3m above mean low tide level. Although areas that are protected from direct sunlight are often preferred for spawning, this will not apply to Burrard Inlet beaches, as there is little or no hanging vegetation.

Required Field Equipment

Collection of Samples:

- 250 ml plastic jar
- Extra large freezer bags (sealable)
- Waterproof labels

Condensing Samples:

- Nalgene sediment screens, sizes 4, 2 and .5mm
- 2 X 25L buckets (modified to act as drain for screen rack)
- wash bucket
- plastic dishpan
- 250ml plastic sample jar
- Stockard's solution (50ml formalin (37% formaldehyde), 40ml glacial acetic acid, 60ml glycerin, 850ml distilled water)

Records to Maintain (Completed at Time of Sampling)

Name of beach sampled, date of sampling, Statistical Management Area and Sub-Area, station number, latitude and longitude (if GPS available)

Beach Substrate type:

- 0–mud
- 1–sand (<2mm)
- 2–gravel (2-64mm)
- 3–cobble (64-256mm)
- 4–boulder (>256mm)
- 5–rock, no habitat (>4000mm)

Uplands Character:

- 1–0% impacted (natural)
- 2–25% impacted

- 3–50% impacted
- 4–75% impacted
- 5–100% impacted (development, housing, breakwaters)

Sample Zone: Distance of collection parallel to landmark (in m to nearest cm). Used to determine tidal elevation of the spawn deposit.

Landmark for Sample Collection:

- 1–down beach from the last high tide mark
- 2–up beach from the last high tide mark
- 3–down beach from second to the last high tide
- 4–down beach from upland toe
- 5–up beach from the waterline at the time noted in comments

Tidal Elevation: To be determined in the lab using data based on landmark, average beach slope, and tidal height.

Width: Width of potential spawning substrate.

Length: Length of potential spawning substrate OR measured from maps if greater than 50m.

Shading: Shading of spawning substrate averaged over the 50m station and best interpretation for the entire day:

- 1–fully exposed
- 2–25% shaded
- 3–50% shaded
- 4–75% shaded
- 5–100% shaded

Smelt, sand lance, rock sole, herring: subjective field assessment of spawn intensity:

- 0–no eggs
- 1–light
- 2–light-medium
- 3–medium
- 4–medim-heavy
- 5–heavy
- 6–very heavy

Comments: Any additional information.

Prepare a map of each location sampled using a 1:20 000 or 1:40 000 scale Canadian Hydrographic Service nautical chart or 1:50 000 scale National Topographic System topographic map. Mark each sample located on the map with the appropriate sample number so that the exact site can be re-visited, if needed. If possible, use a GPS to obtain latitude and longitude of each sampled location, but priority should be placed on an accurate map.

General Guidelines for Collecting Bulk Beach Samples

Examine the beach to evaluate the most likely zone to contain eggs (2–3m MLLW). This zone will be in the upper third of the beach, near the upper tidal limit. Typically, this zone is less than 1m below the log line but for surf smelt eggs it can extend into pure sand. Gravel is the only acceptable substrate for surf smelt.

Each sample is composed of four (4) scoops of gravel evenly spaced along a 50m stretch of beach.

- identify approximately 50m of beach to be sampled
- obtain location information for the transect by reading position information from a GPS or marking the location carefully on the appropriate map
- prepare a sampling label (location, date, time, etc.) and place the label in the collection bag
- starting at one end of the transect, scoop a jar full of sand from the top 2–5cm of beach and dump into the plastic bag. Note: the scooped area will likely be 1–2m long—the idea is to skim the eggs developing in the surface substrate.
- move 15m along the transect and obtain the second scoop of the sample and place in the bag with the previous scoop
- repeat this procedure until the four scoops have been obtained—this constitutes the bulk sample for the transect
- seal the bag securely and place in a cool location (i.e., cooler). This is particularly important in warmer weather since high temperatures can cause mortality and speed the decomposition of eggs
- carefully transport the bulk samples from the field to the laboratory for further examination or proceed with condensing the bulk samples prior to transport depending on time and weather

Condensing Bulk Samples

Bulk egg samples can be processed in the field to remove most of the sand and reduce the volume transported. Eggs are washed from the sediment such that only the eggs (and any residual sediment) are transported to the laboratory. Eggs are lighter than the sand and gravel and will rise to the surface during the washing process, thus allowing the eggs to be skimmed from the surface. Washing is conducted as follows:

- assemble the Nalgene screens on top of the drain bucket, with the largest mesh on top and the smallest mesh on the bottom
- remove the sample label and place it in the sample jar
- place a portion of the bulk sample on the top screen and thoroughly wash the sediment through the screen set with available water
- discard sediment retained in the top screens and retain only material on the bottom (0.5mm) screen
- transfer this material into a dishpan
- add water until the material is covered by 3–5cm of water
- swirl the water around the pan, adding rocking and bouncing motions to allow eggs to migrate to the top of the sediment. The idea is similar to gold panning, try to winnow the eggs to the surface of the material.
- after swirling for 1–2 minutes, work the lighter fraction of material to one corner of the pan. Carefully dry up the lighter fraction by tipping the pan so that excess water drains away and skim the lighter fraction from the surface of the sand with the sample jar.
- repeat the winnowing process two more times

- process the remainder of the bulk sample the same way, each time adding the retained lighter fraction to the sample jar
- fill the sample jar with Stockard's solution and seal the jar securely
- invert several times to ensure that preservative penetrates the entire sample

Laboratory Examination

Laboratory examination begins with a further condensing of the sample. The winnowing process conducted in the field is repeated using a shallow tray to separate eggs and sand. Final separation is performed under a dissecting microscope where eggs can be separated from any remaining beach material using fine-tipped forceps or dissecting needles. Eggs are then identified and counted using available keys.

Eggs found during the surf smelt/Pacific sand lance spawn assessment should be archived for species confirmation and additional analyses. Up to 100 random eggs of each species present should be labeled and preserved in Stockard's solution in a small vial, to be forwarded to DFO staff or other knowledgeable experts for confirmation. A number of non-egg objects may be encountered in preserved upper intertidal substrate samples that may be misidentified as forage fish eggs or empty egg shells, including invertebrate eggs, algal fruiting bodies, flatworms and their egg cases, certain thecate or arenaceous foraminifera, decalcified gastropods, and fragments of annelid worm tubes. Relative abundance of all forage fish eggs encountered in the samples should be recorded since this data provides information of the relative frequency and intensity of spawning activities.

Appendix 2: Survey questions for commercial surf smelt licence holders

1. How long have you been fishing for smelt?
2. Have you caught fish with your commercial licence this year?
3. If so, which areas? If not, do you plan on fishing for smelt this year and why?
4. In which areas have you fished for smelt in the past?
5. How successful was each area? Why did you change?
6. Are there any other beaches that you know of where smelt spawn?
7. How late into the year do you fish for smelt and/or notice smelt spawning?
8. Do you fish prior to June 15?
9. Would you fish for smelt if the season were open between June 16 and August 15?
10. How would you describe the abundance of smelt this year/last year compared to when you first started fishing for smelt?
11. If there are changes, how? (size, density, distribution)
12. What gear have you been utilizing? (gillnet or seine)
13. Have you ever used another type of gear?
14. Do you or have you fished from a boat or onshore? Mesh size of net? (*Minimum is 19mm for seine, some may be using larger, ask why if they are. Size range for gillnet is 25mm – 50mm*).
15. Do you fish smelt in order to sell it or for personal use, or both?
16. If you've fished this year, approximately how much have you caught?
17. Approximately how much do you usually catch per year?
18. What is the average size of smelt being caught?
19. When fishing, how many smelt do you return to the water?
20. If yes, what percent of the returned smelt do you think survive?
21. If yes, why were smelt returned?
22. While fishing for smelt, did you catch any other species?
23. If yes, what species were they, and how old were the individuals?
24. If yes, what is the condition of these species when you released them?
25. Do you also fish for smelt using a tidal waters sport fishing licence? Why?
26. If yes, do you use a gillnet or a dipnet? What is the mesh size?

Any other comments:

From: Joanna Baxter [REDACTED] s. 22(1)
Sent: Monday, February 14, 2022 12:14 PM
To: correspondence
Subject: BYLAW TO SUPPORT LOCAL ECONOMY

CAUTION: This email originated from outside the organization from email address [REDACTED] s. 22(1). Do not click links or open attachments unless you validate the sender and know the content is safe. If you believe this e-mail is suspicious, please report it to IT by marking it as SPAM.

Hello Mayor Booth and Council,

On behalf of the Arts and Culture Advisory Committee, it's my pleasure to express enthusiastic support to the proposed amendments that support the Local Economy, most specifically, amendments that support our local home-based artist community.

These proposals are in line with the most recently approved Strategic Plan towards creating more vital and vibrant versatile spaces in which many -if not most- of our local artists work. Legitimizing the sale of artwork and crafts produced in these private spaces will allow for artists to pursue more exposure, more patrons, more recognition, and more income.

Not only are these amendments paving stones in the road to help support, validate, and celebrate the wide range of talents and work of our local artists, they are also a controlled way to establish Art as an integral part of West Vancouver.

The ACAC strives to support West Van's Artist Community in many ways. Recognition and legitimization of their creative workspaces and business potential is an excellent first step on which to continue to deepen West Vancouver's long culture of the Arts.

Joanna Baxter

[REDACTED] s. 22(1)
WEST VAN BC

From: [REDACTED] s. 22(1)
Sent: Monday, February 14, 2022 11:09 PM
To: Mark Panneton <mpanneton@westvancouver.ca>
Cc: [REDACTED] s. 22(1)
Subject: Transcript of my contribution to Council Meeting 220214

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Hi Mark; thanks for admitting me to tonight's meeting. Herewith please find a transcript of my contribution for your records. Regards, [REDACTED] s. 22(1)

[REDACTED] s. 22(1)
[REDACTED]
West Vancouver BC [REDACTED] s. 22(1)
[REDACTED]

Good evening, Madam Mayor and Councillors. I'm [REDACTED] s. 22(1), a resident of West Vancouver. Thank you for this opportunity to speak to you this evening on the 2022 budget's underlying levy proposals before you.

I am calling for Council's approval of the proposed levies underpinning the 2022 Budget. At a average incremental cost increase of \$109 to apartment owners and \$247 to single family homeowners, the proposed budget for the services to be provided consistent with your strategic objectives is in my view an absolute bargain.

By way of comparison, according to a recent strata depreciation report, my share of foreseeable utility, operations, and maintenance costs will increase my strata unit fees by some 5% or \$250 annually. That is, in my case, more than twice the municipal tax increment, and for a considerably smaller range of expenses than this municipality must cope with.

I have reviewed many municipal budgets during my career [REDACTED] s. 22(1) and I feel your staff have done an extraordinarily efficient job in reconciling the needs and resources of the municipality and the affordability of its programs. It's worth noting five points:

- the expenditure programme supported by the levies is well thought out by the staff;
- the proposed consolidated tax rate increase of 3.79% is less than the rate increases proposed for many other Metro municipalities;
- the Operating Levy is well below current inflation;
- the Asset Levy will help provide the badly needed maintenance of our District assets – the ill-advised stringency of the past has caused sore neglect and is a community regret – we maintain our homes, let's maintain our facilities and amenities; and, lastly,
- the Environment Levy will support the protection of our principal asset – our superb natural environment and, importantly, it will reduce our impact on it. With what we heard tonight is coming at us from a climate change imperative, if we don't pay for it now, we and our children will certainly pay heavily for it later.

West Vancouver needs to do its part now. As the old truism goes, an ounce of prevention is worth a pound of cure. Please support staff's recommendation 8.1 for adoption of the proposed levies.

From: West Vancouver Chamber of Commerce <info@westvanchamber.com>
Sent: Tuesday, February 15, 2022 7:16 PM
To: correspondence
Subject: 🚗 THURSDAY! West Van Community and Business Update with Chief Constable John Lo & Mayor Mary-Ann Booth

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West Vancouver Chamber of Commerce

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Thursday February 17th 3:30pm - REGISTER BELOW!

Leader to Leader: West Vancouver Community and Business Update with Chief Constable John Lo and Mayor Mary-Ann Booth



Mayor Mary-Ann Booth



Chief Constable John Lo

Safety - it is word with many dimensions - safety of place, safety of property, safety of person, and safety of identity to name just a few.

On February 17th, join Mayor Booth and [Chief Constable Lo](#) for a casual and candid conversation about what safety means in West Vancouver and how the new [WVPD Strategic Plan](#) strives to address these needs while helping to build a stronger and more connected community.

Having assumed the helm at the WVPD during this global pandemic in 2021, Chief Lo has led the work to update the strategic plan through input from officers, stakeholders and importantly the public. With a Mission to provide *Excellence in response & investigation for a safe West Vancouver* supported by four goals of reaching out, empowering, uniting, and contributing, the new plan positions the WVPD to continue as leaders in community safety, education, and protection.

This is an opportunity to hear about how the [new plan](#) will benefit residents, visitors, and businesses in the community.

Business leaders and members are encouraged to submit questions or hot topics in advance to info@westvanchamber.ca

***FREE for WVCC Members and Future Members**

[Register Now!](#)

B.C. will lift most COVID-19 restrictions Wednesday at 11:59 p.m.

While keeping the BC Vaccine Card, indoor masking requirements and COVID-19 safety plans in place, the provincial health officer will lift restrictions on personal gatherings, organized gatherings and events, nightclubs, bars and restaurants, exercise and fitness, and adult sports tournaments as of February 16th, 2022 at 11:59 p.m. Capacity limits will return to normal.

Read the news release [HERE](#)

WEDNESDAY POWER LUNCH SESSIONS



Digital Marketing 2: Small business in action

Wed, Mar 2/22 - 12 noon - 1:15 pm

FREE for WVCC Members and Future Members

[Digital Marketing 2: Small business in action](#)

Learn about and take advantage of your small business advantage by

delivering valuable, interesting content to your audience. Find out how an altruistic, giving approach to connecting with your customers can grow your small business advantage and make you stand out in your community. This webinar focuses on the value of content marketing as part of your digital campaign, and how you can do it effectively, even when you are short on staff and other resources.

Facilitator: Graye Williams

One of Canada's leading tech voices, Graye Williams is a widely-read and watched Vancouver-based blogger and marketing professional. Currently chief strategist and partner at Blink, they teach at UBC Sauder and Capilano University, and can be found as a frequent guest on CBC and Global news. Graye is a trusted voice for balanced, insightful tech commentary and social media expertise.

Presented in partnership with Capilano University Continuing Studies

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**THE CORPORATION OF THE DISTRICT OF WEST VANCOUVER
ART MUSEUM ADVISORY COMMITTEE MEETING MINUTES
VIA ELECTRONIC COMMUNICATION FACILITIES
TUESDAY, JANUARY 11, 2022**

Committee Members: F. Patterson (Chair), D. Becker, S. Donaher, K. Duffek, C. Gotay, H. Greenwood, B. Helliwell, D. LaCas, M. Price, R. Van Halm; and Councillor C. Cameron attended the meeting via electronic communication facilities.

Staff: D. Niedermayer, Senior Manager, Cultural Services; and H. Letwin, Administrator/Curator (Staff Liaison) attended the meeting via electronic communication facilities.

1. CALL TO ORDER

The meeting was called to order at 10:06 a.m.

2. ELECTION OF CHAIR FOR 2022

It was Moved and Seconded:

THAT F. Patterson be elected as Chair for 2022.

CARRIED

S. Donaher, R. Van Halm, and C. Cameron absent at the vote

It was Moved and Seconded:

THAT D. LaCas be elected as Acting Chair for 2022.

CARRIED

S. Donaher, R. Van Halm, and C. Cameron absent at the vote

R. Van Halm entered the meeting at 10:09 a.m.

3. COMMITTEE MEETING SCHEDULE FOR 2022

It was Moved and Seconded:

THAT the Art Museum Advisory Committee Meeting Schedule for 2022 be adopted as follows:

- February 8, 2022 at 10 a.m.
- March 8, 2022 at 10 a.m.
- April 5, 2022 at 10 a.m.
- May 10, 2022 at 10 a.m.
- June 7, 2022 at 10 a.m.
- July 5, 2022 at 10 a.m.
- September 6, 2022 at 10 a.m.
- October 4, 2022 at 10 a.m.
- November 8, 2022 at 10 a.m.

CARRIED

S. Donaher and C. Cameron absent at the vote

It was Moved and Seconded:

THAT

1. all remaining Art Museum Advisory Committee meetings, including subcommittee meetings, for 2022 be held via electronic communications facilities only.
2. the Atrium in the Municipal Hall be designed as the place where the public may attend to hear, or watch and hear, the Art Museum Advisory Committee and subcommittee meeting proceedings; and
3. a staff member be in attendance at the Atrium in the Municipal Hall for each of the scheduled meetings.

CARRIED

S. Donaher and C. Cameron absent at the vote

S. Donaher entered the meeting at 10:12 a.m.

4. APPROVAL OF AGENDA

It was Moved and Seconded:

THAT the January 11, 2022 Art Museum Advisory Committee meeting agenda be approved as circulated.

CARRIED

C. Cameron absent at the vote

5. ADOPTION OF MINUTES

It was Moved and Seconded:

THAT the November 9, 2021 Art Museum Advisory Committee meeting minutes be adopted as circulated.

CARRIED

C. Cameron absent at the vote

C. Cameron entered the meeting at 10:19 a.m.

REPORTS / ITEMS

6. **Welcome and Introductions**

It was Moved and Seconded:

THAT the discussion regarding Welcome and Introductions be received for information.

CARRIED

7. Committee Orientation

Staff reviewed the committee orientation materials. F. Patterson and H. Letwin to meet with new committee member, R. Van Halm.

It was Moved and Seconded:

THAT the discussion regarding Committee Orientation be received for information.

CARRIED

It was Moved and Seconded:

THAT the Fundraising Subcommittee include D. Becker, F. Patterson, and M. Price.

CARRIED

It was Moved and Seconded:

THAT the Programming Subcommittee include K. Duffek, C. Gotay, B. Helliwell, F. Patterson, and R. Van Halm.

CARRIED

It was Moved and Seconded:

THAT the Strategic Planning Subcommittee include S. Donaher, F. Patterson, and R. Van Halm.

CARRIED

8. Administrator/Curator's Report

H. Letwin reported that:

- F. Patterson presented to Council about AMAC's 2021 Achievements and 2022 Objectives on January 10, 2022.
- Exhibition installation is underway for the exhibitions opening on January 19, 2022.
- Staff are scheduled to work at the WVAM on certain days to mitigate closures due to staff illness.
- Adult programming is going to be presented virtually, as opposed to in-person, at least for the next month. Children's programming will continue in-person as planned, with a new after-school program starting January 13, 2022 in the Hobby Studio at the West Vancouver Community Centre and the Saturday Art Explorers course starting January 15, 2022.
- I. Vanderhorst will be working a fourth day per week for the foreseeable future.

It was Moved and Seconded:

THAT the Administrator/Curator's Report be received for information with thanks.

CARRIED

9. Strategic Planning

Staff will work on drafting a document to present to the subcommittee.

It was Moved and Seconded:

THAT the discussion regarding Strategic Planning be received for information with thanks.

CARRIED

PUBLIC QUESTIONS

10. PUBLIC QUESTIONS

There were no questions.

NEXT MEETING

11. NEXT MEETING

The next Art Museum Advisory Committee meeting is scheduled for February 8, 2022 at 10 a.m.

12. ADJOURNMENT

It was Moved and Seconded:

THAT the January 11, 2022 Art Museum Advisory Committee meeting be adjourned.

CARRIED

The meeting adjourned at 11:02 a.m.

Certified Correct:

s. 22(1)

s. 22(1)

Staff Liaison

**THE CORPORATION OF THE DISTRICT OF WEST VANCOUVER
ARTS & CULTURE ADVISORY COMMITTEE MEETING MINUTES
VIA ELECTRONIC COMMUNICATION FACILITIES
THURSDAY, JANUARY 13, 2022**

(12)(b)

Committee Members: P. Bowles (Chair), J. Baxter, R. Finley, B. Milley, E. Oram-Killas, K. Rosin, S. Swan, S. Tsangarakis; and Councillor P. Lambur attended the meeting via electronic communication facilities.

Staff: D. Niedermayer, Senior Manager, Cultural Services (Staff Liaison); and L. Gillan, Senior Community Planner, Economic Development, attended the meeting via electronic communication facilities.

1. CALL TO ORDER

The meeting was called to order at 1:10 p.m.

2. Election of Chair for 2022

It was Moved and Seconded:

THAT P. Bowles be elected as Co-Chair for 2022.

CARRIED

It was Moved and Seconded:

THAT S. Tsangarakis be elected as Co-Chair for 2022.

CARRIED

3. Committee Meeting Schedule for 2022

It was Moved and Seconded:

THAT the Arts & Culture Advisory Committee Meeting Schedule for 2022 be adopted as follows:

- February 8, 2022 at 3 p.m.
- March 10, 2022 at 3 p.m.
- April 5, 2022 at 3 p.m.
- May 12, 2022 at 3 p.m.
- June 9, 2022 at 3 p.m.
- July 7, 2022 at 3 p.m.
- September 7, 2022 at 1 p.m.
- October 6, 2022 at 3 p.m.
- November 3, 2022 at 3 p.m.
- December 8, 2022 at 3 p.m.

CARRIED

It was Moved and Seconded:

THAT

1. all remaining Arts & Culture Advisory Committee meetings, including subcommittee meetings, for 2022 be held via electronic communication facilities only;
2. the Atrium in the Municipal Hall be designated as the place where the public may attend to hear, or watch and hear, the Arts & Culture Advisory Committee and subcommittee meeting proceedings; and
3. a staff member be in attendance at the Atrium in the Municipal Hall for each of the scheduled meetings.

CARRIED

4. APPROVAL OF AGENDA

It was Moved and Seconded:

THAT the January 13, 2022 Arts & Culture Advisory Committee meeting agenda be approved as circulated.

CARRIED

5. ADOPTION OF MINUTES

It was Moved and Seconded:

THAT the December 16, 2021 Arts & Culture Advisory Committee meeting minutes be adopted as circulated.

CARRIED

REPORTS / ITEMS

6. Welcome and Introductions

Chair welcomed the committee members back to the committee for another term.

It was Moved and Seconded:

THAT the discussion regarding Welcome and Introductions be received for information.

CARRIED

7. Committee Orientation

Members were reminded to advise the Chair, Staff Liaison, and Department Secretary if unable to attend a meeting or take a leave of absence if planning to miss more than three consecutive meetings.

Member contact information is confidential and for committee business only.

New members will receive binders with key documents including Committee Terms of Reference, Council Committee Procedure Bylaw, General Council Committees Policy, Privacy Policy, Conflict of Interest Policy, and key reports. If any returning members are missing documents, please advise the Department Secretary.

It was Moved and Seconded:

THAT the discussion regarding Committee Orientation be received for information.

CARRIED

8. Council Liaison Update

There was no new update.

9. Home-Based Business Discussion

Linda Gillan, Senior Community Planner-Economic Development joined the meeting to provide a short presentation on enabling sales from home based artist studios. Planning has been working on proposed changes to zoning bylaws in response to Council's strategic direction to support home based businesses. The changes are also supported in the Official Community Plan (to encourage compatible economic activities and encourage the creation of versatile spaces that support arts and culture sector development). The Arts & Culture Strategy (2018-2023) also supports the expansion of arts and culture opportunities for individual artists with recommended changes to some bylaws.

Planning will propose amendments to sections 130.04 (1)(b) and 130.04 (4)(f) of the Zoning Bylaw to permit the sale of artwork and crafts produced on the same premises and offer retail sales directly from the site.

Members asked a number of questions related to the proposed changes and requested notification of the Council meeting date where the proposed changes will be considered.

It was Moved and Seconded:

THAT the discussion regarding Home-Based Business be received for information.

CARRIED

10. Staff Update

Staff will reach out to the Ambleside Dundarave Business Improvement Association (ADBIA) to request a meeting to discuss opportunities to pilot a street performers program in conjunction with summer events the ADBIA produces or partners with the District to present.

A meeting has been confirmed with Park Royal for February 8th that will be attended by P. Bowles and S. Swan. Park Royal will be launching their own street performer program.

Staff reminded the committee that R. Finley was appointed by Council to represent the committee on the Arts Facilities Advisory Committee. Their first meeting under a new Terms of Reference will be held on January 25th at 2 p.m.

It was Moved and Seconded:

THAT the verbal report regarding Staff Update be received for information.

CARRIED

PUBLIC QUESTIONS

11. Public Questions

J. Lord of the West Vancouver Community Arts Council mentioned many small arts organizations are challenged to find funds to rent performance, workshop, or rehearsal space. Staff reminded the committee that the committee had successfully worked with the Community Grants Committee (CGC) to receive Council approval of increased funds for the arts, culture, and heritage sector to pay for rental spaces. These funds were suspended when the pandemic affected the District budget and public performances and rehearsals were suspended. There is an opportunity to reengage with the CGC to go back to Council to reinstate this funding once normal operations are achieved.

NEXT MEETING

12. NEXT MEETING

Staff confirmed that the next Arts & Culture Advisory Committee is scheduled for February 8, 2022 at 3 p.m.

CARRIED

13. ADJOURNMENT

It was Moved and Seconded:

THAT the January 13, 2022 Arts & Culture Advisory Committee meeting be adjourned.

CARRIED

The meeting adjourned at 2:27 p.m.

Certified Correct:

s. 22(1)

Chair

s. 22(1)

Staff Liaison

**THE CORPORATION OF THE DISTRICT OF WEST VANCOUVER
DESIGN REVIEW COMMITTEE MEETING MINUTES
VIA ELECTRONIC COMMUNICATION FACILITIES
THURSDAY, JANUARY 13, 2022**

Committee Members: D. Harrison (Chair), R. Amenyogbe, R. Ellaway, E. Fiss, A. Hatch, S. Khosravi Kermani, J. Mahoney, H. Nesbitt, L. Xu; and Councillors B. Soprovich and M. Wong attended the meeting via electronic communication facilities.

Staff: L. Berg, Senior Community Planner (Staff Liaison); E. Wilhelm, Senior Community Planner; and N. Allard, Administrative Assistant (Committee Clerk) attended the meeting via electronic communication facilities.

1. CALL TO ORDER

The meeting was called to order at 4:36 p.m.

2. ELECTION OF CHAIR 2022

It was Moved and Seconded:

THAT Don Harrison be elected as Chair for 2022.

CARRIED

It was Moved and Seconded:

THAT Roger Amenyogbe be elected as Acting Chair for 2022.

CARRIED

3. COMMITTEE MEETING SCHEDULE FOR 2022

It was Moved and Seconded:

THAT the Design Review Committee Meeting Schedule for 2022 be adopted as follows:

- February 10, 2022 at 4:30 p.m.
- March 9, 2022 at 4:30 p.m.
- April 21, 2022 at 4:30 p.m.
- May 19, 2022 at 4:30 p.m.
- June 23, 2022 at 4:30 p.m.
- July 21, 2022 at 4:30 p.m.
- September 15, 2022 at 4:30 p.m.
- October 20, 2022 at 4:30 p.m.
- November 24, 2022 at 4:30 p.m.
- December 7, 2022 at 4:30 p.m.

CARRIED

It was Moved and Seconded:

THAT

1. all remaining Design Review Committee meetings, including subcommittee meetings, for 2022 be held via electronic communication facilities only;
2. the Atrium in the Municipal Hall be designated as the place where the public may attend to hear, or watch and hear, the Design Review Committee and subcommittee meeting proceedings; and
3. a staff member be in attendance at the Atrium in the Municipal Hall for each of the scheduled meetings.

CARRIED

4. APPROVAL OF AGENDA

It was Moved and Seconded:

THAT the January 13, 2022 Design Review Committee meeting agenda be approved as circulated.

CARRIED

5. ADOPTION OF MINUTES

It was Moved and Seconded:

THAT the December 9, 2021 Design Review Committee meeting minutes be adopted as circulated.

CARRIED

6. INTRODUCTION

- a. Introductory presentation by staff.
- b. Applicant presentation.
- c. Clarification questions to applicant by the Design Review Committee.
- d. Roundtable discussion and comments.
- e. Recommendations and vote.

7. APPLICATIONS FOR CONSIDERATION

Applications Referred to the Design Review Committee for Consideration:

7.1 **Address: 2711 Rodgers Creek Place**

Background: E. Wilhelm, Senior Community Planner, introduced the proposal and spoke relative to site context:

- Proposal is for a 19-unit apartment building located in Area 3 of Rodgers Creek.
- Since 2008, development has ensued in Areas 1 and 2, to east of site; Area 4 is nearing completion; sporadic development in Area 3, 10 single family homes and four town house units have already been built; subdivision process for Area 5 and 6 are underway currently.

- Site surrounded by trees to west, north and east of site within the bordering parkland and is currently vacant. It exhibits steep slope within barren portion of lot and less slope in vegetated areas of lot.
- Chippendale Road is an arterial road that connects Upper Lands from east to west and links with Cypress Bowl Road, northwest of this development.
- Rodgers Creek Place is a meandering cul-de-sac with single family lots (no homes built on them yet).
- Site and surrounding area is zoned Comprehensive Development Zone 3; allows for a multitude of different housing forms.
- Upon creation of subdivision and respective covenants registered on Land Title, this lot has always been envisioned as a site for development of an apartment building due surrounding tree cover, prominent corner and the slope of site.
- Folio Studio Architecture has submitted proposal for a six storey format building with an underground parking garage; includes mix of two and three bedroom units ranging from 924 square feet to 2,258 square feet; extensive corner and perimeter landscaping with a focal covered entrance feature with a nearby accessible elevator.

Project Presentation: M. Geller (Advisor to Owner) provided an introduction including:

- The subject site is challenging but has a lot of potential.
- When purchased site spoke to British Pacific Properties as to what was meant by *Contemporary Alpine Character*; was pointed out that 15 years ago it was thought that buildings in this neighbourhood would look like those in Whistler. Decision was made to go towards a more Contemporary West Coast aesthetic.
- Intent in design is to achieve simple lines, large overhangs, and use of stones and materials that reflect a natural setting mixed with a contemporary style.

Project Presentation: F. Xu (Architect) provided a presentation including:

- Presentation will include challenges related to the site, rationale of design and renderings of the proposed building.
- Displayed overview of property with aspects from Rodgers Creek Place looking southeast of site and from Chippendale Road looking north.
- Site has a 28 metre (98 foot) change in elevation from the north to the south and from east to west of site. Topography has therefore, been a major influence in the design and landscaping.
- Displayed slide of siting rationale; explored two options: 1) lowering the building into the ground and keeping lobby at street level; or 2) raising the building which would result in less site disruption and excavation.
- Decided on the following design features: raised entry level, terraced landscaping along street and rear sides, entrance that will include an elevator at the street level, wide frontage along Rodgers Creek Road and narrow frontage along Chippendale Road, stepping back of building massing along top of building, incorporation of large angled balconies and contoured roof shape to create a dynamic view from the street.
- Design inspiration came from modern buildings of nearby sites; all contemporary modern in design.

- Displayed renderings showing angled balconies and dynamic roof overhangs; shallow and wide building; terraced landscapes; non rectangular roof which gives appearance of sloped roof; entry area with wood entry and exterior elevator.
- Due to lobby being higher than street and to minimize site disturbance, an entry stairway has been introduced along with terraced landscapes, outdoor access elevator and an entry canopy.
- In terms of material very conscious of need to create a non-combustible building that meets Wild Fire Development Permit Area Guidelines while also blending into the environment; stone, wood-looking panels and steel utilized to achieve this.
- Considerable attention given to sustainability: considerable natural ventilation into units (eighty percent of units have windows on two sides); balconies and overhangs allow for optimal solar potential, allowing shading in summer time and low angle daylight input in winter; working with Professional Energy Consultant to meet the Step Code 2 and low carbon requirements.

Project Presentation: T. Martin, Landscape Architect provided a presentation including:

- Three objectives driving the landscape design:
 - Thoughtfully integrating the grading
 - Supporting and bolstering the architectural form
 - Blending into the forest surroundings
- Displayed birds-eye view showing hedges in front of building, architectural walls stepped towards street, evergreen shrubs provide greenery in frontage and side the main entry stairway.
- Due to Fire Smart requirements unable to plant conifers; broad leaf evergreens will be comprise most of the hedges and shrubs.
- Planting lines will obscure the main parkade entry wall and provide various colors throughout year.
- Entry driveway composed of permeable paving to create infiltration.
- Stepping concrete walls on east side of driveway will have hedges in front to screen them.
- Landscaping in front is mostly mass plantings supported by hedges along the walls.
- Non-podium planting is low to allow for views off of the patios.
- Perimeter walk way on east side of driveway will wrap around the building, exiting in the southwest edge of site to match the neighbouring grades.
- Two type of architectural walls that will be used in the front:
 - Smooth finished casing-faced walls around driveway
 - Block concrete walls will be used for the main landscaping
- Terrace rear area will provide space behind building and link to the surrounding landscape. These walls will be shotcrete and will provide a natural rock appearance; planting in this area will be native species (vines, maples, ferns) as well as Ash and Oak Trees; no coniferous to Fire Smart Guidelines.
- Other Fire Smart requirements: spacing of planting at least 1.5 metres from building, minimum distance of trees to the building as well as between trees, and decorative gravel mulch to enable fire suppression.

- Laurel and Box Wood used in front yard as main hedging materials as well as Rhododendron, Xalia and Daphne.

Committee Questions:

The Committee went on to question the presenters, with the applicants and staff responses in *italics*.

- Can you talk about the wall materials being used; have you incorporated any natural stone or locally quarried rock into the design? *In rear yard plan to use structural wall shotcrete as this is only way to build into slope; along front yard using casing-faced walls for structural integrity; intent to hide wall in greenery; in frontage using block wall that will be filled in – is quite narrow and will hedge in front of walls to screen them; while request for natural stone, we will plan to disappear the walls in greenery.*
- Noticed an entry feature is to be incorporated. What will this feature be? *This is a concrete wall built out with stone veneer.*
- Are soffit lights to be included and are they part of the Dark Sky Policy? *General intent is not to have any up-lighting, trying to keep lighting to minimum.*
- In presentation package it was mentioned that this will be the only apartment building in Rodgers Creek Area 3. Is there a covenant that prevents applicants from rezoning and building more apartments in this area? *In immediate vicinity there is a 20-unit subdivision; all buildings to the east are single family dwellings and to southeast of site are townhouses; this will be primary apartment complex.*
- What is the required level of the Step Code? *The Step Code requires Step 2 plus low carbon energy system.*
- Did you explore the possibility of having a terrace on the roof that would enhance the character and use of the upper space? *Cannot due to Fire Smart regulations which do not allow for plants in certain locations; rather we chose to utilize space surrounding the building.*
- It looks like the visitor parking area outside the parkade is constricted; has this been looked into? *Inside of parkade is standard size. We will work with Planning to ensure requirements are met.*
- Did you consider a canopy over the parkade entrance to protect entry from climatic elements? *We have parking entry with rolling gates; beside parking area is an entrance door with a covered entry.*
- Regarding parkade entrance, in the architectural drawings there was one green wall with an elevation of 12 feet in height. Does zoning bylaw permit 10 or 12 feet wall height? *This is part of the main building so the height is compliant with the zoning for the building.*
- What type of planting will be on the green wall? *There are two options we have proposed: 1) Suckering Vine; 2) Virginia Creeper.*
- Is the planter on grade or a slab? *On grade; podium is aligned with the parkade; vines would grow out of a thin planter.*
- What is the status of the unopened road to the west of the site, indicated on the site plan? *Legally this is still an unused right of way; it forms part of Chippendale Road Park and is to remain as forest cover.*
- Is there a reason the balconies on east are bigger than the others, which are thinner? *Yes, it was intended to have variations in sizes of balconies to comply with setback requirements.*

- What was rational behind plant distribution on façade of walls of the penthouse? Can you provide rational of the distribution of materials displayed on the elevations? *Intent was to introduce stone veneer material; needed vertical articulation and the stone connects the penthouse with the entry level and creates an articulation of interest.*
- Are two elevators required for this building? *Yes.*
- The trees are not rendered on the 3D images, correct? *Not on front but they are on rendering on side yards.*
- On landscape plans I did not see Sweet Gum Trees. Where are they located on plan? *On the east side of plan; they are the very small type.*
- Is there permanent irrigation? *Yes, that is plan.*
- I do not see any site amenities included in proposal (trail, benches for people to use). Will these aspects be incorporated into plan? *There is an amenity room to the right of the entrance along with picnic tables outside near the entrance. Seating has not been included.*
- Any consideration to use real wood in materials? *Due to Fire Smart we cannot use real wood.*
- How many adaptable units are there? *4 of the units are planned to be adaptable. (which equates to approximately 21% of the units)*
- Are Fire Smart Regulations dictating why this is not a wood building? *Wild Fire Hazard Development guidelines encourage the use of other materials.*
- What are you planning to use for soffits? *Longboard; something non-combustible.*
- Is this the first multi-unit development building in Cypress Village, and will this project become a precedent for other developments? *No, others have been done; within area three however, there are only townhouses approved; but this is not a front runner; there is precedent set. This area is not considered Cypress Village.*
- The Upper Lands specifies two hundred units per gross acre; how does this project fit into this specification? *Looking at density within CD3 zone to make sure it is compliant; also look at covenants; I am not looking at a broader unit count in that manner.*
- How does this structure embody Contemporary Alpine Character? *This was a terminology used 15 years ago; in subsequent years it has been determined that the desire should be for Contemporary West Coast architecture.*
- Apart from recycling areas, is there any bear deterrent program? *The only bylaw is that the garbage area has to be enclosed, and closer to the parkade area to make it easy for trucks to access; cannot plant bear attractant plants.*
- Can you elaborate on non combustible, white and black cladding material? *It is a concrete based material; will be using rain screen system along all sides of wall.*
- Does project just meet requirements of the Step Code, or exceed the minimum codes? *It exceeds the code; low carbon matches Step Code 2.*
- How would one take their bike from the bike room to the street? *There is a room along the street side and the main door access for bikes to go through. One can also use the interior elevator to transport bikes.*
- There was mention of using site regenerated rock. Which wall is this for? *Not sure as we do not know how much rock will be generated on site. If we do use any it will be on the left side.*

- What is permeable material of driveway? *Permeable paver will be used (10 cm thick). Below paver there will be crushed gravel; clear crush will allow water to infiltrate; perforated pipe will take any excess water away.*
- From perspective of District should Alpine or Contemporary West Coast Character be used? *I would have to go with Contemporary Alpine Character with recognition of West Coast Character.*
- Is anything going to be built to the north of site, or will it remain forest? *Nothing will be built directly to the north; the closest in proximity to the north would be Cypress Bowl Road but no buildings. North of that there is a cul-de-sac which is zoned for four to five single family lots with discussion of multifamily in this area; currently zoning does not allow for multifamily in this area.*
- Where is Pike Creek? *Flows the east of site and then turns into Pike Creek to the south.*
- Where will site drain to? *A storm water management detention tank will collect rain water which will slowly release into the District system. None will go into the creek.*
- On north side, are you worried about ground water penetrating? *Have a specialist and water main cut off drain on this side to collect this in a trench drain.*
- Did you consider solar panels for the roof? *No, because we have limited unit numbers, great sunshine through units, roof side limitations and material restrictions; as a result we thought it would not be a good idea. We will provide a rough-in for future solar panels should they be incorporated later on.*
- Would you consider tenant use in the front southwest corner? *We have the patio on the podium; due to slope this area is presently not accessible.*
- Proposal package indicates units being 1,000 square feet or less, but floor plans state 1,600 square feet. Can you explain this? *Upper level has larger units but there are 6 units which meet the floor area within the CD3 zone which requires a minimum of 30% of apartment units must not exceed 1,001 sq. ft.*

Committee Comments:

The Committee went on to provide comments on the presentation, including:

- Understand the challenges involved in meeting Fire Smart requirements and using bear deterrent material; consider exploring ways for diversifying vegetation at the front of property.
- I support proposal for Contemporary West Coast Design; consider what will happen if one elevator is out of commission. *There is a link between entrances to access both elevators to address this.*
- I think more displays of the terracing would be beneficial; more lateral flexibility could help distinguish the building; seems as though the ashlar fascia (Granite Cladding) is being used to mark the entrance but on sheet A3-01 the stone butts into a wood material; consider using the same material to extend down the elevation and the proportions of materials being used.
- Proposal is successful in terms of offering smaller units.
- Good presentation; complex site; landscaping does not include amenity for the residents; consider making a playground, or family area. The stairs from road way are quite a long distance to walk for residents.
- Consider the usability of the site; corner of Chippendale Road could be enhanced through use of art.

- I understand challenges with Wild Fire Hazard Requirements. At entrance with wide staircase suggest rearrangement of trees; instead of having parallel and structured stairs suggest incorporating other stair layouts to add interest to the journey going to upper panel.
- Parkade entrance is very narrow, especially at visitor parking area. Outdoor amenity area would benefit proposal.
- The massing and west façade facing street looks high and bulky; need to see more steps at west façade. Most renderings are of top floors; suggest to have three top levels set back at each level.
- The building needs a stronger and more inviting entrance. Wide panels at west side from far away appear sharp; perhaps move white panels to the entrance to draw attention to this point.
- Entry stairs look too sharp and too high; suggest using L-shaped or zig-zag stairs. Weather protection for stairs suggested.
- Parkade has unnecessarily narrow entry; ensure that two cars can pass one-another. Design of north façade could have more renderings displayed; appears plain and blank which is contrary to the District guidelines; different façade colors could be incorporated. Distribution of façade panels appear random; appreciate natural looking colors and materials but perhaps limit these; stone material on top does not appear right; consider masonry materials on lower portion of building.
- Clarity from the District on Contemporary Alpine or West Coast Modern Character would be useful; character is not clear. Seems neither characters are being met; imposing building; not convinced about the massing. Would like to see the landscape plan with all of the species identified and displayed on rendering. Want to ensure lock blocks will be covered by greenery and that species planted in front will achieve this.
- Concur with comments. As far as resident amenities, the new Trestle Bridge and trail systems have been developed nearby.
- East and north elevations need more work; south and west sides seem resolved; appreciate transition from square retaining walls to natural and informal shapes to the south; perhaps add more wood to east end where elevator is; exposed mass timber columns on balconies could also be a way of adding character to the 'Alpine' feel of the building.
- I like the angular roof form; could be exaggerated more. Don't think the Allan block meets either characters trying to be achieved; perhaps could use a different material. In terms of placement of cladding, wood is suggested in the centre; stone appears random.
- Opportunity for more identity and place making using natural features such as boulders could provide an identity to the development; if possible have friendlier entrance onto the street front.
- Architects response: *chose massing and material organization as east, north and west side as these sides are surrounded by forest; top level segment material organized to be black tone; stone organized vertically to continue to bottom; reason that the entry is wood is that the glass combined with wood in elevator create a warm, light look. We will consider all comments. Overall this is a simple building that tries best to have articulation at top and bottom, and reduce massing.*

Having reviewed the application and heard the presentation provided by the Applicant:

It was Moved and Seconded:

THAT the Design Review Committee support the 2711 Rodgers Creek Place application subject to further review of the following items with staff:

- Explore ways to increase tree and planting species diversity, to achieve a more naturalistic aesthetic in line with the Contemporary Alpine Character.
- Redesign lock block walls with natural or reclaimed stone from site where possible.
- Consider including more amenity space for residents, especially family oriented features such as playgrounds.
- Redesign entrance stairway to include a mid-point resting area and revise stair geometry to break up the linearity and integrate plantings along edges.
- Redesign front entrance to make a stronger and more inviting presence, with increased weather protection.
- Consider making the parking entrance wider to accommodate two cars passing.
- Design development to study the façade materials to make it a more consistent, simplified approach.
- More differentiation required on the north elevation through use of different materials; masonry look material needs to extend all the way down from the top level.
- Work with District to clarify the expression to be consistent with the guidelines around Mountain Forest Character and Contemporary Alpine Character.
- Work with the District to ensure massing complies with the guidelines.
- Explore cladding on elevator to be more in line with the Contemporary Alpine Character.

CARRIED

All in Favour = 8

8. PUBLIC QUESTIONS

There were no questions.

9. NEXT MEETING

Staff confirmed that the next Design Review Committee meeting is scheduled for February 10, 2022 at 4:30 p.m.

10. ADJOURNMENT

It was Moved and Seconded:

THAT the January 13, 2022 Design Review Committee meeting be adjourned.

CARRIED

The meeting was adjourned at 6:46 p.m.

Certified Correct:

 s. 22(1)

Chair, Don Harrison

 s. 22(1)

Staff Liaison, Lisa Berg

From: Weiler, Patrick - M.P. <Patrick.Weiler@parl.gc.ca>
Sent: Thursday, February 10, 2022 3:15 PM
To: Weiler, Patrick - M.P.
Subject: Letter from MP Patrick Weiler - Government of Canada launches a Call for Proposals for the Canada Service Corps
Attachments: Letter from MP Patrick Weiler - Call for Proposals for the Canada Service Corps.pdf

CAUTION: This email originated from outside the organization from email address Patrick.Weiler@parl.gc.ca. Do not click links or open attachments unless you validate the sender and know the content is safe. If you believe this e-mail is suspicious, please report it to IT by marking it as SPAM.

WARNING: Your email security system has determined the message below may be a potential threat. The sender may propose a business relationship and submit a request for quotation or proposal. Do not disclose any sensitive information in response. If you do not know the sender or cannot verify the integrity of the message, please do not respond or click on links in the message. Depending on the security settings, clickable URLs may have been modified to provide additional security.

Good afternoon,

Please see the attached letter from MP Patrick Weiler regarding the launch of a call for proposals for the Canada Service Corps.

Sincerely,
Kevin Hemmat



Kevin Hemmat
Office of Patrick Weiler
Director of Communications
West Vancouver-Sunshine Coast-Sea to Sky Country
Office: 604-913-2660
Cell: 604-353-2550
Kevin.Hemmat.842@parl.gc.ca



Before printing this e-mail, think about the Environment



HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

Patrick Weiler

Member of Parliament
West Vancouver-Sunshine Coast-Sea to Sky Country

February 10, 2022

Dear Friends & Neighbours,

This week, the Honourable Marci Ien, Minister for Women and Gender Equality and Youth, announced a **new multi-stream open call for proposals (CFP) under the Canada Service Corps (CSC)** that will build on the past success of the CSC program by expanding its scope and engaging even more young Canadians from coast to coast to coast.

This CFP prioritizes the participation of organizations that focus on and are represented by Indigenous and under-served populations. It will target themes that are important to young people including reconciliation, building an inclusive Canada, preserving the environment and strengthening resilience, while building a culture of service that empowers young Canadians to make a positive impact in their community.

The four available streams include:

- National Service Placements
- Regional Service Placements
- Micro-grants
- Micro-grants Diversity

[For more information and to apply, please visit the Canada Service Corps website.](#)

The application deadline is March 22, 2022 at 12:00 pm PST.

I also encourage you to [see this page for a full backgrounder](#) on the CSP. If you have any questions about this program, please do not hesitate to reach out to our office. We are happy to support your application in any way that we can.

Sincerely,

Patrick Weiler, MP
West Vancouver-Sunshine Coast-Sea to Sky Country

Constituency *Ottawa*

6367 Bruce Street Suite 282, Confederation Building
West Vancouver 229 Wellington Street, Ottawa
British Columbia V7W 2G5 Ontario K1A 0A6
Tel.: 604-913-2660 | Fax.: 604-913-2664 Tel.: 613-947-4617 | Fax.: 613-847-4620

From: Jenn Moller
Sent: Monday, February 14, 2022 8:37 PM
To: s. 22(1)
Cc: correspondence: Shelley Weal; Andy Kwan
Subject: s. 22(1) Slowing Down Traffic At Irwin Park School and in Dundarave _ ENGINEERING 20220214 RESPONSE

Hi s. 22(1)

I am following up in response to your enclosed correspondence.

The intersections mentioned in your email are within a school zone, staff will review the concerns you have reported with Irwin Park School where staff to include WVPD, Bylaws and Engineering along with the School District maintain a regular dialogue around school and traffic safety related matters.

Historically, the approach to managing school related requests have been dealt individually on a complaint basis which has created some challenges in planning, budgeting and prioritization of the utilization of limited resources and funding. Currently, and in order to better inform decision making in the school zones to address these types of issues, a program framework and supporting operational policies are being developed to evaluate and prioritize traffic requests. In turn, your suggestion of installation of speed humps or flashing stop signs will be taken into consideration and your reported observation will be logged onto the program tracking list. Based on an initial review, the speed signs and stop signs you have referred to are placed in accordance with Manual of Uniform Traffic Control Devices for Canada.

The section of Mathers Ave from 21st to 24th street is classified as a collector road, which is designed for vehicular traffic at 50km/hr. As the speed of driving is also dependent on driver's comfort level, it could be very difficult to successfully implement a reduced speed limit of 40km/hr for roads that were designed for 50km/hr. This is relevant in relation to the ability to influence driver behaviour with posted speed signage alone as if there is no perceived level of risk to the driver, they may drive to the conditions of the road as opposed to the new speed limit.

Thank you for your input and interest in this matter.

Regards,

Jenn Moller, P.Eng
Director, Engineering & Transportation | District of West Vancouver
604-925-7171 | westvancouver.ca

From: s. 22(1)
Sent: Thursday, January 20, 2022 1:57 PM
To: correspondence
Subject: slowing down traffic at Irwin Park School and in Dundarave

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As a long time Dundarave resident I have witnessed first hand a substantial increase in traffic along 24th Street from Marine Drive to Mathers Avenue and along Mathers Avenue in West Vancouver. I have also witnessed vehicles speeding and not stopping at stop signs up 24th Street and especially at Mathers Avenue. I'm hoping that installing speed bumps and flashing stop signs are in the very near future plan for Irwin Park School as has been done for other schools in the district. I would also suggest that a maximum 40 km/hr speed limit along Mathers Avenue from 24th Street to at least 21st Street would be most beneficial to slow traffic down. Please consider my requests for this year's budget.

s. 22(1)
West Vancouver

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