

**SPECIAL MEETING AGENDA
SUMMER VILLAGE OF SUNBREAKER COVE
AUGUST 5, 2021 @ 9:00 A.M.**

A. CALL TO ORDER

B. AGENDA - additions/deletions
- adoption

C. REQUESTS FOR DECISION

1) Mooring

D. ADJOURNMENT

Summer Village of Sunbreaker Cove

August 5, 2021

Agenda Item: *SBC Mooring Plan Proposal*

Background:

This year the province put a new Disturbance Standard into place attempting to deal with docks and mooring on Alberta lakes. Through this process Sunbreaker Cove has been vocal with our feedback that the proposed standards do not work for our Summer Village. During a meeting with Robert Shorten from Alberta Environment and Parks we were encouraged to submit a plan to the province of what could work for us as AEP does things we can come to an agreement. Attached was our submission.

Council should now consider our next steps. From an administrative perspective, the plan does include some considerable administrative tasks such as:

- Creating and passing a bylaw for mooring structure approval
- Reviewing each application (ensuring that each participant is a SBC lot owner, had a boat lift in the water in 2019/2020, reviewing proposed orientation, reviewing feedback from adjacent dock captains, etc.)
- Managing records of participating members, contact names, numbers
- Managing wait lists
- Managing a tag or posting system and issuing those to dock captains
- Issuing approvals as applications come up, and renew every 5 years
- Dealing with enforcement and complaints

Options for Consideration:

- 1) Council to discuss and provide direction to Administration.



SUMMER VILLAGE SUNBREAKER COVE (SBC) MOORING PLAN PROPOSAL



PREPARED APRIL 2021 FOR
AEP DISCUSSION AND PLAN APPROVAL



PROPOSAL OBJECTIVE

SBC's objective is to get AEP's approval of a specific "draft" mooring plan to:

- Ensure SBC is only approving acceptable mooring layouts
- Eliminate the need for TFA applications and approvals for privately owned mooring structures where SBC is the waterfront owner and has followed an AEP approved plan.

The term "draft" is used to clarify the current status of the plan recognizing AEP's sole jurisdiction to approve dock structures.

Note: Abbreviations and terminology are provided (Slides 13 & 14), with **bolded** words defined in the terminology slide



BACKGROUND

- SBC wants to be able to control what docks and lifts are in front of it's EOS on behalf of many of it's ratepayers.
- AEP issued several draft Disturbance Standards (DS) for public engagement in 2020 that set out conditions under which lakefront owners would be excluded from needing to get a TFA before placing a mooring structure.
- Without action by SBC, the DS could:
 - Give all **lakefront owners** the right to deny others from placing a mooring structure in front of their property even if they are not the waterfront owner.
 - Make **backlot owners** relocate their boat lift to a spot in front of CR if they can get SBC consent and a TFA, unless they can share a dock with a lakefront owner.



BACKGROUND (CONTINUED)

- SBC administration will not and cannot consent to mooring structures on a first-come first-served basis without:
 - referencing a municipally approved plan and
 - having assurance the mooring structures will be approved by AEP
- The DS requires all necessary municipal permits and approvals be obtained with respect to the permitted activity. Therefore, SBC can pass a bylaw that requires SWF owners obtain SBC approval.
- It is understood the AEP intends to commence enforcing the law. This implies AEP will deal with dock and boat lift complaints by **lakefront** owners. Please confirm.



THE DRAFT PLAN:

SBC's Draft Plan is comprised of five parts:

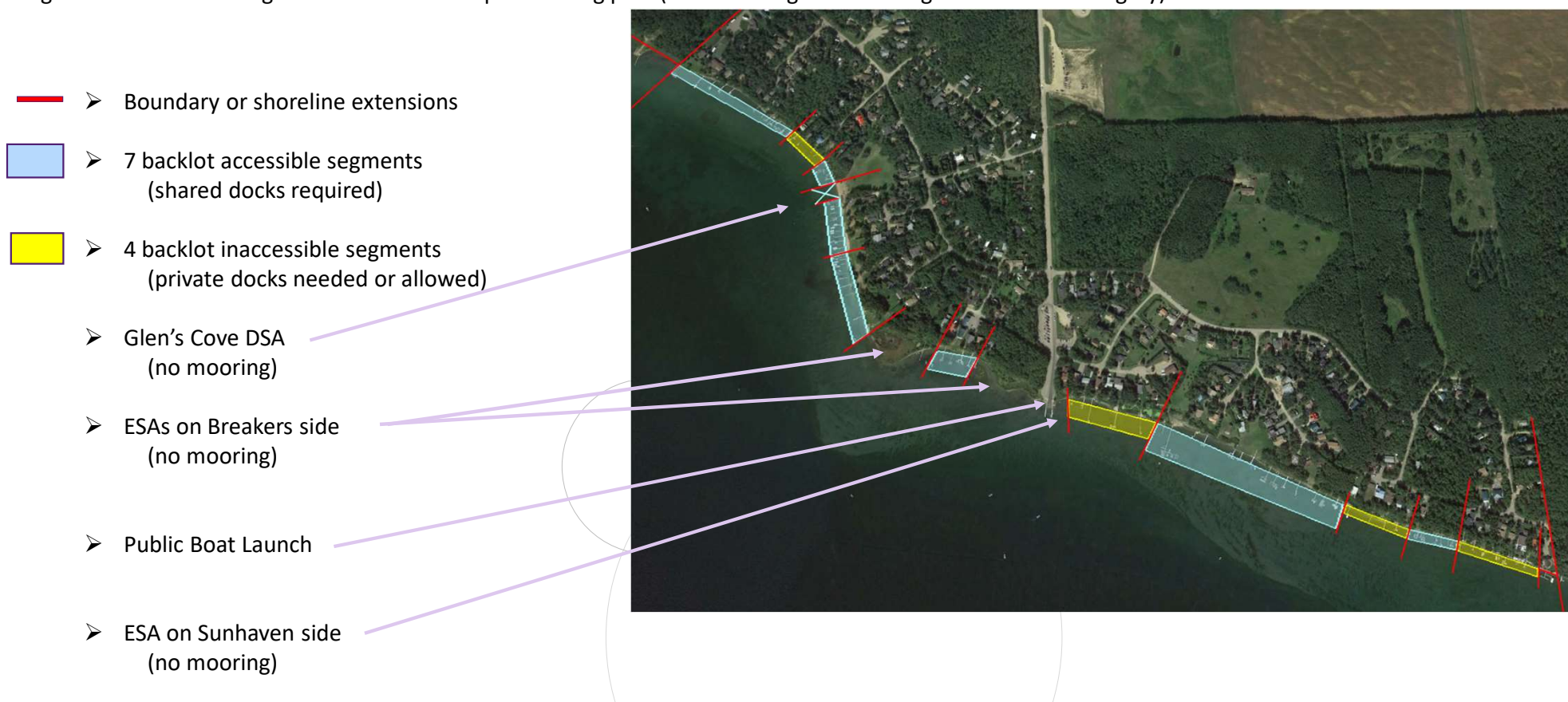
1. Proposed SBC Mooring Administration Segments (MAS)
2. Who can place a dock and/or boat lift in front of SBC's EOS?
3. What does SBC want to see in a shared mooring application?
4. What dock layouts will be approved?
5. What implementation steps are proposed?

Note: The Draft Plan does not address personal watercraft mooring

Proposed SBC Mooring Administration Segments (MAS)



Figure 1 – shows EOS segmentation for municipal mooring plan (source: Google Earth - Aug 2015 satellite imagery)





Who can place a dock and/or boat lift in front of SBC's EOS?

It is proposed that SBC administration consent only to docks and hoists placed inside designated areas (shaded blue in Figure 1) if the dock is shared by at least three lots and where each participant:

1. Is a SBC lot owner,
2. Has only one boat lift in the water (see further discussion in Appendix),
3. Agrees to use the dock, boat lift, and boat for non-commercial purposes,
4. Owned a lot that had a boat lift in the water during 2019 and/or 2020 (wait list for others; see further discussion in Appendix),
5. Is deemed to have participated in selecting a shared dock captain as the sole point of contact with administration, and
6. Is deemed to have agreed to contribute in a meaningful way to:
 - maintaining a safe dock (family friendly and not dangerous to people or the environment),
 - the substantial efforts associated with moving the dock and associated hoists twice a year, and
 - equalizing the perceived value of dock materials being contributed where desired.



Who can place a dock and/or boat lift in front of SBC's EOS? (continued)

Point 6 is intended to reassure and set out expectations if docks amalgamate and there are changes to who now share docks.

Shared docks might further consider adopting a conflict resolution process that allows the majority of participants to remove a participant from the shared dock if the conflict has been documented with all dock participants over a reasonable period in advance of such action being taken. The removed participant would go on the waiting list.

Administration can approve a dock shared by less than three lots on a temporary basis where the dock captain confirms they are prepared to accommodate those on the wait list.

SBC consent to docks and lifts will be demonstrated using a tag or posting system issued to the dock captain. Consents will need to be obtained every five years.

Specific lakefront lots in four MAS segments that are not accessible from CR (shaded yellow on Fig 1) are exempt from requiring SBC approval (or sharing a dock and being constrained to one boat lift) if they conform to DS conditions.



What does SBC want to see in a shared mooring application?

Elected **dock captains** should submit an application that includes:

1. A list of the participating lots (with a contact name, cell number and SBC address),
2. A dock layout description/schematic clarifying:
 - the location of the mooring area. Perhaps providing a satellite image (i.e. google map) to identify its location relative to past dock arrangements
 - the dock and hoist layout to be used. See further discussion in Appendix where a naming convention is offered for consideration
 - the **total dock width used** at the line of navigation and how it is allocated
3. Documentation from adjacent dock captains as to whether or not they agree that the proposed dock does not unreasonably constrain their dock layout to ensure:
 - the actions taken by one group do not unduly constrain opportunities available to have a larger shared dock that utilizes the shoreline more effectively, and
 - Administration is minimizing the chance that docks are simply approved on a first-come first-served basis.



What dock layouts will be approved?

Docks and lifts shall not be placed beyond the **line of navigation**

The dock **setback** shall:

- Be at least 5 ft. See further discussion in Appendix for rationale
- Be at least 10 ft from the east and west boundaries of SBC's EOS to ensure compliance with the DS
- Include the following additional setback where non-standard or modified dock layouts are used to ensure adjacent systems are not negatively impacted and boats can get safely on and off their hoists and pass between docks:
 - 15 ft where boat hoists are located behind other hoists, and
 - 25 ft where boats hoists are orientated parallel to the shore

The ability to have a platform that increases the total width used depends on where it is located and the pressure in that area to accommodate more boat lifts. While layouts with a high lift density are desirable, some reduction in dock density for platforms may be acceptable.

Having wider dock systems will increase the amount of safe space between lifts and the shoreline for family use.



What implementation steps are proposed?

SBC would like to:

1. Obtain AEP approval of the draft plan
2. Pass a bylaw requiring essentially all mooring structures placed in front of SBC's EOS be approved by the municipality commencing in 2021.
3. Allow SBC lot owners in 2021 to place a dock and boat lift as they have in the past. Lots that did not participate in a dock in 2019 &/or 2020 will go on a waiting list maintained by administration.
4. Engage with SBC lot owners during 2021. Those currently with boat hoists in the water will have this summer to discuss if and how docking arrangements need to change to obtain SBC's consent beyond 2021.
5. Implement the plan on a formal basis in 2022



APPENDICES

1. Abbreviations & Terminology (2 slides)
2. Further Discussion of Draft Plan (8 slides)
 - Satellite Imagery Used
 - Who Can Place a dock and/or boat lift in front of EOS Space?
 - What dock layouts will be approved?
3. SBC Public Engagement Information (4 slides)
4. Select SBC Maps (3 slides)
5. Focused Satellite Imagery
 - West (Breakers) -4 slides
 - East (Sunhaven) -3 slides

ABBREVIATIONS

- AEP -Alberta Environment & Parks
- CR -Community Reserves
- DS -AEP Proposed Disturbance Standards setting out conditions under which a TFA is not required
- DSA – Designated Swim Area off Glen’s Cove
- EOS -Environmental Open Space (EOS) making SBC the waterfront owner
- ESA –Environmentally Sensitive Areas that should be left undisturbed
- SBC –Summer Village of Sunbreaker Cove, a municipality within Alberta off Sylvan Lake
- SWF -Semi-waterfront, located behind the municipal EOS along the shoreline
- TFA -Temporary Field Authorization by AEP to have a mooring structure in the water for more than 14 days





TERMINOLOGY

- Communal piers -shared, privately owned, non-commercial piers with a significant number of backlot hoists, such as the one located off Sunset Cove on the east (Sunhaven) side of SBC for many years
- Lakefront owner -either a waterfront lot owner with riparian rights or a SWF lot owner with frontage directly connected to the EOS. Lots with just a view of the lake are not classified as lakefront.
- Backlot owner –not a lakefront owner
- Dock Captain –the single point of contact with SBC for those sharing a dock
- Total Dock Width Used–is the maximum total width of dock/deck material, boat hoists and the required setbacks.
- Line of Navigation – where water is deeper than 5 ft at time of the dock is placed
- Setback –distance from the east and west boundaries of SBC’s EOS or half the minimum separation between standard dock layouts plus any additional ingress and egress required for non-standard dock layouts.

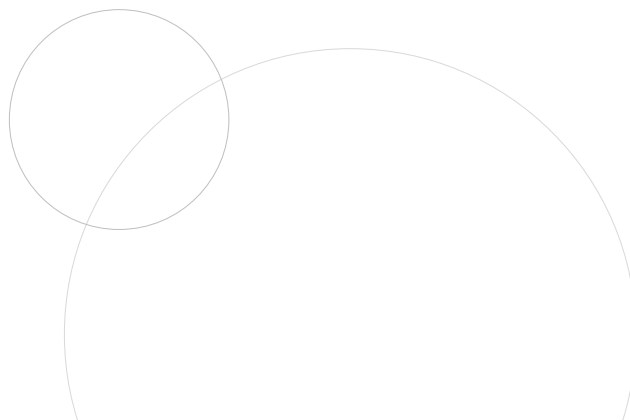


Discussion: Satellite Imagery Used

Figure 1 was generated using Google Earth Pro.

- Google Maps/Earth provides clear, high resolution satellite imagery from Aug 2015 of SBC that show the mooring situation then. Clippings from the 2017 Communal Piers Map (Figure 2) were used in Google Earth Pro to assist in considering a Mooring Plan.
- While Zoom Earth has clear satellite imagery from July 2018, it is not as high a resolution and the website has further limitations relative to desktop Google Earth Pro application.

The Appendix zooms into specific areas with satellite imagery and some comments.





Discussion:

Who can place a dock and/or boat lift in front of SBC's EOS?

- Given shoreline constraints, lot owners that have not used their dock or boat hoist for boat mooring for several years should be required to make their spot available to another lot desiring access on a shared dock to place a boat in the water (use it or lose it).
- The wait list protocol still needs to be developed by administration.
- The capacity to have more docks & boat lifts is dependent on the willingness of individuals to participate in larger shared (communal) docks and physical and environmental constraints.
- The 2018 preliminary piers & hoists plan indicated approvals would not be transferable, however, the final plan may not reflect this. SWF owners may think their approvals should be transferable. There is little reason to differentiate between SWF lot owners and backlot owners in terms of transferability.



Discussion: Dock layouts -6 slides

While a setback of at least 5 ft is a significant increase to that currently being used in some areas in front of the EOS, it is half the DS's 10 ft setback. The 5 ft value recognizes:

- AEP has indicated they are prepared to allow higher densities than the DS permits
- A large portion of SBC's mooring segments are armoured with rocks (set to prevent further erosion), which makes it difficult to beach a boat, and
- Adequate ingress/egress requirements for personal watercraft

The intent of the 5 ft minimum setback is to minimize the need to relocate boat lifts while achieving significant other positive outcomes. It also recognizes that many SBC lot owners want the municipality to:

- block people that don't own in SBC from placing a boat lift in front of the EOS
- increase separation between boat lifts on different docks where the dock density seems too high to allow additional safe areas where families can access the water and improve ingress/egress for personal or smaller watercraft
- monitor the need and desire for additional communal docks



Discussion: Dock Layouts (continued)

Several dock layout shapes were considered while developing the mooring plan

- Chart 1 takes values from Chart 3 to graphically show how the layout can affect lift density per 100m.
- Chart 2 shows the shapes and the naming convention considered
- Chart 3 further helps to clarify the naming convention considered and the determination of total width that includes setbacks

Following Chart 1 there is a brief discussion of the impact of the layouts.



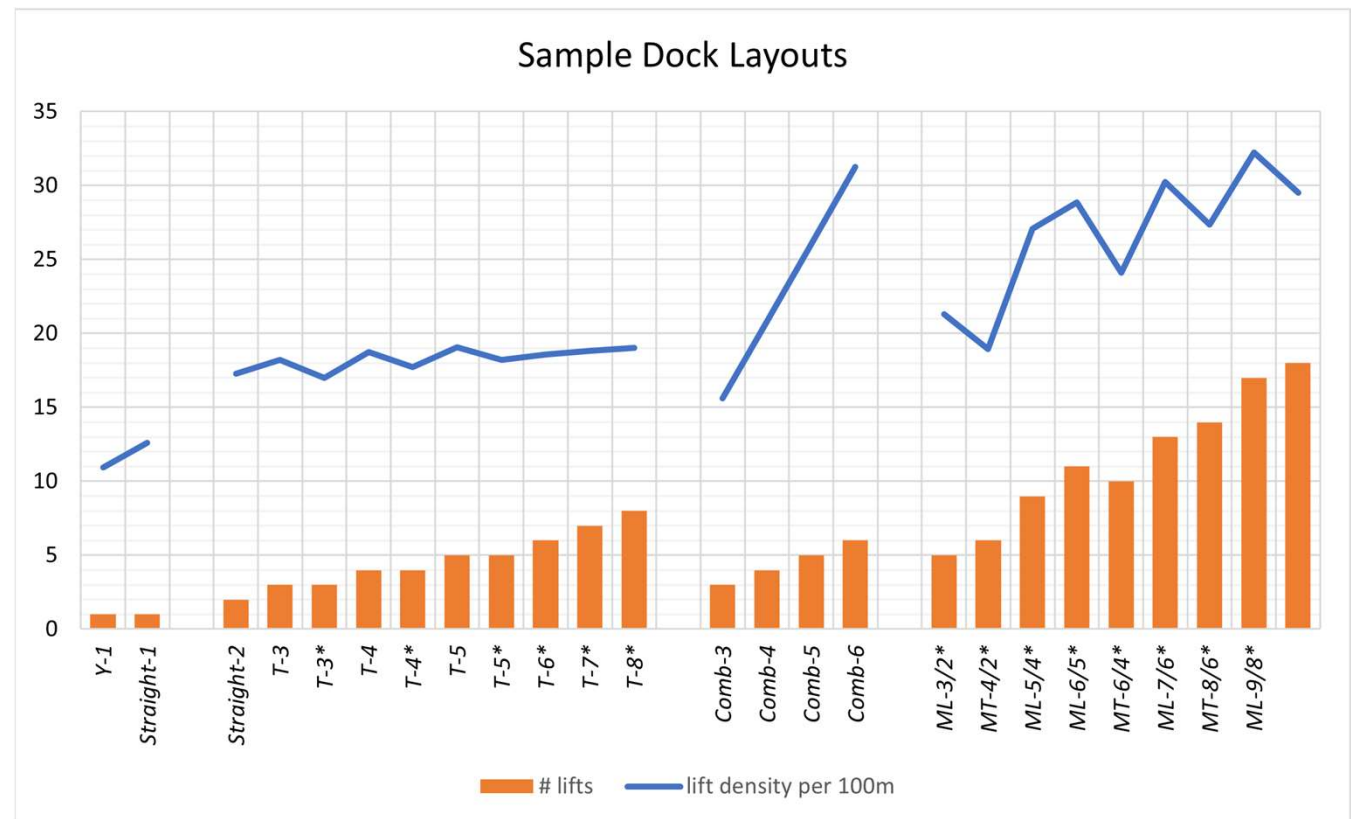


Discussion: Dock Layouts (continued)

Chart 1 – Dock layout affects # boat lifts, total width used and therefore boat lift density

Chart demonstrates

1. Single lift docks have lower (poor) boat lift density relative to multi-lift docks
2. Standard “T” docks densities don’t increase (improve) much after 3 lifts are on it
3. Adding 4 ft for platform reduces lift density except for the “Comb” docks.
4. “Comb” docks need 4+ lifts to be justified on width & density basis, but then are as good or better than many other shapes.





Discussion: Dock Layouts (continued)

Dock density values (number of boat lifts per 100m of total width of the dock layout with setbacks) such as provided on the prior slides can be used to address the efficiency of the layout. For instance:

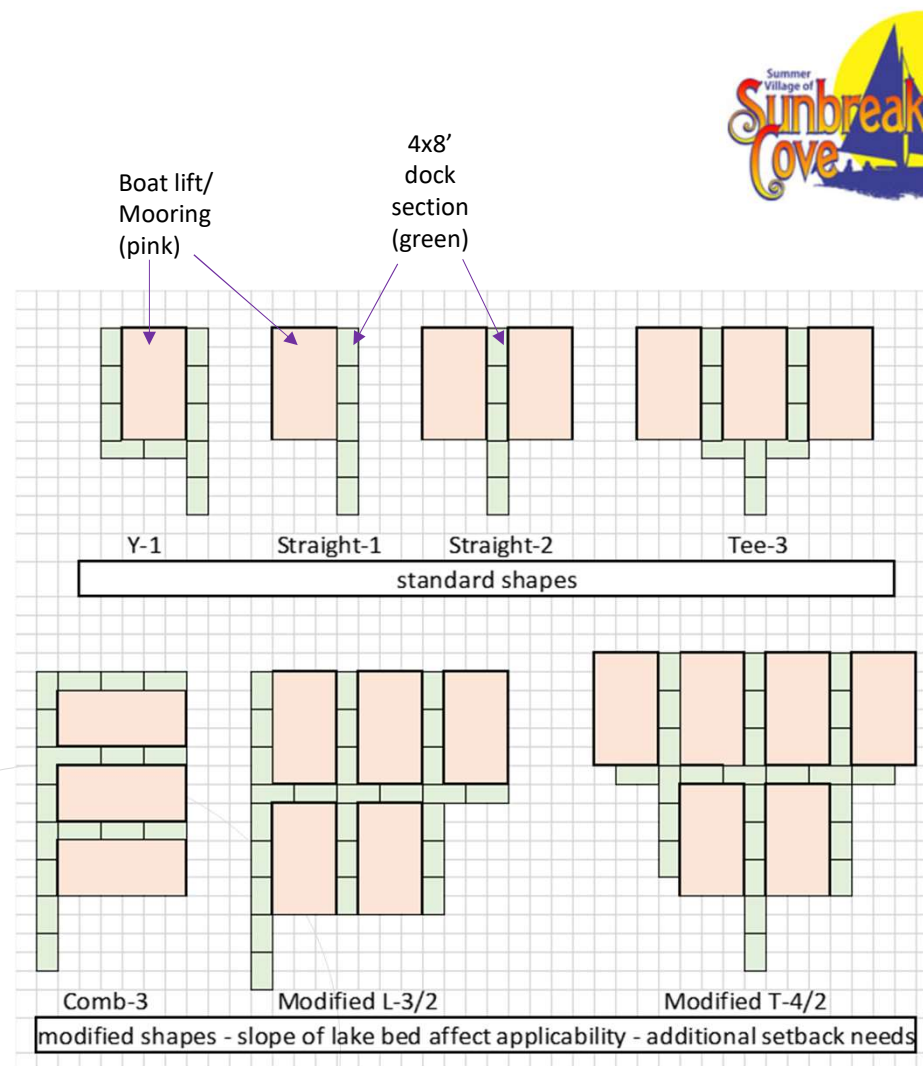
- The density associated with a T-3 dock with 8 ft of dock and no platform is:
 - 67% higher than that of a Y-1 dock with 8 ft of dock width
 - 44% higher than that of a Straight-1 dock with 4 ft of dock width
 - 6% higher than that of a Straight-2 dock with 4 ft of dock width
- Having standard “T” shaped docks with more than 3 dock lifts does not result in material improvements to the density as each additional lift requires an additional 4 ft of dock. The density associated with a T-5 dock, for instance, is only 5% higher than that of a T-3 dock.
- Adding 4 ft of dock between two hoists to make an 8 ft wide platform would reduce the density of a T-3 dock by 7% and a T-4 dock by 5%.
- Two layouts with the same number of lifts can have different lift densities. For instance, a Comb-4 layout is 11% greater than a T-4 layout. Further, the Comb-shape can accommodate a large platform without adding to the system width if the water depth doesn’t increase too rapidly.

Discussion: Dock Layouts (continued)

Chart 2 – Sample Dock Layouts naming convention with comments

Several dock layout shapes were considered in developing the mooring plan as shown here. With regards to the naming convention and setback considerations adopted:

- The number(s) indicate how many boat lifts are on the dock. With the “Modified” layouts, the first/second numbers indicate how many lifts are on the lake and shore side of the dock system, respectively.
- The “Comb” and “Modified L” (ML) shapes have additional setback requirements for ingress/egress on only one side relative to the minimum separation required between standard shaped or “Tee” docks.
- The “Modified T” (MT) shapes have additional setback requirements for ingress/egress on both sides relative to the separation required for the “Comb” or “ML” shapes .
- A “T-4” would have 4 lifts and be an expansion of the T-3 layout shown with additional 4 ft of dock to access the additional lift added to one end. Same idea with respect to a MT-5/3 being a dock lift expansion of the MT-4/2 layout shown.



Discussion: Dock Layouts (continued)



Chart 3 – Helps describe dock layout naming convention, and how assumed separation is allocated to a dock system width

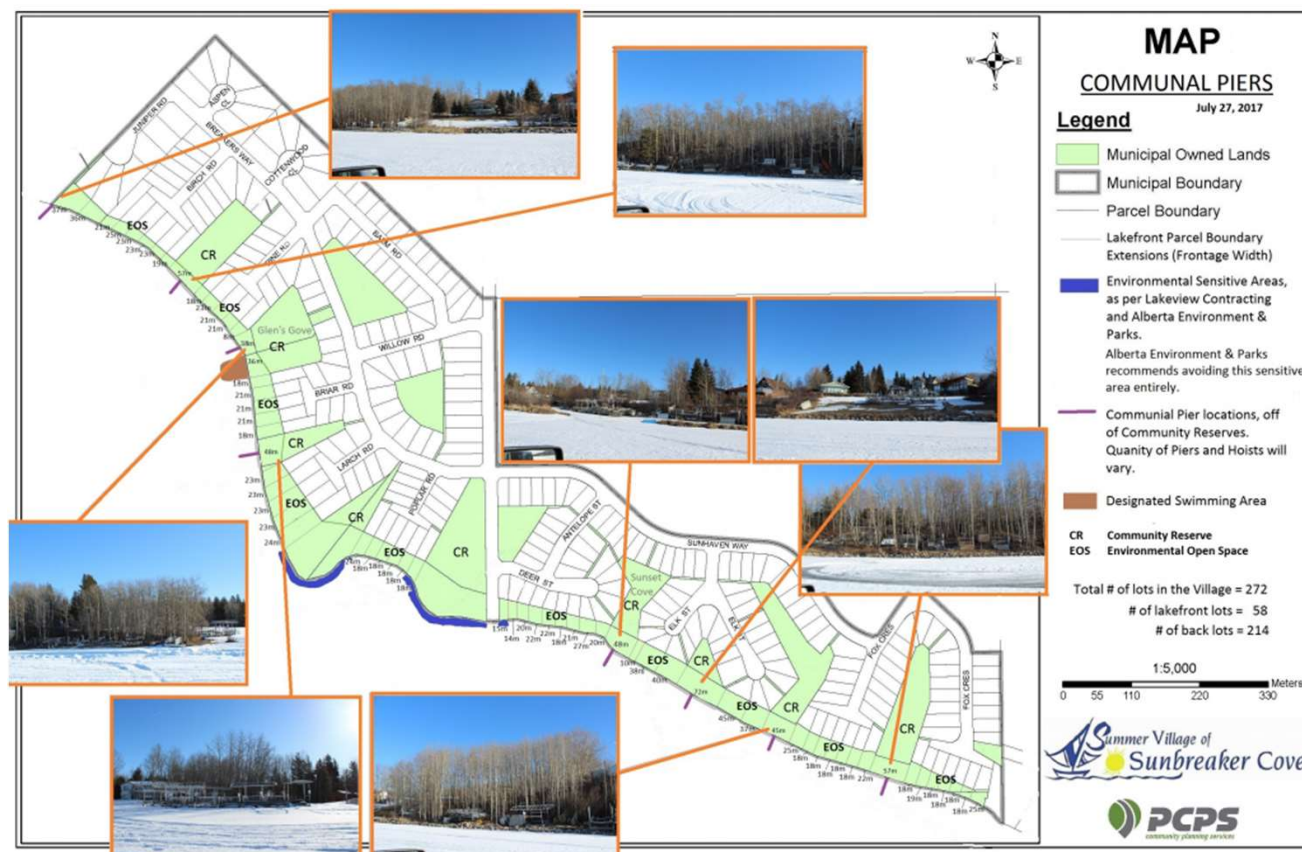
Dock Layout and Effective Boat Density Associated with Shore Line Width								Dock Layout and Effective Boat Density Associated with Shore Line Width							
Dock Shape w/ Boat Lift Count Info	# Boat Lifts	Shoreline Width Used by Mooring System (ft)					Effective Lift Density	Dock Shape w/ Boat Lift Count Info	# Boat Lifts	Shoreline Width Used by Mooring System (ft)					Effective Lift Density
		Dock	Lifts	SEP	AS	Total				Dock	Lifts	SEP	AS	Total	
<u>Standard Shapes - No AS:</u>								<u>Modified Shapes - Need AS; Slope of Lake Bed Affects Applicability:</u>							
Y-1	1	8	12	10	0	30	10.9	Comb-2	2	4	24	10	25	63	10.4
Straight-1	1	4	12	10	0	26	12.6	Comb-3	3	4	24	10	25	63	15.6
Straight-2	2	4	24	10	0	38	17.3	Comb-4	4	4	24	10	25	63	20.8
T-3	3	8	36	10	0	54	18.2	Comb-5	5	4	24	10	25	63	26.0
T-3*	3	12	36	10	0	58	17.0	Comb-6	6	4	24	10	25	63	31.2
T-4	4	12	48	10	0	70	18.7	ML-3/2*	5	16	36	10	15	77	21.3
T-4*	4	16	48	10	0	74	17.7	ML-5/4*	9	24	60	10	15	109	27.1
T-5	5	16	60	10	0	86	19.1	ML-6/5*	11	28	72	10	15	125	28.9
T-5*	5	20	60	10	0	90	18.2	ML-7/6*	13	32	84	10	15	141	30.2
T-6*	6	24	72	10	0	106	18.6	ML-9/8*	17	40	108	10	15	173	32.2
T-7*	7	28	84	10	0	122	18.8	MT-4/2*	6	16	48	10	30	104	18.9
T-8*	8	32	96	10	0	138	19.0	MT-6/4*	10	24	72	10	30	136	24.1
								MT-8/6*	14	32	96	10	30	168	27.3
								MT-10/8*	18	40	120	10	30	200	29.5
Notes:															
1	No intent to limit dock layouts, or imply all lifts are 12 ft wide														
2	Not all of the modified shapes considered above may be applicable because of water depth issues.														
3	SEP- minimum separation between docks in front of SBC EOS (twice the minimum setback)														
5	AS - additional, dock specific spacing necessary for ingress/egress issues														
5	Effective Density value is [# lifts/total width(m)]*100														
6	"" layouts above include extra 4 ft in dock width to provide an 8 ft wide seating area														



What public engagement has occurred already?

- SBC conducted a survey of all lot owners in the spring of 2017 to assist a Piers & Hoists Committee (PHC) that had representation by council, lakefront owners and backlot owners.
- The survey indicated support for shared docks and **communal piers** as opposed to community built and managed piers. Communal piers being shared, privately owned, non-commercial piers with a significant number of backlot hoists, such as the one located off Sunset Cove on the east (Sunhaven) side of SBC for many years
- Survey results were not unanimous regarding what should change. Comments included: having one hoist per dock was inefficient, the shoreline was cluttered in some areas, and people had a significant investment in their docks and real estate.
- The public open house in Aug 2017 and the June 2018 Annual Information Meeting encouraged a greater sharing of docks and presented a Communal Piers Map (next slide) showing areas that should not be used for mooring - environmental sensitive areas (ESA) and a designated swimming area (DSA) off Glen's Cove. Also shown were theoretical extensions to determine frontage at the original bank.
- Changes to the preliminary plan were adopted in the Oct 2018 final meeting of the PHC to reflect agreement by those in attendance on several points including (1) that theoretical lot lines could be misinterpreted as changing property boundaries, (2) trespass on private property should be discouraged, and (3) it was unreasonable and impractical to suggest backlot owners be constrained to communal piers located in front of CR.
- The preliminary plan as of Oct 2018 is posted on SBC's website.

Figure 2 – Communal Piers Map used in prior public engagement activities

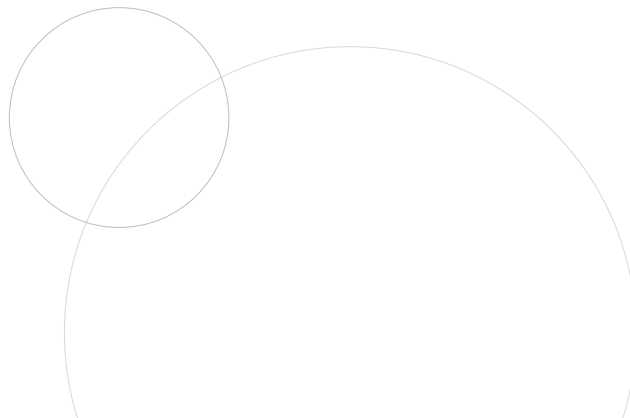


Discussion:

What is wrong with SBC using the Oct 2018 preliminary plan on SBC Website?



- There is no legal way for SBC to authorize occupation of public land (the shore and bottom of the lake) because they are not within our jurisdiction. AEP has sole jurisdiction over use of the bed of the lake and the shore (where the bed of the lake is exposed when water levels aren't at their normal fullest level).
- While AEP has indicated they could approve a municipal plan with a higher density of docks than allowed under the DS, they consider SBC's current draft plan to be deficient in two major ways:
 1. it does not clearly address with certainty who can put out a dock and where, and
 2. there is no sketch that shows where the Crown's land will in fact be occupied.



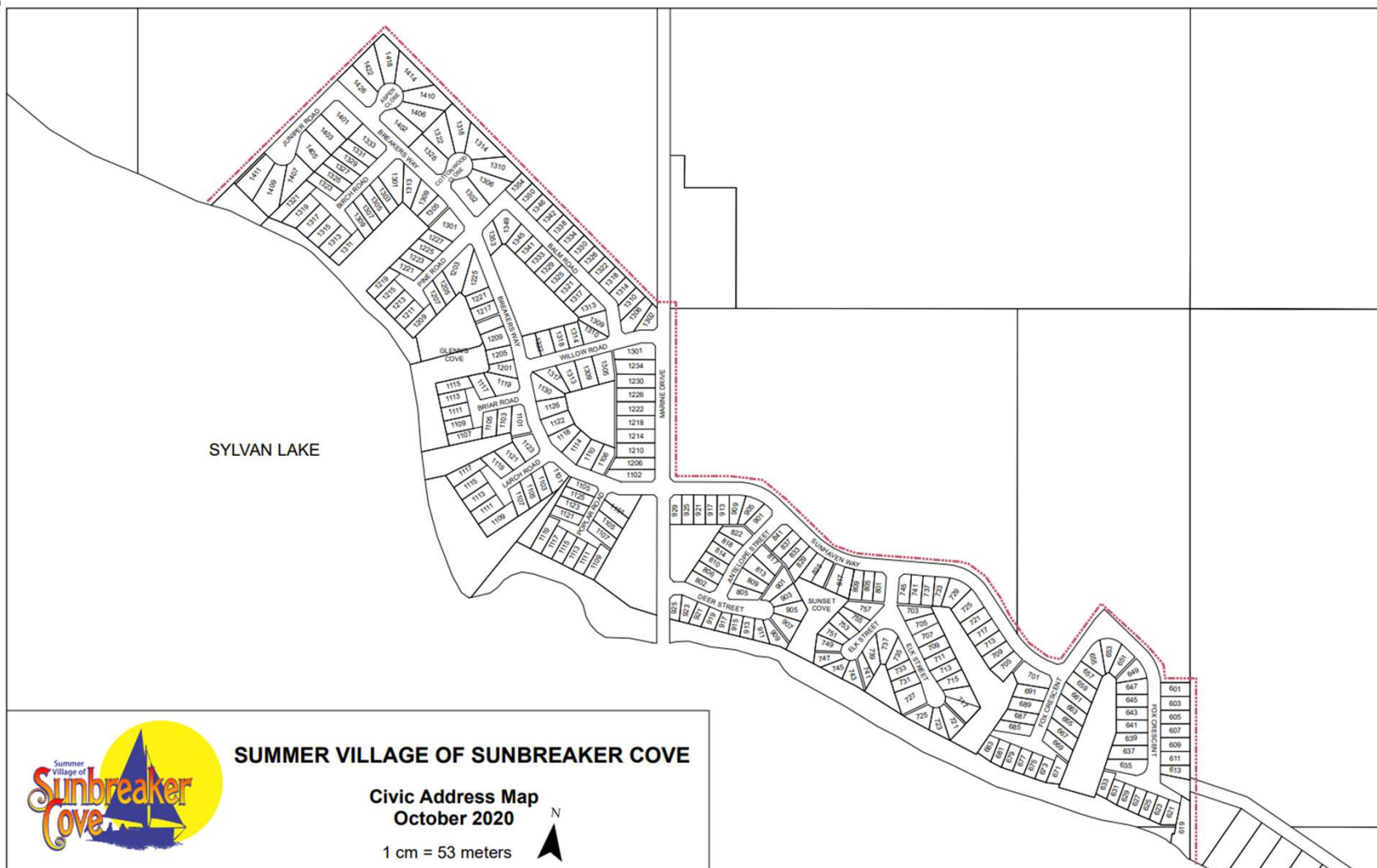
Does SBC need further public engagement to develop a new plan?

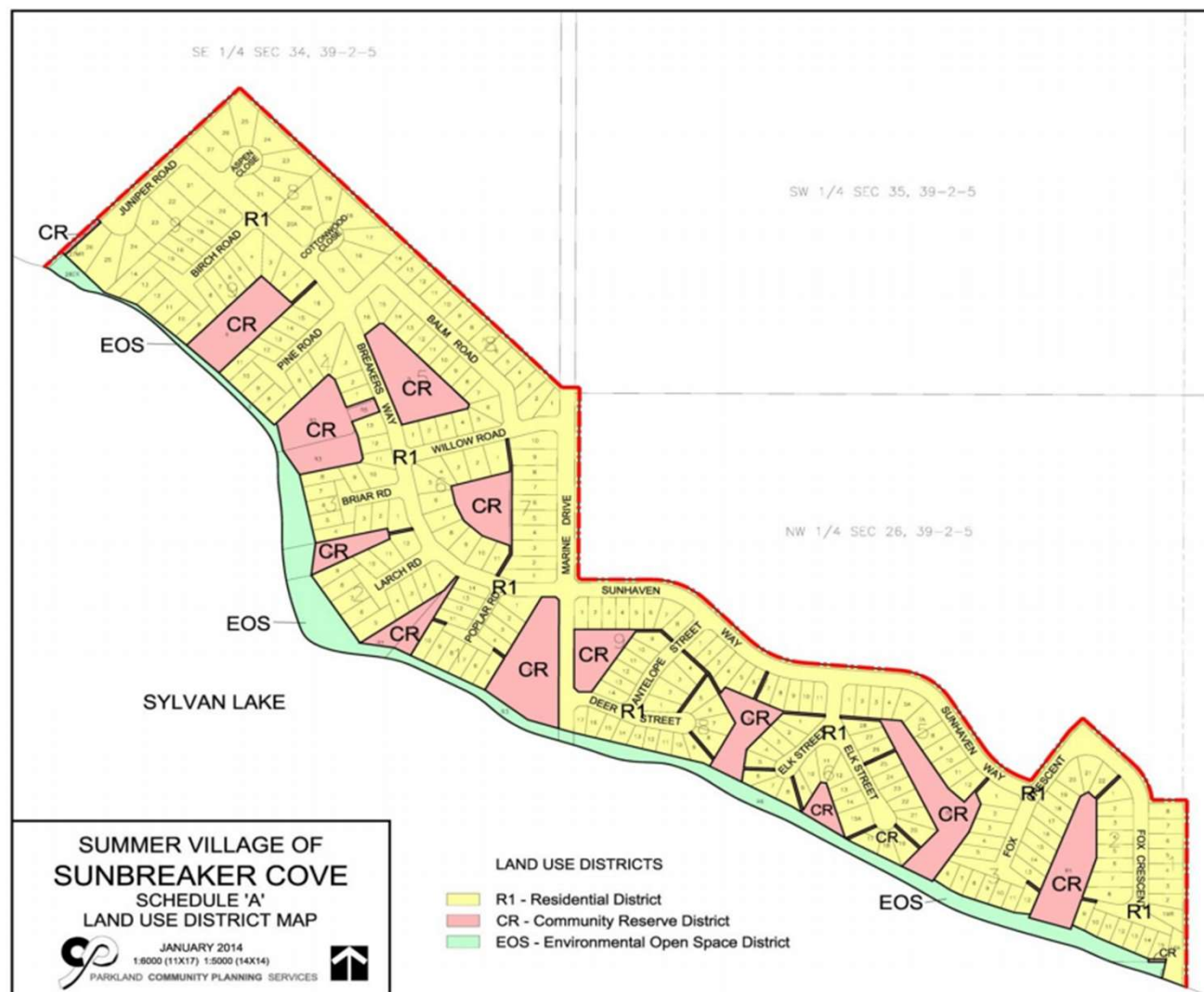


Not at this time given:

1. Prior SBC public engagement activities,
2. Prior work by a Piers & Hoists (P&H),
3. Council's role and obligation to act in the interests of the whole municipality. Most SBC ratepayers are backlot (only 21% [57 lots] of SBC's total private lots are SWF and only 1 lot is waterfront),
4. Council 's personal knowledge of the issues, having shared docks in front of SBC's EOS for many years and participated in the P&H committee.
5. Uncertainty as to what will be approved by AEP, particularly with respect to setbacks

A public education campaign will nevertheless be required once AEP approves our draft plan and a new bylaw has been passed.







Satellite Image with Communal Piers Overlay and Major Shoreline Segments – West (Breakers)



Some minor revisions to 2017 ESA and DSA designations would be appropriate.

ESAs impact available mooring area in front of some SWF lots

Mooring Administration Segments (MAS) with possible subdivisions – Breakers Side



Figure 4 – Breakers Side - with potential subdivision of MAS to assist approvals (source: Google Earth -Aug 2015 satellite imagery)



B2 segment is not accessible from pathways but other segments shown are

Figure 5 – Sept 2018 satellite imagery -provided to comparison of mooring between 2015 (above) -source: Zoom Earth



Relatively few changes in number of boats between 2018 and 2015?

31

Closer Look at SBC's Most Westerly Shoreline Segment -for discussion



Hoists are
too close
to the west
boundary

Easterly
subdivision
(B5e, includes
1 SWF & the
CR) is 255'
wide. While
nice to see
one dock with
5 lifts, there is
clearly room
more dock
consolidation

Shoreline is accessible along this segment. More remote that other areas for many

Closer Look Near Glen's Cove - for Discussion



Clearly room for additional dock consolidation.

B3 Segment (west of DSA) and B4 segment (east of DSA) include modified dock layouts.

B3 segment includes 1 SWF lot.

Preliminary subdivision of B4 Segment (5 SWF lots west of DSA) is perhaps too arbitrary and may limit how dock owners reconsider alternative dock layouts. Segment width along B4 line of nav is about 345 ft.



B5 segment width along line of nav is about 552 ft, with lifts concentrated in front of CR. Opportunities for SWF lots to share with backlots.

Satellite Image with Communal Piers Overlay and Major Shoreline Segments – East (Sunhaven)



ESA impacts
available
mooring area in
front of westerly
SWF lot

Have minimized
mooring area in
front of Deer
Street. These SWF
lots can have
private docks and
easily share with
end lots without
trespass occurring.
Also close to
walkway into CR



Mooring Administration Segments



Figure 6 – Sunhaven side -with further subdivision of MASs to assist approvals (source: Google Earth -Aug 2015 satellite imagery)



S1, S3 & S4 segments are not accessible via pathway

S2a subdivision includes a communal dock

Shoreline access issues in front of portions of S2c need be considered in dock approving dock layouts

Figure 7 – Sept 2018 satellite imagery -provided to comparison of mooring between 2015 (above) -source: Zoom Earth



Relatively few changes in number of boats between 2018 and 2015?



Closer Look at Selected Sunhaven Area Involving 3 CRs – for discussion

Are the preliminary S2 & S4 segment subdivisions too arbitrary or unproductive regarding dock owner discussions as to future consolidation?

S4 segment includes 1 SWF lot with the CR frontage and has a width along line of nav of about 272 ft

