# Vancouver Island Summary Land Use Plan APPENDICES

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## **APPENDIX 1: PLANNING PRIORITIES**

The following planning priorities reflect current agency commitments and stakeholder expectations. They are, however, subject to change, based on the availability of funding and resources.

A: Planning Priority for Regional Landscape Units

Landscape Units	RMZ No. & Name (Refer to Map)	Planning Priority	Biodiversity Emphasis	SMZs within LU Boundaries	Protected Areas within LU Boundaries
HIGH PLANNII	NG PRIORITY	•			
Adam-Eve	28: Adam and Eve	High	Lower		Schoen Lake
Artlish	17: Artlish-Kaouk	High	Intermediate		Artlish Caves
Ash	35:Ash-Central Sproat	High	Intermediate		Strathcona
Bonanza	11: Bonanza	High	Intermediate	7: Johnstone Strait	
Caycuse	46: Gordon- Caycuse-San Juan	High	Intermediate		Pacific Rim National
Chemainus	34: E&N South	High	Intermediate		Chemainus
Cowichan	34: E&N South	High	Lower		Gordon Bay Cowichan River Corridor
Effingham	38: Effingham	High		14: Barkley Sound	
Englishman	34:E&N South	High	Intermediate		Englishman River Falls Rathtrevor
Escalante	25: Escalante	High	Lower		
Great Central	35: Ash-Central Sproat	High	Intermediate	17: Strathcona- Taylor	Strathcona
Kashutl	14: Kashutl	High	Lower	5: South Brooks- Bunsby	Brooks Nasparti Big Bunsby Dixie Cove
Klaskish	9: Klaskish	High	Higher	3: Brooks Bay	
Loss	47: Loss-Jordan	High	Lower	22: San Juan Ridge	China Beach Loss Creek Botanical Beach Parkinson Creek
Marble	7: Marble	High	Intermediate		
Nahwitti	3: Nahwitti- Tsulquate	High	Intermediate		
Nootka	20: Nootka	High	Intermediate	12: Western Nootka Island	Nuchatlitz Santa Boca
Quadra	32: Quadra-Cortes	High	Intermediate	19: Quadra	Main Lakes Chain Octopus Island Waiatt Bay- Small Inlet Rebecca Spit
Rosewall	34: E&N South	High	Intermediate	20: Upper Qualicum	Rosewall Creek Bowser Horne Lake Caves Spider lakes

Salmon	30: Salmon	High	Lower		Strathcona
Landscape	RMZ No. &	Planning	Biodiversity	SMZs within	Protected
Units	Name	Priority	Emphasis	LU Boundaries	Areas within
Office	(Refer to Map)	1 1101111	Linpilatio	LO Doundanco	LU
	(Kelei to Wap)				Boundaries
One least	A. O Is a f	I III-	lata assa di ata	0:14/	
San Josef	4: San Josef- Koprino	High	Intermediate	2:West Coast Nahwitti Lowlands 4: Koprino	Cape Scott
Sayward	31: Sayward	High	Intermediate		Rock Bay Marine Elk Falls Loveland Bay Morton Lake
Shushartie	2: Shushartie	High	Higher	1: Goletas Channel	God's Pocket
Toquart	39: Toquart	High	Intermediate	14: Barkley Sound	
Tsitika	26: Tsitika	High	Higher	8: Tsitika River 9: Tsitika-Woss	Robson Bight Claude Elliot Lake Claude Elliott Creek Mount Elliott Tsitika River
Tugwell	47: Loss-Jordan	High	Lower	22: San Juan Ridge	French Beach
Upper Nimpkish	13: Woss-Vernon	High	Intermediate	6: Woss-Zeballos 9: Tsitika-Woss 11: Schoen- Strathcona	Woss Lake Schoen Lake
White	29: White	High	Higher	11. Schoen- Strathcona	White River Pocket Wilderness
MODERATE PI	ANNING PRIORITY				
Burman	24: Burman	Moderate	Lower		Strathcona
Corrigan	42: Corrigan	Moderate	Intermediate	18: Alberni Canal	Ottatricona
Gold	22: Gold	Moderate	Higher	11: Schoen Strathcona	Muchalat-Gold Strathcona White Ridge
Gordon	46: Gordon- Caycuse-San Juan	Moderate	Intermediate		Pacific Rim National
Kaouk	17: Artlish-Kaouk	Moderate	Intermediate		Rugged Point
Keogh	6: Keogh-Cluxewe	Moderate	Lower		_
Kleeptee	23: Kleeptee	Moderate	Lower		
Lower Nimpkish	10: Nimpkish	Moderate	Lower	10: Pinder-Atluck	
Mahatta	8: Mahatta- Neroutsos	Moderate	Lower	3: Brooks Bay	
Malcolm	12: Malcolm	Moderate	Lower		
Naka	27: Naka	Moderate	Lower		Robson Bight
Nanaimo	34:E&N South	Moderate	Intermediate		Hemer Roberts Memorial Petroglyph Ladysmith Bog Woodley Range Haley Lake

Landscape Units	RMZ No. & Name (Refer to Map)	Planning Priority	Biodiversity Emphasis	SMZs within LU Boundaries	Protected Areas within LU Boundaries
Nitinat	45: Nitinat	Moderate	Intermediate		Pacific Rim National
San Juan	46: Gordon- Caycuse-San Juan	Moderate	Intermediate	22: San Juan Ridge	San Juan River Estuary
Sproat	35: Ash-Central Sproat	Moderate	Intermediate	17: Strathcona- Taylor	Sproat Lake Taylor Arm Fosselli
Tahsis	19: Tahsis	Moderate	Lower		Weymer Creek Karst
Tahsish	15:Tahsish	Moderate	Intermediate		Tahsish-Kwois
Tlupana	21: Tlupana	Moderate	Intermediate		
Walbran	46: Gordon- Caycuse-San Juan	Moderate	Intermediate	21: Walbran Periphery	Pacific Rim National Carmanah Walbran
Zeballos	16: Zeballos	Moderate	Lower	6: Woss-Zeballos	
LOW DI ANNIN	IO DDIODITY				
LOW PLANNIN			lata ana allata	1	Mara Millaria
Cameron	41: Cameron-China	Low	Intermediate		MacMillan
China	41: Cameron-China	Low	Intermediate	40: All : O I	China Creek
Cous	36:Cous	Low	Lower	18: Alberni Canal	0.1.1.1.11
Eliza	18: Eliza	Low	Lower		Catala Island
French Creek	34: E&N South	Low	Lower	44 D. H. O I	
Henderson	37: Henderson	Low	Lower	14: Barkley Sound 18: Alberni Canal	
Holberg	5: Holberg	Low	Lower		
Klanawa	44: Klanawa	Low	Intermediate		Pacific Rim National Oxalis
Koksilah	34: E&N South	Low	Lower		Angel, Koksilah
Little Qualicum	34:E&N South	Low	Intermediate		Little Qualicum Fall McMillan Mt. Arrowsmith
Maggie	40: Maggie	Low	Lower		Pacific Rim National
Millstone	34: E&N South	Low	Lower		Newcastle Island
Nahmint	N/A	Low	Higher	13: Nahmint	
Nanoose	34:E&N South	Low	Intermediate		Arbutus Grove
Neroutsos	8: Mahatta- Neroutsos	Low	Lower		
Nigei	1: Nigei	Low	Lower		
Oyster	33: E&N North	Low	Lower		Strathcona
Puntledge	33: E&N North	Low	Lower		Strathcona
Quinsam	33: E&N North	Low	Lower		Rock Bay Marine Elk Falls
Sarita	43: Sarita	Low	Lower	18: Alberni Canal	Pacific Rim National

Landscape Units	RMZ No. & Name (Refer to Map)	Planning Priority	Biodiversity Emphasis	SMZs within LU Boundaries	Protected Areas within LU Boundaries
Shawnigan	34: E&N South	Low	Lower		
Simms	33: E&N North	Low	Lower		
Somass	34: E&N South	Low	Intermediate		
Sooke	34: E&N South	Low	Lower		Sooke Mountain
Trent	33: E&N North	Low	Lower		
Tsolum	33: E&N North	Low	Lower		Miracle Beach
Tsulquate	3: Nahwitti- Tsulquate	Low	Intermediate		
Victoria/ Saanich	34: E&N South	Low	Lower		Goldstream

## Notes:

- SMZs falling partially or entirely within a Landscape Unit may be planned concurrently with that Landscape Unit.
- Protected Areas falling partially or entirely within a Landscape Unit will contribute to the achievement
  of seral stage biodiversity objectives and targets. Note that this is for calculation purposes only; no
  landscape unit planning will occur within Protected Areas.

**B: Planning Priority for Special Management Zones** 

SMZ	Priority	for Special Management Zo Rationale for Priority	Major Planning Issues & Needs
(No. & Name)	•	•	
1. Goletas Channel	High	no pending development; extensive inventory gaps currently exist, North Coast Trail location and concept needs to be determined in advance	<ul> <li>specific visual quality and recreation objectives</li> <li>recreation and tourism development opportunities</li> <li>access to private land timber</li> <li>integrate coastal planning and upland activities</li> <li>Browning Passage - God's Pocket protected area values</li> <li>reflect North Coast Trail in forest planning</li> </ul>
3. Brooks Bay	High	plan underway for Lower Klaskish-East Creek; need to finalize; development applications pending and high public profile	<ul> <li>specific visual quality and biodiversity objectives</li> <li>coordination of recreation, park and ecological reserve planning</li> <li>Klaskish - East Creek Operational Management Plan</li> </ul>
4. Koprino	High	major pending development applications; major timber supply area for licensee	<ul> <li>specific biodiversity objectives</li> <li>specific wildlife objectives</li> <li>old growth retention and connectivity planning</li> </ul>
8. Tsitika River	High	need decision on SMZ requirements to finalize/endorse current Tsitika plan	<ul> <li>specific biodiversity objectives</li> <li>MOF Tsitika River Plan</li> <li>wildlife inventories</li> <li>connectivity and OGMA designation</li> </ul>
11. Schoen- Strathcona	High	<ul> <li>pending development applications and significant timber supply and environmental issues; community forest licence</li> </ul>	<ul> <li>specific visual quality, recreation &amp; biodiversity objectives</li> <li>high fish values in upper reaches of Gold and White Rivers and Consort Creek</li> <li>old growth retention and wildlife habitat enhancement</li> </ul>
12. Western Nootka Island	High	significant     recreation/tourism     development     applications; pending     development     applications; First Nations     community forest licence	<ul> <li>specific coastal wildlife and visual quality objectives</li> <li>road access and recreation development pressures</li> <li>coordination of recreation, tourism and park planning</li> <li>establish VQOs</li> </ul>

SMZ (No. & Name)	Priority	Rationale for Priority	Major Planning Issues & Needs
13. Nahmint	High	major operating area with significant timber supply constraints	<ul> <li>specific biodiversity and wildlife objectives</li> <li>follow-up to watershed review and resource mapping</li> <li>First Nations use</li> <li>focus on OGMA designation, and recreation and visual resource management</li> <li>First Nations Traditional Use</li> </ul>
19. Quadra Island	High	TFL management plan under review; local inventory and planning initiatives; high local profile	<ul> <li>specify visual quality, recreation and wildlife objectives</li> <li>alternative silviculture systems</li> <li>mineral exploration and access development</li> </ul>
20. Upper Qualicum	High	1 block small business planned; planning focus on enhanced forestry program	<ul> <li>specify biodiversity objectives</li> <li>coordination with private land forestry</li> <li>focus on demonstration of alternative silvicultural practices</li> </ul>
21. Walbran Periphery	High	<ul> <li>pending development applications and concern about SMZ impacts on rate of cut elsewhere; high public profile</li> </ul>	<ul> <li>specify fish habitat, biodiversity and recreation objectives</li> <li>alternative silviculture systems</li> <li>focus on old growth retention, WHA designation and visual resources</li> </ul>
2. West Coast Nahwitti Lowlands	Moderate	major pending forest development applications; high recreation values; major timber supply area for licensee	<ul> <li>specific recreation and habitat protection objectives</li> <li>recreation and tourism development opportunities</li> <li>coastal tourism and recreation in Grant Bay - San Josef Bay</li> <li>landscape unit plans &amp; WFP Forest Development Plan</li> </ul>
5. South Brooks- Bunsby	Moderate	<ul> <li>local community economic concerns; high demand for woodlots; tourism and recreation pressures in the area</li> </ul>	<ul> <li>specific recreation and marine species objectives</li> <li>recreation/tourism development</li> <li>establish visual quality objectives (VQOs)</li> </ul>
7. Johnstone Strait	Moderate	<ul> <li>no immediate impacts on visual resources; need to determine recreational trail concept and to resolve access and visual issues</li> </ul>	<ul> <li>specific visual quality objectives</li> <li>access to timber</li> <li>establish VQOs</li> <li>M&amp;B Forest Development Plan</li> </ul>

SMZ (No. &	Priority	Rationale for Priority	Major Planning Issues & Needs
Name)			
9. Tsitika- Woss	Moderate	need to finalize/endorse current Tsitika plan	<ul> <li>specific visual quality and recreation objectives</li> <li>biodiversity strategy and restoration of habitats</li> <li>OGMA designation</li> <li>Address SMZ objectives in TFL management plan</li> </ul>
14. Barkley Sound	Moderate	small business development applications; tourism and recreation growth and development pressures	<ul> <li>specific visual quality objectives</li> <li>recreation development &amp; uses</li> <li>archaeological sites protection</li> <li>shellfish aquaculture potential</li> <li>implement Barkley Sound Planning Strategy</li> </ul>
17. Strathcona -Taylor	Moderate	<ul> <li>significant harvesting proposed; various operational plans affected by SMZ requirements</li> </ul>	<ul> <li>specify biodiversity objectives</li> <li>recreation opportunities and planning</li> <li>First Nations traditional use</li> <li>mineral exploration and development access</li> <li>focus on OGMA and WHA designation</li> </ul>
22. San Juan Ridge	Moderate	<ul> <li>no major harvesting constraints; need to adjust SMZ boundary; high public profile</li> </ul>	<ul> <li>specify visual quality and recreation objectives</li> <li>examine trail width requirements</li> <li>plan for hiking trail development and use</li> </ul>
6. Woss- Zeballos	Low	only 1 block currently proposed for harvesting; relatively low conflict area	<ul> <li>specific biodiversity and visual quality objectives</li> <li>road and access planning</li> <li>coordination of licensees</li> <li>establish visual quality objectives (VQOs)</li> <li>plan for recreation associated with lakes and trails</li> </ul>
10. Pinder- Atluck	Low	recreation and visual concerns	<ul> <li>specific visual quality and recreation objectives</li> <li>focus on old growth retention &amp; recreation/visual management</li> </ul>
15. Tofino Mudflats	Low	waterfowl management issues; long term habitat protection objective	<ul><li>waterfowl uses &amp; capability</li><li>shellfish aquaculture uses</li></ul>
16. Saanich Inlet	Low	ongoing implementation of Saanich Inlet study	<ul> <li>water quality &amp; pollution</li> <li>recreation access to shoreline</li> <li>implement 1996 Saanich Inlet Study</li> </ul>

SMZ (No. & Name)	Priority	Rationale for Priority	Major Planning Issues & Needs
18. Alberni Canal	Low	<ul> <li>general need to establish visual landscape objectives at an operational level</li> </ul>	specify visual quality objectives

**C:** Planning Priority For Coastal Planning Units

<u> </u>						
6	Quadra/Cortes	High		Planning Issues and Needs  ◆ Recreational opportunities		
8	Strait  Baynes Sound	High	<ul> <li>very high usage, potential conflict over resource use in specific areas</li> <li>high level of public interest in planning</li> <li>277 tenures recorded in this area</li> <li>majority of shellfish aquaculture in this unit; concerns regarding</li> </ul>	<ul> <li>Recreational opportunities dependent on access to shoreline features</li> <li>Bird wintering areas to be identified</li> <li>Mining dependent on infrastructure development</li> <li>need to consider Regional District's Baynes Sound Plan</li> </ul>		
			<ul> <li>existing water quality</li> <li>high recreation use</li> <li>102 tenures including 62 shellfish,</li> <li>5 log handling and storage,</li> <li>interest in tourism</li> </ul>	<ul> <li>maintenance of water quality critical to both shellfish aquaculture and recreational opportunities</li> <li>numerous cultural heritage sites</li> </ul>		
1 5	Nootka Sound and Associated Waterways	High	<ul> <li>SMZ/LU pilot project on Nootka Island contains significant marine component</li> <li>62 tenures recorded in area including 34 log handling and storage sites, 5 shellfish aquaculture sites</li> </ul>			
7	Esperanza Inlet	High	<ul> <li>adjacent to northern portion of Nootka Island; SMZ/LU pilot project on Nootka Island contains significant marine component</li> <li>CPU surrounds 2 provincial parks</li> <li>37 tenures recorded in this area including 12 log handling and storage sites and 7 aquaculture sites</li> </ul>	<ul> <li>need to consider Regional District's Nootka Rural Land Use Bylaw</li> <li>integration of confidential First Nations cultural and traditional use sites</li> <li>Boat havens recommended by BC Yacht Club</li> <li>Identification and management of areas critical to marine ecosystem functioning</li> </ul>		
1 8	Kyuquot Sound	High	<ul> <li>adjacent to moderate priority SMZ (South Brooks- Bunsby) containing a marine component.</li> <li>upland LUs rated as low priority for planning</li> <li>expanding development and use conflicts anticipated</li> <li>31 tenures recorded including 20 log handling and storage sites and 5 aquaculture sites</li> </ul>	<ul> <li>potential siting issues for finfish aquaculture</li> <li>Boat havens recommended by BC Yacht Club</li> <li>Identification and management of areas critical to marine ecosystem functioning</li> <li>Development sensitivity of First Nations values and uses</li> </ul>		
2 0	Quatsino Sound	High	<ul> <li>adjacent to moderate and high priority SMZs (Brooks Bay and West Coast Nahwitti Lowlands) and LUs</li> <li>69 tenures including 35 log handling and storage sites and 6 finfish aquaculture tenures</li> </ul>	<ul> <li>significant marine biota concentrations: implications for harvesting and conservation</li> <li>high potential for aquaculture</li> <li>Boat havens recommended by BC Yacht Club</li> </ul>		

	CPU	Priority	Rationale	Planning Issues and Needs
2	Northwest Coast (Lawn Point – Hope Island)	Moderate	<ul> <li>only land as yet unzoned is adjacent to a moderate priority SMZ</li> <li>no tenures recorded in area</li> <li>includes offshore oil and gas tenures under moratorium</li> </ul>	<ul> <li>significant portions of adjacent upland dedicated to recreational activities</li> <li>consider recommendations of North Vancouver Island Recreation and Tourism study</li> </ul>
3	Queen Charlotte Strait	Moderate	<ul> <li>significant coastal SMZ component. SMZ is rated as a high priority</li> <li>3 tenures recorded in area</li> </ul>	majority of adjacent uplands dedicated to recreation and conservation: Cape Scott Park
4	Southern Queen Charlotte Strait and Broughton Strait West	Moderate	<ul> <li>populated coastline and island communities</li> <li>recreation use and tourism activity</li> <li>74 tenures recorded including log handling, aquaculture and infrastructure</li> </ul>	<ul> <li>Opportunities for coastal oriented recreation and tourism</li> <li>Sensitivity for First Nations traditional use and cultural heritage sites</li> </ul>
7	Cape Mudge/ Cape Lazo	Moderate	<ul> <li>populated coastline with attendant expectations and impacts</li> <li>high recreation use</li> <li>20 tenures recorded</li> </ul>	<ul> <li>consider Regional District's         Oyster Bay-Buttle Lake         Official Community Plan         Bylaw</li> <li>critical marine bird feeding         areas</li> <li>recreation opportunities</li> </ul>
9	Strait of Georgia to Cowichan Bay	Moderate	<ul> <li>populated coastline with attendant expectations and impacts</li> <li>heavy usage: 273 tenures recorded including 20 aquaculture tenures, 35 log handling and storage sites, 94 private and residential moorages</li> </ul>	<ul> <li>consider Regional District's Growth Management Plan</li> <li>water quality of concern for recreational, aquaculture and wildlife values</li> <li>high fish and wildlife values</li> </ul>
10	East Saanich Inlet to Race Rocks	Moderate	<ul> <li>heavily populated coastline with attendant expectations and impacts</li> <li>adjacent to a low priority marine SMZ (Saanich Inlet) water quality concerns</li> <li>limited resource development anticipated; 291 tenures recorded of which 234 are marinas, private moorages and residential miscellaneous</li> </ul>	<ul> <li>consider extensive planning already completed</li> <li>water quality at issue for tourism resource</li> <li>highly developed uplands adjacent to zone</li> </ul>
11	Race Rocks to Cape Beale	Moderate	heavily populated coastline with attendant expectations and impacts     diverse resource usage - 129 tenures recorded in area including 81 private residential, 17 log handling and storage     tourism and visual implications due to adjacent Pacific Rim National Park and West Coast Trail	<ul> <li>consider Regional District's Regional Green/Blue Spaces Strategy</li> <li>significant marine fish and wildlife</li> </ul>

	CPU	Priority	Rationale	Planning Issues and Needs
12	Alberni Inlet	Moderate	<ul> <li>subject of Barkley Sound         Planning Strategy - planning         could be limited to review and         updating of Strategy's         recommendations</li> <li>10 tenures including 6         aquaculture tenures</li> </ul>	<ul> <li>consider Barkley Sound Planning Strategy</li> <li>future mining operations may require infrastructure development</li> </ul>
13	Barkley Sound	Moderate	<ul> <li>subject of Barkley Sound Planning Strategy - planning could be limited to review and updating of Strategy's recommendations adjacent to Barkley Sound SMZ (large marine component)</li> <li>125 tenures recorded including 21 general commercial, 52 private moorage, 11 log handling and storage sites and 8 shellfish aquaculture sites</li> </ul>	<ul> <li>consider Barkley Sound Planning Strategy</li> <li>high recreational and tourism values</li> <li>high aquaculture potential</li> <li>sensitivity for First Nations traditional use and cultural heritage sites</li> </ul>
19	Brooks Peninsula Approaches	Moderate	<ul> <li>adjacent to protected uplands and high priority SMZ (Brooks Bay) which contains a significant marine component</li> <li>significant wildlife values throughout area</li> <li>no tenures recorded in this area</li> </ul>	<ul> <li>address confidential First         Nations information regarding         cultural heritage and         traditional use sites</li> <li>Council of BC Yacht Clubs         proposes two boat havens</li> <li>Majority of adjacent uplands         is protected</li> </ul>
1	Lanz-Cox Islands	Low	<ul> <li>little activity, all land adjoining CPU is protected area</li> <li>includes offshore oil and gas tenures under moratorium</li> </ul>	limited opportunities for accessibility due to remoteness, permit requirements
5	Johnstone Strait	Low	<ul> <li>high use travel corridor</li> <li>Wildlife habitat issues in vicinity of Robson Bight</li> <li>14 tenures recorded including 7 for log handling and storage</li> </ul>	<ul> <li>preservation of visual quality</li> <li>areas of cultural heritage site concentrations</li> <li>significant marine fish resources</li> </ul>
14	Barkley Sound Outer Coast	Low	<ul> <li>no land adjacency issues</li> <li>no tenures recorded in this area</li> <li>Could be coupled with Barkley Sound for planning purposes</li> </ul>	<ul> <li>limited development opportunities with existing technologies</li> <li>important area for marine fish and wildlife migrations</li> </ul>
16	Nootka, Kyuquot and Esperanza Sound Approaches	Low	<ul> <li>SMZ/LU pilot project on Nootka Island contains significant marine component adjacent to CPU</li> <li>majority of unit located offshore with limited potential for development</li> <li>no tenures recorded in this area</li> </ul>	consider implications of Regional District's Nootka Sound Rural Land Use Bylaw

## **D: Planning Priority For Protected Areas**

**Management Plans Complete** 

Protected Area	Status of Designation <sup>1</sup>	Status of Public Review
Haley Lake	ER	Plan completed 1995

**Draft Management Direction Statements completed** 

Protected Area	Status of Designation	Status of Public Review
Carmanah Walbran (includes Walbran, Upper Carmanah)	Park	Final plan due for approval: 2000/2001
Somenos Garry Oaks (portion only)	Purchased by Crown (not designated)	Final plan due for approval: 2000/2001
Niagara Creek (exchange with CRD)	Regional park (not included in PAS)	Final plan due for approval 99/2000
Cowichan River	Under negotiation	Final plan due for approval 2001/2002
Chemainus River	Private portion under negotiation	Final statement due for approval: 2000/2001
Ladysmith Bog	ER	Final statement due for approval: 2000/2001
Nitinat River	Crown portion: Park	Final statement due for approval: 2000/2001
Klanawa River	ER	Final statement due for approval: 2000/2001
Woodley Range	ER	Final statement due for approval: 2000/2001
Hudson Rocks	ER	Final statement due for initiation: 2000/2001
Hitchie Creek	Park	Final statement due for initiation: 2001/2002
Nimpkish Lake	Park	Preliminary review complete
Lower Nimpkish River	Park	Preliminary review complete
Misty Lake	ER; addition under negotiation	Preliminary review complete
Quatsino	Park	Preliminary review complete
Marble River	Park	Preliminary review complete
Artlish Caves	Park	Preliminary review ongoing

<sup>&</sup>lt;sup>1</sup> Status current as of January, 2000

Weymer Creek Park Preliminary review ongoing	
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**Management Plans Under Development** 

Protected Area	Status of Designation	Status of Public Review
Cape Scott - including Lanz-Cox Islands and Nahwitti-Shushartie	Park	Preliminary review ongoing
Strathcona Review including Megin Talbot, McBride Creek,	Park	5-year review of 1992 Master Plan ongoing.
and Divers Lake	Purchased	
Bligh-Santa Boca	Park	Public review scheduled to commence in 2000

## **High Priority for Management Plan Development**

Cave/Karst protected areas including:

White Ridge Artlish Caves Weymer Creek Horne Lake Caves Tahsish Kwois

Clayoquot Sound protected areas including:

Upper Shelter Inlet Sydney Inlet

Hesquiat Peninsula and Trail

Flores Island Vargas Island

Clayoquot Arm/Clayoquot Lake

Clayoquot Plateau

Dunlap and Morfee Islands Dawley Passage and Lane Islet

Kennedy River Bog Kennedy Lake

Tranquil Creek Headwaters

Hesquiat Lake

Woss Lake

Brooks/Checleset/Big Bunsby Robson Bight/Broughton

Nuchatlitz/Catala Gold-Muchalat

## **Moderate Priority for Management Direction Statement Development**

Main Lakes - private land under negotiation Small Inlet - private land under negotiation

Octopus Islands - no action

Surge Narrows Dixie Cove White River God's Pocket Claud Elliot Lake Comox Lake Bluffs Read Island Rock Bay

## **Other Areas**

Bright Angel Addition - being transferred to local government for park purposes

San Juan River Estuary - land acquisition not finalized

Stamp River, Money's Pool

Carrington Bay (Regional District transfer) - First Nations consultation underway

Little Mountain - First Nations consultation underway

Morison Creek - First Nations consultation underway

Seal Bay - First Nations consultation underway

Somass River Estuary - Under negotiation

Mesachie Lake - Private - no action to date

Notch - Private - no action to date

Puntledge River Fossil Beds - Private - no action to date

## APPENDIX 2: SPECIAL MANAGEMENT ZONE DEVELOPMENT REVIEW PROCESS

STEP	Lead Agency Actions	Participating Agencies	IAMC
1. DRAFT PLANS OR APPLICATIONS RECEIVED AND ASSESSED	Conduct preliminary check for consistency with applicable legislation, regulations, standards, objectives and guidelines     Consult with proponent (applicant) as necessary		
2. INTER-AGENCY REFERRAL AND REVIEW	<ul> <li>Provide a deadline for review completion based upon plan/application complexity, etc. and in consultation with other agencies</li> <li>Inform proponent of the timelines</li> <li>Refer plan/application to other agencies</li> <li>Initiate appropriate First Nations consultation</li> <li>Initiate review of plan, and consider applicable regulations, standards, objectives and guidelines including VILUP and higher level plans when reviewing plan or application</li> <li>Identify specific recreation, cultural/historic and natural values associated with proposal area specifying sensitivity to potential development</li> </ul>	<ul> <li>Agencies to consider applicable regulations, standards, objectives and guidelines including VILUP and higher level plans when reviewing plan or application.</li> <li>Identify specific recreation, cultural/historic and natural values associated with proposal area specifying sensitivity to potential development.</li> <li>Provide advice back to lead agency.</li> </ul>	
3. PLAN/PROPOSAL EVALUATION AND REVISION	<ul> <li>Evaluate responses and public comment<sup>2</sup> where applicable.</li> <li>Guide proponent in making appropriate revisions to plan or application to satisfy issues identified</li> <li>Summarize input received through initial referral and any resulting adaptations of the plan or proposal</li> <li>Complete First Nations consultation</li> </ul>		
4. AGENCY LEVEL SIGN-OFF	<ul> <li>MoF District Manager and MELP Designated Environment Official approve forest development plans.</li> <li>Once referrals and other standards are satisfied, non-forest development proposals and plans should be authorized at the regional level</li> <li>For non-forest development proposals, refer to IAMC if outstanding inter-agency issues remain after operational level review; otherwise proceed to Step 6</li> </ul>		

<sup>&</sup>lt;sup>2</sup> For forest development plans, the proponent is required by law to publish a notice, and provide public review and comment opportunity.

STEP	Lead Agency Actions	Participating Agencies	IAMC
5. IAMC REVIEW			
6. PREPARATION OF AUTHORIZATION AND PERMIT DOCUMENTS	<ul> <li>Prepare the necessary authorization and permit documents and provide these to the proponent without delay</li> </ul>		

## Note:

- IAMC is involved in resolving outstanding issues and processing any such development plans or proposals expeditiously.
- Upon receipt of plans or proposals referred from the agency level, the IAMC Chair shall immediately determine the most effective means of expediting a resolution and shall take the appropriate actions without delay. Actions may include ad hoc sub-committees and communications technology to expedite a resolution prior to a formal IAMC meeting.

## APPENDIX 3: PLANNING FRAMEWORK STATEMENTS FOR SPECIAL MANAGEMENT ZONES

The following Planning Framework Statements (PFS) were compiled on initiative by the Vancouver Island Interagency Management Committee, following a recommendation in the Low Intensity Area report. For each individual Special Management Zone, the PFS present a synopsis of primary resource values, planning issues as identified by the public, stakeholders, interest groups and agencies, as well as information on suggested planning needs, inventories and tenure information. The PFS do not constitute planning direction; rather, they represent a compendium of information, which may be useful in subsequent local planning processes.

## 1. Goletas Channel

## **Primary SMZ Values**

- · coastal visual and recreational opportunities
- fish habitats (lower Shushartie, Songhees rivers)
- wildlife habitats (deer/elk wintering ranges: lower Shushartie River; coastal waterfowl habitat)
- Shushartie River recreational access route

## **Priority:** High

## **Planning Issues**

- visual objectives are unclear; more detailed parameters are needed
- ORC suggested viewpoints for visual analysis: coastline, north coast trail, Georgie Lake
- Shushartie River is potential wilderness route for the proposed North Island Trail; integrate planning with adjacent Cape Scott Provincial Park with respect to trail linkages
- good recreational opportunity in Shushartie Lake areas adjacent to Cape Scott (Nahwitti-Shushartie Addition) Provincial Park; little current recreation; some fly-in angling in lower reaches
- Richply has proposed development of north coast trail, and First Nations tourism development services and facilities for hikers and kyakers
- public interest group comments:
  - future logging plans around Shushartie Lake will have major impact on wilderness recreation values
  - ensure that logging is evenly distributed among height class and species distribution; licensees must be made to include height class 3 cedar in cutblocks
  - avoid shallow soils
  - · wind throw is serious concern
  - proposed North Island Trail should begin at Shushartie Lake
  - ensure the maintenance of fish & wildlife habitat, old growth biodiversity, and recreational opportunities
  - road access to trail requires planning
- M&B require access through the SMZ to reach their private land
- Richmond Plywood small licence (70,000 m<sup>3</sup>) unable to support detailed inventories
- two active fish farms and additional applications anticipated, posing potential visual concerns

- Richply has proposed a trail linking Shushartie Lake to the inlet, intended to limit angling and camping access to semi-privatized non-motorized use
- CWS Marine Protected Area candidate area of international/national significance to marine birds and cetaceans
- integration with planning for Cape Scott Provincial Park and God's Pocket Marine Park to meet goals and objectives of PAS
- examine the inclusion of the upper Shushartie River to height of land and Georgie Lake to include high recreation values, including trail route and important old growth biodiversity functions

## **Planning Needs**

- integrated coastal planning required to address marine resource values
- landscape unit plans, including consideration of proposed North Island Trail and coastal visual, recreation and tourism opportunities
- conduct fish and wildlife habitat and population inventories
- conduct inventory on recreational opportunities and viewscapes

## **Existing Inventories, Plans and Studies**

- reconnaissance survey of fisheries resource in 1993 by MELP (Scholten & Chamberlain)
- socio-economic study of proposed North Coast Trail (George Penfold, consultant)
- mineral potential and mineral inventory (MINFILE)

## **Key Resource Information Gaps**

- no detailed wildlife inventories in the area
- insufficient visual landscape and tourism assessment
- tourism opportunity studies
- lack of inventory information within Browning Passage and God's Pocket Marine Park

## Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>3</sup>

Crown land	99%	Tourism potential -	
Private land	1%	high capability for coastal and marine activities	
Crown reserve	no		
Mineral tenures	no		
Tree Farm Licence	no	Archaeology potential	
Timber Licences	no	- unproven	30%
Community watershed	no	- moderate	1%
Private forest lands	1%	- potential	10%

## Land and Resource Tenures<sup>4</sup>

- 2 Forest Licences Richmond Plywood FL A19243; SBFEP, Interfor FLA 19238 (small area)
- 2 Fish farms
- anticipated marine plant harvesting licence: Kwakiutal Band to harvest Nereocystis for fertilizer product

information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included no information on mineral or other tenures; occurrence of mineral tenure is noted from LUCO maps

## $Other\ Stakeholders/Interest\ Groups$

- First Nations traditional territories unclear
- Anchor Seafarms
- tourism businesses and operators
- Mount Waddington Community Resource Board
   Sierra Club; Outdoor Recreation Council of BC

**Bibliography References:** 3, 4, 5, 6, 9, 12, 13, 16

## 2. West Coast Nahwitti Lowlands

## **Primary SMZ Values**

- scenic values, as visible from coastal areas and access routes
- cultural/heritage (archaeological) values
- · sensitive coastal fish and wildlife habitats
- coastal recreation values and opportunities

## **Priority:** Moderate

## **Planning Issues**

- ORC suggested viewpoints for visual analysis: coastline to visible height of land San Josef Bay to Lippy Point; eastern portion local study required
- public interest group comments:
  - · present level of logging too high
  - maintain viewscape from adjacent park
  - general biodiversity conservation management recommended
  - ensure that development does not impact upon recreation opportunities
- pending forest development applications by WFP (12 blocks in SMZ # 2 and 4)
- recognize mineral values and the likelihood of future exploration
- need to consider protected areas' values, goals and objectives
- three sub-zones proposed by WFP: coastal protected strip (recreation and conservation emphasis), sensitive viewscape zone (visual emphasis) and regular FPC zone (modified forest development emphasis) see map
- area recreation planning must be coordinated with BC Parks' plans for Raft Cove Provincial Park and Cape Scott Provincial Park, recreation corridor on Mack Jack River and MOF/WFP recreation sites
- major recreation opportunities at beaches and rocky headlands from Raft Cove to Grant Bay, and from Cape Scott
- trail development potential (>30km) under study by WFP
- need to clarify coastal recreation and marine species objectives/concerns
- WFP proposes visual objectives limited to marine access routes and questions habitat sensitivity along Awhichaolto and Forward Inlets and between Cliffe Point and Monkey Creek

## **Planning Needs**

- preparation of a coastal recreation/tourism plan that connects Grant Bay with San Josef Bay in Cape Scott Park
- landscape unit plans and WFP Forest Development Plan
- suggested planning unit: 1000m inland for coastal recreation plan, and approved landscape units
- conduct inventory on recreational opportunities and viewscapes
- conduct inventory of fish and wildlife habitat and populations
- complete cultural heritage inventory

## **Existing Inventories, Plans and Studies**

- recreation: inventory updated in 1994
- landscape: inventory completed in 1994
- wildlife: 1:50,000 overview to be completed by October 1996 (Blood & Associates)
- cultural: MOF overview for Port McNeill Forest District; detailed inventories completed on a cut block basis where areas are considered high or moderate potential
- recreation analysis of coastal recreation corridor (being completed by WFP)
- mineral potential and mineral inventory (MINFILE)

## **Key Resource Information Gaps**

- detailed recreation assessment with BC Parks
- detailed tourism resource inventory and opportunity study
- biodiversity/FEN strategy

## Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>5</sup>

	014001114414	( ,	
Crown land	99%	Tourism potential - significant opportunities for coastal tourism activities and resort or lodge development	
Private land	1%		
Crown reserve	25%		
Mineral tenures	no		
Tree Farm Licence	99%	Archaeology potential	
Timber Licences	1%	- unproven	50%
Community watershed	no	- moderate	20%
Private forest lands	<1%	- potential	30%

## **Land and Resource Tenures**

• Western Forest Products TFL 6

## Other Stakeholders/Interest Groups

- Villages of Winter Harbour and Holberg
- · Quatsino Nation
- Tourism businesses and operators
- Mount Waddington Community Resource Board
- Sierra Club; Outdoor Recreation Council of BC

Bibliography References: 1, 3, 5, 6, 7, 8, 11, 13, 16

bibliography References: 1, 3, 3, 0, 7, 0, 11, 13, 10

<sup>&</sup>lt;sup>5</sup> information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

## 3. Brooks Bay

## **Primary SMZ Values**

- visual quality, as viewed from coastal areas, and associated recreation opportunities
- fisheries values in anadromous fish streams and estuary fish rearing habitats
- · populations and habitat of marine endangered/threatened species

## **Priority:** High

## **Planning Issues**

- need to clarify the marine species concerns
- impact of boaters mooring in Brooks Bay
- · tourism/recreation access management plan
- marbled murrelet in Klaskish River-East Creek (terrestrial) and Brooks Bay (foraging)
- high steelhead values in Klaskish and East Creek systems
- ORC suggested viewpoints for visual analysis: coastline Cliff Pt. to Lawn Pt., Heater Pt. to & including Klaskish Inlet
- public interest group comments:
  - public interest groups have been refused participation in Klaskish-East Creek Planning Group
  - intact watersheds have special planning needs
  - Klaskish-East Creek be designated high emphasis for biodiversity
  - maintain viewscapes visible from the park and from the water
- a priority is rehabilitation of Red Stripe Mtn., Side Bay and Klaskino Inlet
- additional objectives: maintaining/protecting ecological integrity, viewscape and tourism opportunities for Brooks Peninsula Prov. Park and integrating planning for park with Klaskish Inlet
- reject COMP as it does not qualify as a higher level plan
- ensure the protection of fish and wildlife habitats, old growth biodiversity, and recreational opportunities
- immediately conduct a rate of cut assessment for SMZ
- Sierra Club proposes zone should include East and Klaskish Creeks to height of land; exclude Redstripe Mtn.
- recognize mineral values and the likelihood of future exploration
- · impact of access on Klaskish Ecological Reserve
- · need to consider values, goals and objectives of adjacent protected areas
- look at excluding inner Brooks Bay from SMZ

## **Planning Needs**

- completion and implementation of Klaskish East Creek Coordinated Operational Management Plan (COMP)
- recreation access management plan
- conduct inventory of fish and marine wildlife habitat and populations
- conduct inventory on recreational opportunities and viewscapes
- Suggested planning unit: Klaskish-East Creek COMP area and other landscape units

## **Existing Inventories, Plans and Studies**

- COMP -folio mapping and studies underway, leading to a plan for the watershed; current themes available in digitized form from MOF:
  - forest cover
  - licensee tenure
  - mineral information
  - road network (proposed)
  - CWAP terrain stability
  - recreation inventory
  - drainage
  - operability
  - biogeoclimatic classification
  - fisheries
  - wildlife
  - archaeology
- previous Brooks Study coordinated by MoF
- traditional use studies underway (FRBC) for Quatsino Band
- archaeological overview completed (for all of PMFD)
- salmon farming capability and kelp inventory
- mineral potential and mineral inventory (MINFILE)

## **Key Resource Information Gaps**

- FEN designations under review with MELP for COMP area
- more detailed resource information needed for outer Brooks Bay
- visual assessment to be completed

## Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>6</sup>

Crown land	100%	Tourism potential -	
Private land	0%	high potential for coastal and l	backcountry tourism use
Crown reserve	no		
Mineral tenures	20%		
Tree Farm Licence	no	Archaeology potential	
Timber Licences	10%	- unproven	10%
Community watershed	no	- moderate	5%
Private forest lands	<1%	- potential	15%

## **Land and Resource Tenures**

- Interfor FLA 19238; MB FLA 18244 and Tls
- MoF Small Business Program
- Mineral tenures noted on LUCO maps covering 20% of the SMZ
- 2 marine plant harvesting licences
- Ecological Reserves:
  - Solander Ecological Reserve 2nd largest tufted puffin colony in B.C.
  - Klaskish Ecological Reserve

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information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

## Other Stakeholders/Interest Groups

- Klaskish-East Creek Operational Planning Committee
- Quatsino Nation
- Village of Winter Harbour
- Mount Waddington Community Resource Board
   Sierra Club; Outdoor Recreation Council of BC

**Bibliography References:** 1, 3, 4, 9, 13, 16

## 4. Koprino

## Primary SMZ Values

- · old growth biodiversity and connectivity functions
- upland wildlife habitat

**Priority:** High

## **Planning Issues**

- connectivity objective and rationale are unclear
- second growth area threatened wildlife habitat around Koprino Harbour is not apparent
- ORC suggested viewpoints for visual analysis: possibly from water of Holberg Inlet
- public interest group comments:
  - current logging plans will diminish SMZ values
  - designate SMZ as high emphasis for biodiversity to protect old growth and wildlife values
  - ensure the maintenance of old growth biodiversity and connectivity
- pending forest development applications by WFP, Holberg area provides one-third of WFP wood supply; 40% of Holberg WFP operations is in SMZ
- recognize mineral values and the likelihood of future exploration
- · need to incorporate values, goals and objectives of Quatsino Park

## **Planning Needs**

- preparation of landscape unit plan
- suggested planning unit: approved landscape unit

## **Existing Inventories, Plans and Studies**

- wildlife deer winter ranges identified
- proposed zoning plan prepared by WFP
- completed inventories: forest cover, ecosystem classification (1985), stream classification (1995), landscape (1994), recreation inventory (1990), cave locations, drinking water sites
- mineral potential and mineral inventory (MINFILE)

## **Key Resource Information Gaps**

- biodiversity/FEN strategy
- conduct inventory of wildlife habitat and populations

based on VIRT Interim Technical Report, April 1996

## Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>8</sup>

Crown land	95%	Tourism potential -	
Private land	5%	insignificant	
Crown reserve	no		
Mineral tenures	no		
Tree Farm Licence	100%	Archaeology potential	
Timber Licences	25%	- unproven	98%
Community watershed	no	- moderate	1%
Private forest lands	5%	- potential	1%

## **Land and Resource Tenures**

Western Forest Products TFL 6

## Other Stakeholders/Interest Groups

- Quatsino Nation
- Villages of Winter Harbour and Holberg
- Mount Waddington Community Resource Board
- Sierra Club; Outdoor Recreation Council of BC

**Bibliography References:** 1, 3, 5, 6, 7, 8, 11, 13, 16

information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

## 5. South Brooks - Bunsby

## Primary SMZ Values<sup>9</sup>

- population and habitat values for sensitive marine species
- coastal recreation values and opportunities
- · archaeological values

**Priority:** Moderate

## **Planning Issues**

- need to clarify coastal recreation/tourism and marine species objectives/concerns
- quality of tourist services on Bunsby Island (e.g., haphazard use of boat homes as bases for fishing/hunting excursions which conflict with more established outfitters)
- use of house boats for commercial purposes, and Crown foreshore trespass
- development of tourism opportunities consistent with local community aspirations and environmental/cultural resource sensitivities
- opportunity for aboriginal involvement in recreational resource use/tourism
- · road access is a concern for future recreation and settlement
- development pressures to be addressed by regional district
- · candidate wood lot licences in demand for the local area
- wood supply is a major concern for economic stability
- · candidate area for potential designation as a Marine Protected Area
- ORC suggested viewpoints for visual analysis: requires local study
- recognize mineral values and the likelihood of future exploration
- consideration of values, goals and objectives of protected areas
- possible exclusion of degraded area and Mt. Paxton/St. Paul's Dome from SMZ, after consultation with Kyuquot residents
- look at including the inter-island area within Marine Planning Unit 18

## **Planning Needs**

- prepare a recreation/tourism and visual landscape plan for SMZ, led by MOF and SBTC
- coordinate planning with CSRD Rural Land-Use Bylaw planning study
- suggested planning unit: entire SMZ
- · coordinate planning with Marine Planning Units

## **Existing Inventories, Plans and Studies**

- MOF recreation and landscape inventories completed; landscape inventory needs to be updated
- ESA, forest cover and terrain stability mapping completed
- no FEN mapping to date
- · overview archaeological assessment completed
- mineral potential and mineral inventory (MINFILE)

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<sup>&</sup>lt;sup>9</sup> LIARC Report, 1995, p.98

## **Key Resource Information Gaps**

- need a recreation supply/demand analysis, including more detailed recreation inventory especially on the islands near Kyuquot
- detailed tourism resource capability inventory and identification of tourism development opportunities
- biodiversity/FEN strategy
- conduct inventory of wildlife habitat and populations
- conduct inventory on recreational opportunities and viewscapes
- conduct impact assessment on recreational use and establish carrying capacity
- conduct inventory of archaeological and cultural heritage resources

## **Other Resource Features**

- Checleset Bay Ecological Reserve
  - largest and most diverse area of littoral/marine environment in B.C. that is protected
  - contains over half of the population of sea otters in Canada
- Species at risk:
  - Blue-listed:
    - ° Fisher's chickweed (plant) McKay Cove
  - Sea Otters

## Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>10</sup>

Crown land	100%	Tourism potential – significant capab	ility on offshore
Private land	0%	islands and coastal areas	
Crown reserve	80%		
Mineral tenures	< 1%		
Tree Farm Licence	no	Archaeology potential	
Timber Licences	10%	- high	5%
Community watershed	5%	- moderate	1%
Private forest lands	no	- potential	25%

## **Land and Resource Tenures**

- Strathcona TSA
  - Interfor -Forest Licence Chart
- Mineral Tenures noted on LUCO maps covering <1% of the SMZ
- 1 marine plant harvesting licence: Kyuquot; spawn on kelp; Maff # 611

## Other Stakeholders/Interest Groups

- Kyuquot Band
- Comox-Strathcona Regional District West Coast Committee
- Kyuquot Management Board
- Westcoast Expeditions commercial guiding operation
- Sierra Club: Outdoor Recreation Council of BC

information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

**Bibliography References:** 1, 3, 5, 6, 7, 8, 13, 16

## 6. Woss - Zeballos

## **Primary SMZ Values**

- old growth biodiversity
- visual qualities associated with access corridors and recreation sites
- · recreation values/opportunities in association with lakes

**Priority:** Low

## **Planning Issues**

- · old growth retention
- ORC suggested viewpoints for visual analysis: from lakes, corridor & recreation sites
- participation of Nootka Sound Resource Board
- maintaining fibre flow for Pacific's TFL 19
- hiking/climbing opportunities (Rugged Mountain)
- SMZ is split by licensees tenures and Forest District need to coordinate planning
- moderate concerns over maintaining visual quality
- need to consider biodiversity and recreation/conservation in relation to adjacent park
- classification of unique fish populations
- conduct inventory of recreation uses
- very large community watershed for Zeballos is questioned; serves as backup, but a second well would be preferable to lake water supply
- access along the lake is very rough; Pacific prefers road access through protected area
- · Zeballos Creek trail not maintained
- recognize mineral values and the likelihood of future exploration
- Nootka Sound employment and Village of Zeballos stability
- fibre flow and employment levels for the Village of Zeballos and Ehattesaht band
- consideration of values, goals and objectives of Woss Lake Park

## **Planning Needs**

- Pacific's total chance plan to occur in 1997
- Zeballos and Woss Lake landscape unit plans
- recreation and visual landscape plan for Zeballos Lake and associated trails
- suggested planning unit: approved landscape units

## **Existing Inventories, Plans and Studies**

- recreation inventory and recreation analysis are complete
- operability mapped; much of the area is inoperable
- CWAP completed for Zeballos Lake, 1996
- sufficient deer, elk and bear habitat assessment to establish ESAs
- Pacific's Management Plan (1996 to 2001) for TFL 19 recently completed
- Pacific's TFL Twenty Year Plan
- Canfor's TFL Management Plan currently being revised
- stream classification completed
- MELP wildlife capability mapping
- terrain stability classification completed by Pacific

- forest inventories completed by Pacific
- ESA classification completed by Pacific
- · TRIM folio overlays currently being prepared
- Canfor plans/studies/inventories (no information provided)
- mineral potential and mineral inventory (MINFILE)
- visual landscape assessment complete

## **Key Resource Information Gaps**

- more detailed recreation assessment, Zeballos Lake
- fisheries assessment of Zeballos Lake
- · karst inventory
- completion of FEN mapping and wildlife assessment (FRBC application)
- Terrestrial Ecosystem Mapping (TEM) application to FRBC not approved

## **Other Resource Features**

- Species at risk:
- Blue-listed:
- Menzies' Brunet (plant) Kaipit Lake

## Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>11</sup>

100%	Tourism potential -	
0%	moderate opportunities associated wit	th Woss Lake
no		
no		
100%	Archaeology potential	
1%	- unproven	97%
60%	- moderate	1%
no	- potential	2%
	0% no no 100% 1% 60%	0% moderate opportunities associated with no no 100% Archaeology potential 1 - unproven 60% - moderate

#### **Land and Resource Tenures**

- Canfor TFL 37 (east side); MOF SBFEP
- Western Forest Products TFL 19 (west side)
- Mineral Tenures: Rugged (#331971)

<sup>11</sup> information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

## Other Stakeholders/Interest Groups

- Village of Zeballos
- Namgis Nation
- Ehattesaht Band
- Mount Waddington Community Resource Board
- Nootka Resource Board
- Trappers (registered traplines)
- Sierra Club; Outdoor Recreation Council of BC; BC Speleological Federation
- IWA/PPWC

**Bibliography References:** 3, 4, 5, 6, 7, 8, 13, 16

## 7. Johnstone Strait

## **Primary SMZ Values**

- scenic values, as visible from coastal areas
- old growth biodiversity values
- · coastal fish and wildlife habitat
- shoreline recreation opportunities

## **Priority:** Moderate

## **Planning Issues**

- high priority for maintaining visual quality since this SMZ has a highly visible viewscape in a high traffic marine area; need to specify visual quality and tourism objectives
- ORC suggested viewpoints for visual analysis: from water
- public interest group comments:
  - VQOs should be applied throughout to protect viewscape critical to recreation/tourism
  - ensure that future development does not impact viewscape
  - ensure that proposed trail has adequate infrastructure and carrying capacity; trail should not provide access beyond Kaikash Creek
- Sierra Club proposes zone include up to height of land
- need to specify coastal wildlife habitat objectives; concern about recreation impacts on killer whales
- Robson Bight Provincial Park has precluded licensee (M&B) road access to TFL cut blocks; some potential road access to upper portions of the TFL; helicopter logging with water dump probably not an acceptable option
- 5% of AAC allocated to small business, but no road access; policy on road access through protected areas is unclear
- Tsitika watershed restoration program proposes to remove existing road and bridge (3km into lower Tsitika)
- interest in local community benefits from increased cruise ship traffic
- maintenance of accessibility and anchorage for pleasure boaters and kayakers
- residential development and whale interpretive centre proposed near Telegraph Cove
- old growth biodiversity needs to be considered in relation to adjacent protected areas
- increase in killer whale watching activities and associated encroachment of boaters into Robson Bight Ecological Reserve

## **Planning Needs**

- preparation of a visual landscape plan for the SMZ
- M&B Forest Development Plan to address access and visual issues
- · suggested planning unit: approved landscape units

## **Existing Inventories, Plans and Studies**

- Tsitika Plan covering south-east portion of SMZ
- no recent inventory work in TFL due to uncertain status
- TFL management plan approved in June 1996
- mineral potential and mineral inventory (MINFILE)

## **Key Resource Information Gaps**

- visual quality objectives
- recreation inventory and analysis
- impact of potential trail development
- conduct inventory of wildlife habitat and populations

## **Other Resource Features**

- Species at risk:
  - Blue-listed:
    - bog rush (plant) Suqash Fern
    - Queen Charlotte butterweed (plant) Suqash Fern

## Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>12</sup>

Crown land	100%	Tourism potential -	
Private land	5%	internationally significant existing use and high capability for marine and coastal activities	
Crown reserve	no		
Mineral tenures	no		
Tree Farm Licence	40%	Archaeology potential	
Timber Licences	20%		
Community watershed	no	- unproven	50%
Private forest lands	no	- potential	50%

## **Land and Resource Tenures**

- M&B TFL 39
- Interfor FLA 19238
- Kingcombe TSA

## Other Stakeholders/Interest Groups

- Johnstone Strait Killer Whale Committee
- Mount Waddington Community Resource Board
- Namgis Nation; Tlowitsis Mumtagila Nation
- tourism operators in Johnstone Strait
- · Sierra Club

• Outdoor Recreation Council of BC

**Bibliography References:** 3, 4, 5, 13

Dibliography References. 3, 4, 3, 13

<sup>&</sup>lt;sup>12</sup> information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

## 8. Tsitika River

## **Primary SMZ Values**

- · old growth and connectivity function
- fish and wildlife habitats and populations, associated with riparian zone

## **Priority:** High

## **Planning Issues**

- relation of SMZ to adjacent areas: higher biodiversity in SMZ and lower elsewhere?
- protection of killer whales while maintaining whale watching industry in SMZ
- · marbled murrelet potential breeding areas
- public interest group comments:
  - · overcutting in SMZ and entire Tsitika watershed unsustainable
  - · protection of fish, wildlife, old growth and biodiversity a priority
  - east side of Fickle Lake should be protected area due to steelhead run
  - additional objective: maintain ecological integrity and viewscape of adjacent provincial park
  - lodge or resort would directly conflict with high biodiversity values
  - ensure the maintenance of old growth biodiversity and connectivity
  - the MoF Tsitika LRUP is inadequate, as it is pre SMZ and pre FPC; new plan with public input required
- Mitlenatch Field Naturalists state there is a need to recognize very important fisheries values in Fickle Lake-Claud Elliot Lake area and high bear, elk, and deer populations due to high fish and wetland values. Goshawk use the valley as well. This area should be protected.
- ORC suggests that government should encourage/require more research and operation trials to demonstrate and increase the use of alternative harvesting systems
- Sierra Club proposes inclusion of Catherine and Thursday Creeks in SMZ
- need to finalize and endorse the MoF Tsitika River Plan
- 3 blocks within the SMZ have been approved (based on clearcutting with reserves); 3 more blocks proposed in 5 year plan
- need to specify biodiversity objectives and requirements for proposed blocks
- M&B object to alternative harvesting systems because of hemlock-balsam stands and blowdown potential, not suited to selective harvesting
- area of proposed pilot project for preparation of a total chance development plan through one rotation (Blk 2 of the TFL)
- recognize mineral values and the likelihood of future exploration
- consideration of protected area's values, goals and objectives
- look at environmental values in the Catherine Creek area

## **Planning Needs**

- need to consider a wide range of options to address biodiversity emphasis (in addition to alternative silviculture systems) within landscape units
- · access management planning
- preparation of Tsitika landscape unit plan, with a focus on FEN and OGMA designation
- suggested planning unit: Tsitika drainage
- conduct inventory of fish and wildlife habitat and populations

### **Existing Inventories, Plans and Studies**

- TFL management plan, including separate rate of cut for the Tsitika River
- comprehensive inventories (from 1978) completed for Tsitika River Plan
- sedimentation studies (Environment Canada and MOF) underway
- marbled murrelet studies in 1991, and proposed for 1997
- MELP Northern Goshawk studies in the last two years
- TEM recently completed
- M&B northern goshawk and bear den studies for each proposed block
- mineral potential and mineral inventory (MINFILE)

#### **Other Resource Features**

- Species at risk:
  - Blue Listed:
    - Vancouver Island pygmy owl Tsitika Lake

### **Key Resource Information Gaps**

• require northern goshawk strategy

# Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>13</sup>

Crown land	100 %	Tourism potential -	
Private land	0%	moderate capability for backet	ountry activities
Crown reserve	no		
Mineral tenures	<1%		
Tree Farm Licence	100%	Archaeology potential	
Timber Licences	no	- unproven	100%
Community watershed	no		
Private forest lands	no		

#### **Land and Resource Tenures**

- MacMillan Bloedel TFL 39
- Mineral Tenures noted on LUCO maps covering <1% of the SMZ

### Other Stakeholders/Interest Groups

- Johnstone Strait Killer Whale Committee
- Mount Waddington Community Resource Board
- Namgis Nation
- Tlowitsis Mumtagila Nation
- Sierra Club; Outdoor Recreation Council of BC
- Mitlenatch Field Naturalists

**Bibliography References:** 3, 4, 5, 13

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information derived from Vancouver Island Land Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

#### 9. Tsitika - Woss

# **Primary SMZ Values**<sup>14</sup>

- Biodiversity (restoration) and connectivity function
- recreational values and opportunities
- critical fish and wildlife habitats and populations

### **Priority:** Moderate

## **Planning Issues**

- · restoration of old growth biodiversity, fish and wildlife habitat, connectivity
- marbled murrelet potential breeding areas
- integration with objectives for Woss Lake Provincial Park, Nimpkish River Ecological Reserve, Claud Elliot Creek Ecological Reserve, Claud Elliott Lake Provincial Park and Schoen Lake Provincial Park
- ORC suggested viewpoints for visual analysis: from Woss Lake
- recognize mineral values and the likelihood of future exploration

## **Planning Needs**

- TFL 37 management plan inventory updates and wildlife inventory underway; SMZ objectives should be addressed as part of plan preparation and review
- Canfor TFL Statement of Management Objectives and Practices under review
- preparation of landscape unit plans, with a focus on FEN and OGMA designation
- suggested planning unit: approved landscape units
- conduct inventory on recreational opportunities
- create plan for restoration of biodiversity, connectivity, and fish & wildlife habitats

# **Existing Inventories, Plans and Studies**

- archaeological inventory completed for 4 blocks
- · wildlife inventory underway by Canfor
- submissions for forest development plans in SMZ submitted (October)
- mineral potential and mineral inventory (MINFILE)

# **Other Resource Features**

- Species at risk:
  - Blue-listed:
    - ° purple-leaved willowheads (plant) Woss Lake
    - ° Vancouver Island pygmy owl various locations in SMZ
    - Vancouver Island Wolverine Davie River
  - Red-listed

Vancouver Island wolverine - Woss Lake/Nimpkish River

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<sup>&</sup>lt;sup>14</sup> LIARC Report, 1995, p.106

# **Key Resource Information Gaps**

- biodiversity/FEN strategy
- TFL management plan updated inventory to be completed

# Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>15</sup>

Crown land	100%	Tourism potential -	
Private land	15%	moderate capability for midcountry activities and adjacent to Woss Lake	
Crown reserve	no		
Mineral tenures	<1%		
Tree Farm Licence	100%	Archaeology potential	
Timber Licences	60%	- unproven	85%
Community watershed	no	- moderate	5%
Private forest lands	15%	- potential	10%

# **Land and Resource Tenures**

- Canfor TFL 37
- Mineral Tenures noted on LUCO maps covering <1 % of the SMZ

# Other Stakeholders/Interest Groups

- · Village of Woss
- Namgis Nation
- Mount Waddington Community Resource Board
- Sierra Club; Outdoor Recreation Council of BC

**Bibliography References:** 3, 4, 5, 13

<sup>&</sup>lt;sup>15</sup> information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

# 10. Pinder - Atluck

#### **Primary SMZ Values**

- visual qualities associated with the lakes and road corridor
- fish and wildlife habitats and populations
- recreation opportunities at the lakes

#### **Priority:** Low

## **Planning Issues**

- recreation and visual management concerns
- ORC suggested viewpoints for visual analysis: from roads and lakes
- Sierra Club suggested an assessment of the rate of cut
- recognize mineral values and the likelihood of future exploration
- recognize importance of Tahsish River
- ensure the maintenance of VQOs, recreational opportunities, and fish & wildlife habitats
- OGMA in upper Pinder Valley
- Friends of Nootka Sound suggested that karst deposits be considered in maintenance of biodiversity at zone/landscape level

### **Planning Needs**

- preparation of landscape unit plan, with a focus on FEN designation and recreation and visual landscape management
- conduct inventory of fish and wildlife habitat and populations
- conduct inventory on recreational opportunities and viewscapes
- · suggested planning unit: approved landscape unit

### **Existing Inventories, Plans and Studies**

- Canfor Plans/inventories/studies (no information provided)
- · recreation inventory
- mineral potential and mineral inventory (MINFILE)

#### **Other Resource Features**

- Species at risk:
  - Blue-listed:
    - Vancouver Island pygmy owl Atluck Lake

#### **Key Resource Information Gaps**

• no information provided

# Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>16</sup>

Crown land	99%	Tourism potential -
Private land	0%	predominantly moderate capability
Crown reserve	no	
Mineral tenures	no	

information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

Tree Farm Licence	99%	Archaeology potential	
Timber Licences	50%	- unproven	90%
Community watershed	<1%	- moderate	-
Private forest lands	no	- potential	10%

# **Land and Resource Tenures**

- Western Forest Products TFL 19 (96 ha only)
- Canfor TFL 37

# Other Stakeholders/Interest Groups

- Village of Zeballos
- Namgis First Nation
- Mount Waddington Community Resource Board
- Sierra Club; Outdoor Recreation Council of BC

**Bibliography References:** 3, 4, 5, 13

### 11. Schoen - Strathcona

#### **Primary SMZ Values**

- old growth biodiversity and connectivity function
- fish and wildlife habitats and populations
- visual qualities associated with Victoria and Warden Peaks

#### **Priority:** High

#### **Planning Issues**

- priority objectives should include recreation and visual landscapes near peaks
- ORC suggested viewpoints for visual analysis: around Victoria and Warden Peaks; local study required
- · access development for recreation
- need to specify biodiversity connectivity objectives
- need to specify visual quality objectives: from the peaks/toward the peaks
- public interest group comments:
  - assess rate of current forestry harvest impact on SMZ values and objectives
  - assess views to/from peaks and parks
  - additional objectives: maintain ecological integrity and viewscapes of adjacent parks and recreation values and opportunities
  - oppose lodge/resort development
- ensure the maintenance of old growth biodiversity, fish, wildlife, and connectivity
- OGMA in upper Schoen Creek
- · Sierra Club recommends a rate of cut assessment for White, Salmon, and Gold watersheds
- pending development applications; major operating area for TFL 19 and 39
- major fisheries concerns on the Gold River
- old growth retention (especially Elbow Creek drainage)
- · enhance elk habitat and blacktail deer habitat
- protection and enhancement of valuable steelhead and salmon habitat within Gold River and Elbow and Twaddle creeks
- maintain fibre flow for Pacific's Forest Licence A19231 and Gold River/Tahsis/ Zeballos
- maintain fibre flow and enhance employment for the Village of Gold River, Mowachaht/Muchalaht Band and community forest licence
- · concern for community forest licence in Elbow Creek drainage
- involvement of Nootka Resource Board in planning
- recognize mineral values and the likelihood of future exploration
- consideration of values, goals and objectives of protected areas

# **Planning Needs**

- completion of landscape unit plans, involving: MOF, MELP, Western Forest Products, Village of Gold River, Mowachaht/Muchalat Band, Nootka Resource Board
- preparation of visual landscape plan around Victoria and Warden Peaks
- preparation of upper landscape unit plans, with a focus on FEN and OGMA designation, and recreation and visual management
- inventory of fish and wildlife habitat and populations
- inventory on viewscapes

• suggested planning unit: landscape units

## **Existing Inventories, Plans and Studies**

- · operability mapped
- fisheries and watershed restoration assessment 3 overviews complete (D. Tripp)
- fall 1996: Level 1 fisheries assessment proposed
- MOF/WFP TFL recreation inventory
- WFP's Five year Forest Development/Access Management/Silviculture Plans
- WFP's TFL 19 Management Plan No. 8 (1996-2001)
- WFP's TFL 19/FLA 19231 operability mapping
- WFP's TFL 19 Twenty Year Plan
- Stream classification/rehabilitation (in progress)
- WFP's Recreation Analysis Report (TFL 19)
- MELP wildlife capability mapping
- MOF/WFP's forest inventories
- MOF/WFP's ESA classification
- MOF/WFP's terrain stability classification
- WFP's fisheries assessment of Elbow Creek (Peter Bruce, 1994-95)
- Level 1 CWAP for upper Gold River
- WFP's Elbow Creek deer assessment
- wildlife ecosystem classification (in progress)
- TRIM (1994 Thematic overlays being digitized)
- mineral potential and mineral inventory (MINFILE)

#### **Kev Resource Information Gaps**

- more detailed recreation inventory for TFL 39 area within the SMZ and upgrading to RIC standards
- visual landscape inventory of Victoria peak
- fisheries assessment of Twaddle Creek and Gold River (in progress)
- update wildlife assessments (elk) (FRBC proposal)
- · ecosystem classification

# Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>17</sup>

Crown land	100%	Tourism potential -	
Private land	0%	moderate capability associated with backcountry activities	
Crown reserve	no		
Mineral tenures	<1%		
Tree Farm Licence	95%	Archaeology potential	
Timber Licences	10%	- unproven	100%
Community watershed	no		
Private forest lands	<1%		

#### **Land and Resource Tenures**

• Canfor TFL 37; TFL 39 MB Kelsey Bay Division

<sup>17</sup> information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

- Western Forest Products TFL 19 and FLA 19231
- Villages of Gold River/Tahsis/Zeballos community forest licence
- traplines
- Mineral Tenures (#346859)

# Other Stakeholders/Interest Groups

- Nootka Sound Economic Development Corporation
- Villages of Gold River/Tahsis/Zeballos/Sayward
- Nootka Resource Board
- Mowachaht/Muchalaht Band/Nuu-chah-nulth Tribal Council
- Namgis Nation
- Mount Waddington Community Resource Board
- Owen Lake Logging (Campbell River) (contractor)
- Kent Logging and Equipment (Courtenay)
- Russell and Lily (Tahsis)
- Sierra Club
- Outdoor Recreation Council of BC
- Friends of Strathcona Park

**Bibliography References:** 3, 4, 5, 13

# 12. Western Nootka Island

## **Primary SMZ Values**

- endangered/threatened marine species and habitat (e.g., sea otters, sea lions)
- coastal wildlife and fish habitats
- visual quality, as visible from coastal areas
- coastal and upland recreation/tourism values and opportunities
- archaeological resources

**Priority:** High

# **Planning Issues**

- planning unit needs to consider larger area in context with access points
- need for linkage with BC Parks: recreation/tourism strategy in conjunction with Nuchatlitz, Bligh Island and Santa Gertrudis-Boca del Infierno Provincial Parks
- need to specify endangered/threatened species objectives protection of sea otter and sea lion habitat; local concern about impact of sea otters on urchin
- high capability shellfish aquaculture beaches and reaches
- ORC suggested viewpoints for visual analysis: from water on coastline and proposed trail route, view of north side Genevieve Range from Nuchatlitz of crucial importance - local study required
- public interest group comments:
  - protection of viewscape
  - establish a wilderness trail corridor
  - much of Nootka Island diversity ignored
- clearcut reserves should be within clearcuts, not adjacent; clearcut limit should be reduced to 30% over 10 years
- Mitlenatch Field Naturalists have identified areas important for Marbled Murrelet habitat: Louie Bay, Calvin Falls, Bajo Point and Beano Creek; also want better wildlife studies; other regionally important species include: bald eagle nest between Louie Bay and Calvin Falls; bear habitat: Bajo Point to Beano Creek, especially Beano Creek estuary; delete cutblocks, especially B145 because of proximity to Beano Cr. Estuary; keep trail to Calvin Falls open for public; C141 should have a reserve around both branches of Calvin Creek; local trails and routes need to be better marked on Forest Development Plans as these are being featured in hiking guides; show a trail from Louie Bay to the beach, and a coastal route from Louie Bay to Friendly Cove
- · access and development pressures
- development pressures to be addressed by regional district
- Nootka First Nation Forest Products Forest Licence (propose wood from SMZ)
- Mowachaht/Muchalaht Band recreation/tourism development program
- Nootka Cannery old subdivision within Boca-Sarta Provincial Park
- recreation strategy and hiking/camping opportunities; proposed trail between IR1- IR3
- protection of sea otter and sea lion habitat
- CWS interest in seabirds and other marine bird species at western Nootka Is-Ferrer Pt
- maintain fibre flow for Western Forest Products and community forest licence
- Nootka First Nation Forest Products want to start forest operations in 1997
- involvement of Nootka Resource Board in planning
- recognize mineral values and the likelihood of future exploration
- consideration of protected areas' values, goals and objectives

### **Planning Needs**

- preparation of a recreation/tourism plan; proposed tourism development strategy
- · coordinate planning with CSRD proposed Rural Land-Use Bylaw planning study
- three recreation planning sub-areas: a) Zeballos-Esperanza, b) outer coast, c) south-east Friendly Cove
- completion of landscape unit plans, involving: MOF, MELP, Western Forest Products, Villages of Gold River, Tahsis and Zeballos, Mowachaht/Muchalat Band, Nuchatlat Tribe, Ehattesaht Tribe, Nootka Resource Board
- preparation of landscape unit plan, with a focus on visual resource management
- · suggested planning unit: Nootka Island
- conduct inventory of fish and wildlife habitat and populations
- conduct inventory on recreational opportunities and viewscapes and archaeological resources

#### **Existing Inventories, Plans and Studies**

- MOF Nootka Sound Recreation Initiative completed -1996
- Bligh Island and Santa Gertrudis-Boca del Infierno Management Proposals
- CSRD west coast park plan completed about 10 years ago
- Terrain stability overview completed
- Landscape inventory completed for inlet area only
- MOF Recreation inventory (out of date)
- Archaeological Inventory 1988-90 field work (Yvonne Marshall), and Phd thesis
- Mowachaht/Muchalaht Archaeology Project survey and mapping program
- WFP's Five year Forest Development/Access Management/Silviculture Plans
- Nootka First Nation Forest Products Five Year (1996-2000) Development Plan
- MOF/WFP's Operability Mapping
- MELP wildlife capability mapping
- MOF/WFP's forest inventories
- MOF/WFP's ESA classification
- TRIM
- CWAPs for two drainages (Beano and Bajo Creeks) reports available Fall 1996
- stream classification field work completed for Beano and Bajo systems
- Calvin Creek fisheries inventory to be completed in 1996
- Coastal Resource Interests Study (1989)
- Tourism Resource Inventory (1996)
- salmon and shellfish aquaculture capability studies, and kelp inventory
- mineral potential and mineral inventory (MINFILE)

## **Other Resource Features**

- Species at risk:
  - gray whale
  - northern sea lion
  - marbled murrelet

### **Key Resource Information Gaps**

- landscape assessment for outer part of the island, and establishment of VQOs
- recreation inventory needs to be updated to new RIC standards at 1:20 K
- · detailed tourism resources and capability inventory and tourism development opportunities study
- possible gap in terrain stability mapping; applying to FRBC
- · archaeological assessment
- terrestrial ecosystem mapping needs to be completed
- · stream classification for remaining streams
- biodiversity/FENs to be addressed within forest development plans
- operability mapping (including non-conventional harvesting systems)
- karst inventory (including scientific and cultural values)
- wildlife habitat inventories and documentation of wildlife values

## Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>18</sup>

Crown land	95%	Tourism potential -	
Private land	5%	internationally significant coastal marine and wilderness tourism	
		capability; exceptional cultural feature	res
Crown reserve	60%		
Mineral tenures	1%		
Tree Farm Licence	no	Archaeology potential	
Timber Licences	5%	- high	5%
Community watershed	no	- moderate	15%
Private forest lands	no	- potential	10%

#### **Land and Resource Tenures**

- Western Forest Products Ltd. (FLA 19231)
- Nootka First Nation Forest Products Ltd. owned by Mowachaht/Muchalaht Band (community forest licence)
- MacMillan Bloedel (TL T0853, T0862, T0866)
- Traplines: (e.g., TR0112T627/TR0112T624)
- Mineral Tenures: Five Acres (#342107)
- 1 shellfish licence
- 2 marine plant harvesting licences
- 31 Crown land tenure files, including:
  - private lands (e.g., Lot 68, 261, 262, 270, 366, 426, 427; Nootka Is, Fish Camp, etc.)
  - 5 Indian Reserve tenures files (A-Ass, Owossitsa, Opemit, Nuchatl, Ahpukto)
- Indian Reserves and private landowners

## Other Stakeholders/Interest Groups

- Villages of Gold River, Tahsis, Zeballos; Mowachaht/Muchalaht Band, Nuchatlat Nation
- Nootka Resource Board
- Mowachaht/Muchalaht Band (IRs 1,2,3)

<sup>18</sup> information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

- Nuchatlat Nation (IRs 1,2,4,6)
- Ehattesaht Band (nearby)
- Nootka Island Fishing Camp
- Nootka Island Logging Contractors; Kent Logging & Equipment Ltd.; Russell and Lilly Ltd.; Onion Lake Logging Ltd.
- tourism operators; Strathcona Lodge
- aquaculture association
- Sea Kaykers Association of BC
- Sierra Club; Outdoor Recreation Council of BC; BC Speleological Federation
- Mitlenatch Field Naturalists
- Comox-Strathcona Regional District

**Bibliography References:** 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, 17

#### 13. Nahmint

## **Primary SMZ Values**

- · old growth biodiversity and connectivity functions
- fish and wildlife habitats and populations
- visual quality for recreationists in Nahmint Valley
- Linkage to possible high elevation Wilderness Area

**Priority:** High

#### Planning Issues

- rate of harvest remains to be resolved
- carrying capacity and objectives for elk
- ORC suggested viewpoints for visual analysis: from Nahmint Lake and parts of valley
- public interest group comments:
  - concerns over rate of forestry harvest, including 5 year Forest Development Plan
  - concerns over lack of protection for fish, wildlife, old growth and biodiversity
  - propose creation of old growth reserves for Douglas fir in upper Nahmint
  - consideration of M&B's old growth management proposal
  - apply CWAP and place old growth into FEN and OGMA
- area used by Hupcasath First Nation for fishing, cedar gathering, berries, medicines and hunting; inland from Nahmint Bay is an important archaeological area
- concern about potential reduced allowable annual cut impact on other areas; major operating area for M&B; current AAC does not account for SMZ objectives
- Sierra Club recommends a rate of cut assessment
- recognize mineral values, existing exploration programs and the likelihood of future exploration

### **Planning Needs**

- organize planning around landscape units; fix Taylor River boundary to accord with viewscape
- address deferred Wilderness Area in the upper Nahmint
- finalize SMZ planning before commencement of TFL management plan
- preparation of landscape unit plan, with a focus on FEN and OGMA designation, and recreation and visual resource management
- conduct inventory of fish and wildlife habitat and populations
- conduct inventory on recreational opportunities and viewscapes
- · conduct comprehensive traditional use surveys and archaeological assessments
- suggested planning unit: Nahmint drainage

# **Existing Inventories, Plans and Studies**

- Nahmint watershed review/folio mapping finalized in 1992
- · recreation and landscape inventories are up to date
- MELP vegetation studies for elk capability are underway
- vegetation site series mapping (one-half of area complete)
- reptile/small mammal inventories proposed (FRBC)
- mineral potential and mineral inventory (MINFILE)

#### **Other Resource Features**

- Species at risk:
  - Red-listed: northern Adder's tongue fern Sutton Pass Ecological Reserve, one of four or five known locations of northern Adder's tongue fern in B.C.

### **Key Resource Information Gaps**

- MELP Data Needs: marbled murrelet habitat use (site specific); northern goshawks habitat use; rare and endangered species (bats, owls, riparian species [water shrew]) and rare plants; bear management studies to develop management strategies and carrying capacity (i.e., bear den use); songbird communities in old growth and second growth; riparian community studies
- traditional use information

# Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>19</sup>

Crown land	99%	Tourism potential -	
Private land	1%	significant fishing associated	
Crown reserve	no	with river component	
Mineral tenures	10%		
Tree Farm Licence	99%	Archaeology potential	
Timber Licences	20%	- unproven	85%
Community watershed	no	- moderate	5%
Private forest lands	<1%	- potential	10%

#### **Land and Resource Tenures**

- M&B TFL 44
- 2 Crown land tenure files, including 1 Indian Reserve tenure file (Kleykleyhouse)
- Mineral Tenures: Dalmation Resources Ltd.'s Tay property, about 10% of the SMZ

## Other Stakeholders/Interest Groups

- Nahmint Watershed Follow-up Committee
- Sierra Club; Outdoor Recreation Council of BC
- Hupacasath First Nation

**Bibliography References:** 3, 4, 5, 13

<sup>&</sup>lt;sup>19</sup> information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

#### 14. Barkley Sound

### **Primary SMZ Values**

- rare/threatened marine species populations and habitat;
- recreational values and opportunities
- · visual resources associated with marine zones and islands
- archaeological values

**Priority:** Moderate

## **Planning Issues**

- maintain and protect visual quality of SMZ from Broken Islands, which are extensively used by ecotourists
- proposed community forest licence in Broughton Peak/Crawford Lake area
- high capability shellfish aquaculture beaches and reaches
- see development issues identified in Barkley Sound Planning Strategy, 1995
- unauthorized (90) float cabins throughout Barkley Sound
- marbled murrelet winter and summer habitats
- potential designation as Important Bird Area by CWS due to sea ducks and marbled murrelet
- · candidate area for designation as Marine Protected Area
- uncertainty over visual constraints adjacent to LIAs
- recognize mineral values and the likelihood of future exploration
- Sierra Club recommends the restriction of aquaculture

#### **Planning Needs**

- several licensees; need to coordinate inventories/determine the lead agency for planning
- preparation of visual landscape management plan for Barkley Sound and Alberni Canal
- implementation of Barkley Sound Planning Strategy, led by Alberni-Clayoquot Regional District
- inventory of fish and marine wildlife habitat and populations
- inventory on recreational opportunities and viewscapes
- Suggested planning unit: Barkley Sound and Alberni Canal

#### **Existing Inventories, Plans and Studies**

- Barkley Sound Planning Study, Alberni-Clayoquot Regional District, 1995
- archaeological assessments in Lucky Creek, head of Pipestem, Julia Passage and Crawford Lake, and Tzartus Island
- 1995 landscape assessment for all of Barkley Sound (Tzartus Is. VQOs approved)
- Interfor chart area VQOs and recreation inventories remain to be completed
- · salmon and shellfish culture capability mapping & qualitative kelp inventory
- mineral potential and mineral inventory (MINFILE)

#### **Other Resource Features**

• Species at risk:

Blue-listed:

- ° Oregon selagninella (plant) Broken Island Group
- ° tufted puffin Seabird Rocks

- ° surf scoter Macoah Passage, Pinkerton Island/Equis Beach
- Cassin's auklet Seabird Rocks

#### Yellow-listed:

- ° rhinocerous auklet Seabird Rocks
- ° bald eagle various locations

Red-listed: northern sea lion - Folger Island

Gray whale (n/a) - Pachena Point, Ucluelet

# **Key Resource Information Gaps**

- MELP Data Needs: marbled murrelet habitat use (site specific); northern goshawks habitat use; rare and endangered species (bats, owls, riparian species [water shrew]) and rare plants; bear management studies - to develop management strategies and carrying capacity (i.e., bear den use); songbird communities in old growth and second growth; seabirds and waterfowl
- · recreation inventory needs to be updated
- detailed tourism resource inventory and capability assessment
- further archaeological assessments need to be completed

# Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>20</sup>

Crown land	99%	Tourism potential -	
Private land	1%	internationally significant coastal,	
Crown reserve	5%	marine and resort capability	
Mineral tenures	10%		
Tree Farm Licence	10%	Archaeology potential	
Timber Licences	5%	- high	
Community watershed	<1%	- moderate	20%
Private forest lands	5%	- potential	5%

### **Land and Resource Tenures**

- Interfor chart areas: east of Tzartus Island, west side of Uchucklesit Inlet, and applied for in Vernon Bay and May Lake
- MOF Small Business Program on Tzartus Island and Broughton Peaks area
- Mineral Tenures Consolidated Logan's Lucky/Toq property, about 10% of the SMZ
- 3 fish farms
- 18 shellfish farms
- 4 marine plant harvesting licences:
- 114 Crown land tenure files, including 9 Indian Reserve tenure files (Eeoowa, Quinaquilth, Deekyakus, Nuchaquis, Ahmitsa, Outs, Equis, Macoah, Chequis)

#### Other Stakeholders/Interest Groups

- Alberni-Clayoquot Regional District
- Nuu-chah-nulth Tribal Council and member bands
- tourism operators; aquaculture associations
- Sierra Club; Outdoor Recreation Council of BC

<sup>&</sup>lt;sup>20</sup> information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

**Bibliography References:** 3, 4, 5, 6, 7, 8, 9, 13, 15

# 15. Tofino Mudflats

#### **Primary SMZ Values**

- · estuary/mudflat habitat for fish and waterfowl
- · sheltered waters habitats for waterfowl

**Priority:** Low

#### **Planning Issues**

- Meares Island First Nations interests
- shellfish aquaculture leases and high shellfish capability in Lemmens Inlet
- Sierra Club suggests designation as Wildlife Management Area and no aquaculture within this area
- potential designation as Important Bird Area and Western Hemisphere Shorebird Reserve Network by CWS due to shorebirds

## **Planning Needs**

- need to determine the lead agency and scope of follow-up planning
- preparation of a wildlife management plan by MELP and CWS
- suggested planning unit: Tofino Mudflats SMZ

#### **Existing Inventories, Plans and Studies**

- Clayoquot Sound Special Management Zone landscape planning studies
- Clayoquot Sound Aquaculture Resource Study, 1995
- · visual landscape inventory completed
- some waterfowl studies underway, 1996
- mineral potential and mineral inventory (MINFILE)

#### **Other Resource Features**

- Species at risk:
  - Blue-listed: California wax myrtle Cox Bay
  - Sitka spruce Meares Creek
  - western red cedar Meares Island

### **Key Resource Information Gaps**

· MELP Data Needs: seabirds and waterfowl

# Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>21</sup>

Crown land	100%	Tourism potential -
Private land	0%	significant wildlife viewing
Crown reserve	no	product capability
Mineral tenures	no	

<sup>&</sup>lt;sup>21</sup> information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

Tree Farm Licence no
Timber Licences no
Community watershed no
Private forest lands no

# **Land and Resource Tenures**

- 2 Shellfish leases
- 3 Crown land tenure files, including 1 Indian Reserve (Opitsat)

# Other Stakeholders/Interest Groups

- Village of Tofino
- Alberni-Clayoquot Regional District
- Nuu-chah-nulth Tribal Council and member bands
- Sierra Club; Outdoor Recreation Council of BC

**Bibliography References:** 3, 4, 5, 6, 7, 8, 9, 13, 16

# 16. Saanich Inlet

## **Primary SMZ Values**

- · marine water quality
- · waterfowl habitat areas
- estuarine habitats
- recreation values and high quality recreation opportunities

**Priority:** Low

# **Planning Issues**

- water quality, non-point pollution sources from upland-uses
- · maintain recreational access to foreshore
- Sierra Club suggests local government focus on low density housing

#### **Planning Needs**

- regional and local planning needed to protect marine environment from surrounding urban development
- review and consider recommendations of 1996 Saanich Inlet Study, led by MELP
- suggested planning unit: Saanich Inlet and adjacent local governments
- consideration of parks' values, goals and objectives
- · inventory on recreational opportunities

## **Other Resource Features**

- Satellite Channel Ecological Reserve
  - only completely subtidal Ecological Reserve in B.C.
- Gowlland Tod Provincial Park including southeast portion of Saanich Inlet

### **Existing Inventories, Plans and Studies**

- MELP 1996 Saanich Inlet Study
- archaeological assessment of Finlayson Arm (ongoing)
- mineral potential and mineral inventory (MINFILE)
- management plan for Gowlland Tod Provincial Park

### **Key Resource Information Gaps**

· none identified

Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>22</sup>

	O 10000111011011	( ,	
Crown land	100%	Tourism potential – no data available	
Private land	0%		
Crown reserve	no		
Mineral tenures	<1%		
Tree Farm Licence	no	Archaeology potential	
Timber Licences	10%	- unproven	100%
Community watershed	no		
Private forest lands	no		

# **Land and Resource Tenures**

- 1 marine plant harvesting licence for Salicornia
- Mineral Tenures noted on LUCO maps covering <1% of the SMZ
- 191 Crown land tenure files, including;
  - 1 Ecological Reserve
  - 1 Indian Reserve (Senanus)

# Other Stakeholders/Interest Groups

- Capital Regional District
- Cowichan Regional District
- · District of North Saanich
- District of Central Saanich
- District of Highlands
- Institute of Oceans Sciences, Pat Bay
- Sierra Club; Outdoor Recreation Council of BC

**Bibliography References:** 2, 3, 4, 5, 6, 7, 8

<sup>&</sup>lt;sup>22</sup> information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

# 17. Strathcona - Taylor

## **Primary SMZ Values**

- old growth biodiversity (Maber Creek)
- wildlife and fish habitats and populations;
- connectivity functions (Taylor River to Strathcona Park)

## **Priority:** Moderate

## **Planning Issues**

- need more specific direction on where and how objectives apply (e.g., Maber Creek is presumably the focus of biodiversity)
- public interest group comments:
  - concern over development plans in Maber Creek area, a pristine watershed prior to 1994
  - establish old growth reserves in Maber Creek area
  - add objectives: recreation opportunities/maintain visual, recreation, ecological integrity of Strathcona Provincial Park
- very important area for Hupacasath First Nation fishing, cedar gathering, berries, medicinal plants, past settlement areas and sacred/spiritual sites
- Sierra Club recommends a rate of cut assessment and an OGMA for Maber Creek
- industry comments: no clear direction on harvesting constraints
- MB suggest protected area boundary should exclude main haul road into Maber Creek
- recognize mineral values, existing exploration programs and the likelihood of future exploration
- boundary part way up the Taylor River is not a logical planning unit
- coordinate SMZ boundary with park boundary at north end

# **Planning Needs**

- need a biodiversity strategy for Maber Creek
- inventory of fish and wildlife habitat and populations
- preparation of landscape unit plans, with a focus on FEN, OGMA, and WHA designation
- traditional use surveys and archaeological assessments
- suggested planning unit: approved landscape units

#### **Existing Inventories, Plans and Studies**

- Maber Creek hydrological and fisheries studies completed by MB
- MB inventory of elk/deer in Maber Creek area
- CWAP completed for Maber Creek
- mineral potential and mineral inventory (MINFILE)
- Hupacasath First Nation/MB/MOF agreement to conduct a Traditional Use Assessment and Archaeological Impact Assessment of the McBride Creek drainage

#### **Key Resource Information Gaps**

- MELP Data Needs: marbled murrelet habitat use (site specific); northern goshawks habitat use; rare and endangered species (bats, owls, riparian species [water shrew]) and rare plants; bear management studies - to develop management strategies and carrying capacity (i.e., bear den use); songbird communities in old growth and second growth; riparian community studies
- no comprehensive inventories to address the objectives

• traditional use surveys and archaeological assessments

# Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>23</sup>

Crown land	99%	Tourism potential -	
Private land	1%	moderate capability for backco	ountry activities
Crown reserve	no		
Mineral tenures	25%		
Tree Farm Licence	100%	Archaeology potential	
Timber Licences	no	- high	30%
Community watershed	no	- moderate	60%
Private forest lands	1%	- potential	10%

#### **Land and Resource Tenures**

- MB TFL 44
- Mineral Tenures Dalmation Resources Ltd.'s Tay property, about 25% of the SMZ
- 4 Crown land tenure files, including 1 Quarry file

# Other Stakeholders/Interest Groups

- Comox-Strathcona Community Resource Board
- Sierra Club
- Outdoor Recreation Council of BC
- Friends of Strathcona Park
- Hupacasath First Nation

**Bibliography References:** 3, 4, 5, 13

<sup>&</sup>lt;sup>23</sup> information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

# 18. Alberni Canal

#### **Primary SMZ Values**

- · visual qualities as seen from waterway
- · coastal wildlife habitats

**Priority:** Low

#### **Planning Issues**

- Interfor road construction proposed for 1996
- public interest group comments:
  - add objective: maintain recreation opportunities
- recognize mineral values and the likelihood of future exploration
- · high archaeological importance for First Nations

## **Planning Needs**

- visual landscape plan and objectives for Alberni Canal
- conduct inventory of fish and wildlife habitat and populations
- suggested planning unit: Alberni Canal and Barkley Sound

#### **Existing Inventories, Plans and Studies**

- · recreation inventory completed
- visual landscape inventory available for TFL lands
- Barkley Sound Planning Strategy, 1995
- Interfor forest development plan (1996) submitted for review
- mineral potential and mineral inventory (MINFILE)

#### **Other Resource Features**

- · Species at risk:
  - Red-listed:
    - Vancouver Island wolverine Nitinat River
  - Yellow-listed:
    - bald eagle various locations

#### **Key Resource Information Gaps**

- MELP Data Needs: marbled murrelet habitat use (site specific); northern goshawks habitat use; rare and endangered species (bats, owls, riparian species [water shrew]) and rare plants; bear management studies - to develop management strategies and carrying capacity (i.e., bear den use); songbird communities in old growth and second growth; seabirds and waterfowl
- no visual landscape inventory for TSA lands on north side
- no VQO objectives established for Alberni Canal
- · archaeological studies and Traditional Use Study

# Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>24</sup>

Crown land	85%	Tourism potential -	
Private land	15%	site specific coastal product capability	
Crown reserve	no		
Mineral tenures	5%		
Tree Farm Licence	60%	Archaeology potential	
Timber Licences	60%	- high	
Community watershed	no	- moderate	5%
Private forest lands	15%	- potential	65%

# **Land and Resource Tenures**

- M&B TFL 44 on south side
- Interfor forest licence on north side
- Mineral Tenures noted on LUCO maps covering about 5% of the SMZ
- 2 Crown land tenure files

# Other Stakeholders/Interest Groups

- Town of Port Alberni
- Regional District of Alberni-Clayoquot
- Sierra Club; Outdoor Recreation Council of BC

**Bibliography References:** 3, 4, 5, 13, 15, 16

<sup>&</sup>lt;sup>24</sup> information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

#### 19. Quadra Island

## Primary SMZ Values<sup>25</sup>

- ecosection biodiversity representation
- coastal and shorelands wildlife values
- visual qualities, especially in association with marine recreation and major road corridors

# **Priority:** High

#### **Planning Issues**

- need to specify 'coastal', shorelands and interior wildlife values and objectives
- need to specify recreation objectives to be achieved
- public interest group comments:
  - need for more detailed planning and consideration of alternative silviculture systems
  - visual quality important in areas of present and future high use
  - need to protect adjacent marine viewscapes
  - oppose push-over logging and clearcuts
  - disagree with objectives; visual qualities from trails, etc. are important, expand wildlife objectives beyond the shoreline to all of the area
  - additional objectives: maintain recreation opportunities; maintain ecological integrity and viewscape of adjacent Prov park; maintain and protect fish and wildlife habitat - both upland and marine, biodiversity and tourism
  - concern about number and size of logging roads, AAC is too high; concern over logging alongside
     Long Lake without adequate wildlife inventories
  - concern about 'fragmented' plans need for overall plan for the island
  - concerns about amount, size, type of cutblocks shown on the development plan and mining
  - include all of Quadra Island in SMZ
- Sierra Club recommends aquaculture be restricted and an assessment of rate of cut
- ORC suggested viewpoints for visual analysis: from water along coast; area of SMZ affected: 10%
- ecosection variant representation (altered landscape) objective
- rate of harvest and use of alternative harvesting systems
- visual concerns for marine recreation/tourism around the coast, especially along Discovery Passage/Johnstone Strait
- · log handling sites
- local employment
- plans for locally-directed tourism opportunities
- · accommodating aquaculture development
- TimberWest comments:
  - proposes three management zones: high, medium and low sensitivity management zone in the
    interior area (extensive alternative harvesting systems, clearcuts with reserves and size limits), and
    site specific VQOs per the FPC for the exterior area
  - the VIRT objectives should apply only to primary values and not whole island; focus visual concerns on public roads
- recognize mineral values and the likelihood of future exploration

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<sup>&</sup>lt;sup>25</sup> based on VIRT Interim Technical Report, April 1996

### **Planning Needs**

- · need a process for coordination of logging, mining and recreation access
- preparation of a recreation and visual landscape management plan for protected areas and adjacent TSA
- inventory of wildlife habitat and populations
- inventory on recreational opportunities and viewscapes, not just coastal areas
- yield analysis to assess the impact of SMZ objectives on the AAC
- completion of TFL management plan within next six months: need to re-assess SMZ objectives as appropriate

# **Existing Inventories, Plans and Studies**

- MSBTC Tourism Resource Inventory
- MOF Local Resource Use Plan 1993
- Small Business Program Development Plan updated 1996
- Archaeological overview assessment completed by University of Victoria in 1960s and 1970s.
- Quadra Island Recreation Society master plan for recreation
- TimberWest Draft Management Plan, 1996, including proposed FENS
- TimberWest/MOF recreation inventory to RIC standards and the visual landscape inventory
- TimberWest/MOF cave/karst inventory, ecological inventories for woodlots and partial trail inventory
- TimberWest currently undertaking stream classification of Open Bay and Banyon Creek systems
- Quadra Island Official Community Plan, 1996: SMZ mostly designated Silviculture (40 ac min.) and some Rural (10 ac min) with policies regarding resource management and land use, and map schedule of Potential Trail and Park Opportunities (see maps); marine by-laws
- Quadra Island Conservancy & Stewardship Society undertaking Quadra Island Mapping Project
- ongoing wildlife research project near Morte Lake (by Jennifer Balke)
- a trail inventory has been started by local people
- aquaculture capability mapping
- mineral potential and mineral inventory (MINFILE)

### **Other Resource Features**

- Species at risk:
  - Marbled Murrelet
  - Blue-listed:
    - ° turkey vulture Hyacinthe Bay
- Other species: bald eagle, Pine Grosbeak, Northern Goshawk, Western Screech Owl, Northern Pygmy Owl, Great Blue Heron, Ermine and Flying Squirrel

#### **Key Resource Information Gaps**

- public interest group comments:
  - lack of detailed mapping and inventory
  - need old growth inventory, ecosystem mapping, updated eagle nesting study, karst studies and comprehensive wildlife inventories
  - critical lack of data on marine component of SMZ

# Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>26</sup>

Crown land	85%	Tourism potential: no data available	
Private land	15%		
Crown reserve	no		
Mineral tenures	no		
Tree Farm Licence	98%	Archaeology potential	
Timber Licences	5%	- high	10%
Community watershed	no	- moderate	10%
Private forest lands	no	- potential	10%

#### **Land and Resource Tenures**

- TimberWest TFL # 47
- Merril and Ring properties within Goal 2 area
- MOF small business development plan
- 2 Woodlots
- Salmon farm tenure MAFF 733 Noram Aquaculture
- 26 mineral claims in good standing
- 135 Crown land tenure files

# Other Stakeholders/Interest Groups

- Quadra Island Forest Committee
- Quadra Island Recreation Society
- Quadra Island Salmon Enhancement Society
- Comox-Strathcona Community Resource Board
- Quadra Island Conservancy
- Mitlenatch Field Naturalists
- · Outdoor Recreation Council of BC
- Quadra Island Protected Areas Committee
- Nutreco
- Sierra Club
- Quadra Island Eco-Tourism Committee
- Quadra Island Conservancy and Stewardship Society
- Chinese Mountains Preservation Society

**Bibliography References:** 3, 5, 6, 7, 13, 14

<sup>&</sup>lt;sup>26</sup>information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

# 20. Upper Qualicum

#### Primary SMZ Values<sup>27</sup>

- ecosection biodiversity representation
- · recreation opportunities associated with the river
- wildlife and fish habitats and populations

#### **Priority:** High

## **Planning Issues**

- biodiversity strategy for second growth forests
- forestry on private lands; effects on SMZ management objectives
- 1 block small business planned; 2 more potential blocks identified
- CWS interest in bird populations (e.g., harlequin ducks)
- · ORC suggested viewpoints for visual analysis: from highway very sensitive
- public interest group comments:
  - additional objective: maintain viewscape and recreational opportunities of adjacent park
  - conduct a rate of cut assessment

## **Planning Needs**

- coordination of inventories on Crown and private lands
- integrate planning with FRBC enhanced forestry program
- inventory of wildlife habitat and populations
- inventory on recreational opportunities and viewscapes
- preparation of landscape unit plan, with a focus on demonstration of alternative silvicultural practices
- suggested planning unit: approved landscape unit

#### **Existing Inventories, Plans and Studies**

- MELP site series vegetation mapping in upper Qualicum
- · recreation inventory up-to-date
- vegetation mapping covering Crown lands
- mineral potential and mineral inventory (MINFILE)

## **Key Resource Information Gaps**

 MELP Data Needs: marbled murrelet habitat use (site specific); northern goshawks habitat use; rare and endangered species (bats, owls, riparian species [water shrew]) and rare plants; bear management studies - to develop management strategies and carrying capacity (i.e., bear den use); songbird communities in old growth and second growth; riparian community studies

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<sup>&</sup>lt;sup>27</sup> based on VIRT Interim Technical Report, April 1996

Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>28</sup>

Crown land	50%	Tourism potential	
Private land	50%	- high	-
Crown reserve	100%	- moderate	99%
Mineral tenures	no		
Tree Farm Licence	no	Archaeology potential	
Timber Licences	no	- unproven	100%
Community watershed	no		
Private forest lands	50%		

# **Land and Resource Tenures**

- MOF Small Business Program
- Texada Logging (1 block a licensee and adjacent owner)
- Western Forest Products
- Private lands: M&B, Pacific, Texada Logging
- 1 Crown land tenure file

# Other Stakeholders/Interest Groups

- Nanaimo Regional District
- Sierra Club; Outdoor Recreation Council of BC

**Bibliography References:** 3, 4, 13

<sup>&</sup>lt;sup>28</sup> information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

## 21. Walbran Periphery

## Primary SMZ Values<sup>29</sup>

- fish and wildlife habitat
- old growth biodiversity and connectivity
- recreation opportunities

**Priority:** High

#### **Planning Issues**

- fish habitat objectives and special values need to be clarified; special fish values may be within protected area
- public interest group comments:
  - designate SMZ as high priority for biodiversity
  - establish ecoforestry (alternative harvest systems) in Walbran
  - additional objectives: maintain ecological integrity, viewscape and recreational opportunities of adjacent park; maintain wildlife populations and habitat; extend riparian reserve zone
- TimberWest
  - -question the need for additional biodiversity objectives given adjacent Carmanah and proposed surrounding FENs
  - -lack of justification for proposed requirements and restrictions on harvesting
- diverse views as to extent and significance of recreation opportunities within SMZ
- specify recreation objectives for the southern part of the SMZ
- ORC suggested viewpoints for visual analysis: from Walbran Creek
- marbled murrelet potential breeding areas
- impact of restrictions on rate of cut outside of the SMZ
- 3 blocks in current development plan (1 harvested, 1 proposed, 1 future)
- access management/liability into the park is an issue
- two forest districts and two TFLs: need for coordination
- recognize mineral values and the likelihood of future exploration

### **Planning Needs**

- enhanced operational plans, coordinating both licensees with a focus on recreation and biodiversity; a coordinated plan does not currently exist
- · need for Provincial Park inventory work which complements the SMZ
- suggested longer term development plan (20 years) covering larger area
- coordinated planning framework including standardized and compatible inventories between licensees and standardized process for cut block approval
- preparation of landscape unit plan, with a focus on biodiversity/FEN and WHA designation and visual resource management
- inventory of fish and wildlife habitat and populations
- inventory on recreational opportunities and viewscapes
- suggested planning unit: approved landscape unit

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<sup>&</sup>lt;sup>29</sup> based on VIRT Interim Technical Report, April 1996

#### **Existing Inventories, Plans and Studies**

- management plan for TFL 46, 1996 includes 1:20 K folio mapping (currently under review by government agencies - completion Dec. 1996)
- · Carmanah Walbran Master Park Plan
- biodiversity plan prepared for TFL 46
- stream classification currently being updated
- recreation and visual studies using RIC standards completed with management plan
- studies underway by Marbled Murrelet Recovery Team; some northern goshawk studies by MELP
- site series vegetation mapping done for southern area by TimberWest; currently being done by M&B for northern area
- portions of SMZ are being considered as a Scenic Area under the FPC
- mineral potential and mineral inventory (MINFILE)

### **Other Resource Features**

- Species at risk:
  - Sitka spruce West Walbran Creek
  - trails have been built along Walbran Creek to Anderson Lake

### **Key Resource Information Gaps**

- MELP Data Needs: marbled murrelet habitat use (site specific); northern goshawks habitat use; rare and endangered species (bats, owls, riparian species [water shrew]) and rare plants; bear management studies - to develop management strategies and carrying capacity (i.e., bear den use); songbird communities in old growth and second growth
- some gaps in ecosystem mapping to RIC site series standards, enabling better evaluation for biodiversity planning and mapping of areas susceptible to blowdown, including addressing appropriate natural disturbance type (NDT3 vs. NDT1)
- possible need for CWAP in northern area re terrain stability
- identify stream reach fish values for determination of riparian reserves, and requirements for course woody debris

# Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>30</sup>

a renard capability	Ciassification	(VILOI 1994 Incidanc maps)			
Crown land	100%	Tourism potential			
Private land	0%	- high backcountry activity capability			
Crown reserve	no				
Mineral tenures	1%				
Tree Farm Licence	100%	Archaeology potential			
Timber Licences	25%	- unproven	100%		
Community watershed no					
Private forest lands <1%					

<sup>30</sup> information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

# **Land and Resource Tenures**

- MacMillan Bloedel TFL 44
- TimberWest TFL 46
- Hayes Forestry Services
- Mineral Tenures noted on LUCO maps covering about 1% of the SMZ
- no land tenure files

# Other Stakeholders/Interest Groups

- Carmanah Forestry Society
- Sierra Club; Outdoor Recreation Council of BC

**Bibliography References:** 3, 4, 13

### 22. San Juan Ridge

# Primary SMZ Values<sup>31</sup>

- upland recreational opportunities and values
- · visual qualities associated with trail corridor

**Priority:** Moderate

#### **Planning Issues**

- provide for Kludahk trail requirements; trail does deviate from height of land and includes the majority of potential recreation features in the SMZ
- forest industry recommends 100 m or 50 m trail reserve; question 1 km wide reserve
- some proposed cutblocks very close to the trail (2-3 cutblocks in 1997)
- unclear what the objectives are within the SMZ
- · ORC suggested viewpoints for visual analysis: from trail corridor local study required
- public interest group comments:
  - additional objective: protect rare, threatened and endangered plants; no hunting
  - 100 m trail reserve not wide enough, need a min. of 250 m.
- TimberWest suggests: standard Forest Practices Code with enhancement if necessary where cutblocks cross the trail
- recognize mineral values and the likelihood of future exploration
- · boundary does not currently follow all of the San Juan Trail
- rare and endangered plants
- what is the maximum long term protection that a BCFS Recreation Trail can have and is this sufficient?

#### **Planning Needs**

- preparation of a recreation plan for hiking trail development and use
- identify appropriate trail reserve width in landscape unit planning
- designate the trail as a BC Forest Service Recreation Trail under the Code
- planning objectives currently being developed for this SMZ
- · define a role for the local advisory committee
- MOF to coordinate a management plan between licensees
- suggested planning unit: trail corridor

#### **Existing Inventories, Plans and Studies**

- revised Recreation and Landscape Inventory
- Kludahk Trail has been plotted using GPS
- mineral potential and mineral inventory (MINFILE)

#### **Other Resource Features**

• Species at risk:

Blue-listed: White Glacier Lily - Three Arm Creek, Sombrio River and on the ridge above 700 m elevation, and Menzie's brunet - San Juan Ridge

• San Juan Ridge Ecological Reserve:

<sup>&</sup>lt;sup>31</sup> based on VIRT Interim Technical Report, April 1996

- excellent examples of rare White Glacier Lily

# **Key Resource Information Gaps**

• forest development plan will determine need for archaeological impact assessment

# Land Tenure/Capability Classification (VILUP 1994 Thematic maps)<sup>32</sup>

Crown land	100%	Tourism potential – low capability	
Private land	0%		
Crown reserve	no		
Mineral tenures	no		
Tree Farm Licence	95%	Archaeology potential	
Timber Licences	40%	- unproven	99%
Community watershed	no	- potential	1%
Private forest lands	no		

#### **Land and Resource Tenures**

- Western Forest Products
- TimberWest
- 2 land tenure files

# Other Stakeholders/Interest Groups

- Kludahk Hiking Club
- Kludahk Outdoors Club

• Sierra Club; Outdoor Recreation Council of BC

**Bibliography References:** 3, 4, 13

<sup>&</sup>lt;sup>32</sup> information derived from Vancouver Island Land-Use Plan 1994 Thematic maps - LUCO, 1994, or as otherwise updated; this generalized information for selected parameters may be outdated and not all information is included

#### **Annotated Bibliography for Special Management Zones**

# 1. Wright, M.E. 1994. Nestucca Project: Inventory of Department of Fisheries and Oceans Biological Resource Datasets. Can. Manuscr. Fish. Aquat. Sci. 2259: 76p.

52 biological resource datasets within DFO, Pacific Region are described in terms of:

- parameters measured
- · form of collection
- · geographic extent
- georeference
- · collection dates and frequency
- confidentiality
- quality
- resources include salmon, herring, shellfish, groundfish, vegetation and marine mammals

## 2. Ministry of Environment, Lands and Parks. 1996. Saanich Inlet Study. 35p.

- provide baseline information to make future decisions regarding zoning, land use, habitat management and pollution prevention
- study provided information on following topics:
  - public consultation on human water uses, values and concerns
  - consultation with First Nations
  - surveys of oceanographic properties
  - surface current surveys during winter and summer conditions
  - review of existing water quality information and environmental criteria
  - review of historical fisheries and marine life information
  - surveys of intertidal biota, boot and cloud sponge distribution and eelgrass habitat
  - survey of sources of fecal contamination and computer modeling of fecal coliform dispersion
  - assessment of chemical contamination and computer modeling of sediment transport
  - computer modeling of impact of nutrient enrichment on Phytoplankton growth
  - computer modeling of rates of water exchange between various parts of the Inlet
  - computer modeling of fate of chemical contaminants in tissues and marine sediments, with prediction of assimilative capacity

# 3. Vancouver Island Tourism Resource Inventory (1992,1996) Coastal Tourism Resource Inventory (1991) Ministry of Small Business, Tourism and Culture

- inventory is map-based at 1:250,000
- identifies important natural and cultural resources, and infrastructure that are important to the tourism industry (e.g., identifies high, medium and low concentrations of whales; or highlight important slopes for heli-skiing and downhill skiing)
- maps can illustrate high, low, medium capability areas for specific tourism activity
- maps can also identify current use of tourism resources

#### 4. British Columbia Conservation Data Centre

The BC Conservation Data Centre's information is managed using the Biological and Conservation Data System (BCD), a software system developed by The Nature Conservancy (US). BCD consists of over 30 types of files linked to topographic maps and manual files.

#### • Element Occurrence File:

This file is used to manage location-specific records for species and plant communities being tracked by the CDC. Each record includes population and community data, information on environmental features associated with the species or community, and precise geographical and ecological data.

## • Element Tracking File:

These are the definition files for each of the species or communities (known as Elements) which the CDC is tracking. They contain taxonomic information, global and provincial rarity ranks (based on degree of endangerment), status on the provincial Red or Blue list and other ecological details for over 1,000 threatened or endangered plant and animal species and plant communities found in British Columbia.

### • Source Abstracts File:

This is a bibliography of information sources (currently approximately 6,000 records) which includes published and unpublished reports, field surveys, journal articles, organizations, and knowledgeable individuals. The sources contained in this database are, in general, focused on rare and endangered species and plant communities.

## • Managed Areas File:

This file summarizes information on areas in B.C. that are under some type of special management or ownership, usually with conservation as a primary goal. Area in hectares, ownership, contact information, boundaries and special features are noted for managed areas such as: National and Provincial Parks, Ecological Reserves, Nature Trust Properties, Wildlife Management Areas, Regional Parks, bird sanctuaries and private conservation areas.

#### • Sites File:

This file, which is currently under development, describes and characterizes sites in B.C. which are of outstanding biological significance. Information available includes comments on the biodiversity significance, key environmental factors, current and past Land-Use, additional information needs and sources, and rare and endangered species and plant communities present at the site.

## • GIS:

The CDC has been using the Biotics system since 1998, a customized GIS application designed specifically as a front end for the Biological Conservation Database software used at the BC CDC (and throughout the international network of Natural Heritage Programs and Conservation Data Centres).

## 5. Guide to British Columbia Ecological Reserves. 1993. B.C. Ministry of Environment Lands and Parks. ISBN 0-7726-0733-8.

This report contains information on location and description of ecological reserves in B.C. including:

- 1:50,000 maps
- purpose of reserve
- · location, size, physical and biological features
- outstanding features

## 6. British Columbia Designated Heritage Sites Registry. 1995. B.C. Ministry of Small Business, Tourism and Culture.

This report details location, name and authority for each heritage site in B.C. The sites are listed by regional district.

## 7. B.C. Archaeological Site Inventory. B.C. Ministry of Small Business, Tourism and Culture.

The inventory contains identification, location, land status, site description, environment and investigations for each identified archaeological site in B.C. Updated to 1996.

## 8. Archaeological Field Research in B.C. An Annotated Bibliography. B.C. Ministry of Small Business, Tourism and Culture.

Listing and description of all archaeological field work in B.C. Updated to 1996.

# 9. Biophysical Suitability of the Western Johnstone Strait, Queen Charlotte Strait and West Coast Vancouver Island Regions for Salmonid Farming in Net Cages, 1989, K. Ricer et. al., Ministry of Agriculture and Fisheries.

An assessment of biophysical capability for fish farming (does not consider market or access elements) including 1:125,000 map atlas. Covers the area from Kelsey Bay north and west to Nitinat Lake and includes oceanographic, biological, hydrologic and meteorological data. Each waterway was rated for 12 or more biophysical characteristics: temp., D.O., salinity, plankton blooms, pollution threats, currents, depth, substrate, geomorphology, etc. Rating of suitability: Good, Medium, Medium with caution for low summer/autumn oxygen levels, Poor, Not Acceptable and NA for Not Acceptable unless large open ocean net cages are used.

## 10. Nootka Coastal Resource Interests Study, 1989. Ministry of Crown Lands

Mapping of resource interests involving government agencies and public interest groups. CRIS provides a composite descriptive map summary of all critical (C) and important (I) interests of agencies and groups. Information compiled at 1:50,000 scale. A Finfish Aquaculture opportunity map was also produced from the composite interest input map, identifying Conditional areas (applications considered), Limited areas (applications only accepted after resolution of concerns identified on the composite map), No Opportunity (applications not accepted).

## 11. West Coast Nahwitti Lowlands/Koprino SMZ Subjoining Proposal, May 13, 1996 Progress Report, Western Forest Products

Proposed subjoining scheme, involving: Protected, Regular and modified subpoenas. The protected coastal reserve area runs from San Josef Bay to Cape Perkiness. Wilderness recreation cannot be the focus; access by existing forest roads as well as future park plans and opportunities make the area more appropriate for semi-wilderness and rustic development for day hikes, short overnight trips and campers. A land based (rather than ocean based) recreation focus with emphasis on coastal features. Total protected area: 1,099 ha; 1,001 forested, 962 ha old growth, 39 ha second growth. A detailed analysis was also completed of the viewscape area immediately behind the protected area. This involves 1,990 ha within TFL. Proposed: 2,000 ha reserve (protected area), 7,500 ha special management for visuals and biodiversity/wildlife, 12,200 ha regular FPC standards.

## 12. Goletas Channel Resource Targets - Low Intensity Area # 117, Thomas R. Cole, September 29, 1995, Richmond Plywood Corporation

Proposed management approach to the SMZ. Total operable area: 1,300 ha; 27% FENs, 11% hydrariparian areas, 62% forested land available. Rate of harvest for the 405 ha available is estimated at between 15 and 30% (60 - 120 ha first pass development over 15-20 years) Forest types: Spruce-Salmonberry (<2%), Hemlock-Vaccinium (30%), Cedar Salal (68%). Currently very little recreation in the area; some fly-in angling in the lower reaches. Richply proposes a 800m trail linking the inlet to Shushartie Lake, and a 100m management zone surrounding the lake and river system. They have also proposed

development of the North Coast Trail. Fisheries reconnaissance completed in 1993. No detailed wildlife inventory.

## 13. Sierra Club of Western Canada's Submission to the Low Intensity Area Review Committee. 1994; Response to SMZ Questionnaire, September 1996, Sierra Club.

Detailed review of LIAs identified in the LIARC Report, including: guiding principles, proposed SMZ boundary adjustments, objectives, logging status and recommendations. Identification of issues and concerns for each SMZ; suggested expansion of SMZ objectives: some designated LIAs and the methods of logging within them are inappropriate - e.g., 20% of LIAs are already degraded and there are no objectives to restore these; they would prefer that these areas be traded for other forestry areas containing old growth. Secondly, LIAs are intended as buffers around parks and or to provide areas suitable for multiple use such as recreation, tourism, etc. but they are subject to the same type of logging as other areas. SMZ objectives currently do not stipulate alternative forestry practices which would ensure protection of biodiversity. A major objective missing is the need to have SMZ management standards bounded by the AAC. There are also discrepancies in defining LIAs; they are not structured to protect biodiversity; no inventory work to determine qualities within the areas. Priority planning objectives are incomplete. Data gaps which need to be filled are comprehensive wildlife inventories in all the LIAs. Comprehensive recreation and access management plans need to be developed for LIAs with high recreation values (Klaskish-East, Shushartie, Nootka Island) in consultation with First Nations.

## 14. Quadra Island Official Community Plan, 1996, Comox Strathcona Regional District.

The plan provides a statement of community values and goals with regard to land use and community development. It designates much of the SMZ for Silviculture (S), with some Rural (RU) designation on various private properties. Policies are provided for each designation. The Silviculture designation includes support for FPC implementation, and provides for a minimum parcel size of 16 ha. The Rural designation provides for a minimum parcel size of 4 ha. A schedule to the plan identifies potential trail and park opportunities. The following areas are listed for protection: Village Bay Lakes Chain, Hyacinth Point, Heriot Bay Ridge, Extension of Octopus Islands Provincial Park, Chinese Mountains/Morte Lake/Nugedzi Lakes, Waiatt Bay/Small Inlet/Newton Lake, and Surge Narrows/Settlers Group.

## 15. Barkley Sound Planning Strategy, 1995, Alberni Clayoquot Regional District.

The Barkley Sound Planning Strategy is a strategic framework for the long-term use, development and management of the lands and resources of Barkley Sound and Alberni Inlet. It represents a common statement of intent on the part of fifteen participating agencies of the Barkley Sound Planning Committee with regard to land and water use in an area 1,000m upland of high water or 100m elevation. Policies and guidelines may also refer to adjacent watershed areas where they specifically affect management issues in the study area. The Strategy is organized into three parts: a review of the issues and trends, including an overview of land and resource features, a set of goals, objectives and guidelines, and an area designation system which guides the allocation of land and water uses. Six principles form the basis for many of the policies and guidelines: resource sustainability, environmental protection, development suitability, community involvement, land and sea claims, and inter-agency cooperation. Four digitized map schedules are included: Schedule 1- Area Designation, Schedules A - Land and Foreshore Use, B - Recreation and Scenic Features, C- Environmental Features.

## 16. Spawning Areas of British Columbia Herring, 1989, D.E. Hay, P.B. McCarter, R. Kronlund, C. Roy, Dept. of Fisheries and Oceans

A review, geographical analysis and classification of herring spawning areas. Provides analysis of 50 years (1937-1986) of records, based on approx. 20,000 annual records of spawning by fishery officers.

## 17. Nootka Sound Recreation Initiative, 1993, Ministry of Forests, Campbell River.

A committee has been established to address recreation issues in Nootka Sound. In the long term, a comprehensive land/water use plan will be required. The current issues include: insufficient public recreation sites, unauthorized float cabins, commercial recreation development (including use of vessels for commercial purposes). A series of recommendations were developed by the committee and some of these are currently being implemented.

## APPENDIX 4: PLANNING FRAMEWORK STATEMENTS FOR COASTAL PLANNING UNITS

#### CPU-1: Lanz-Cox Islands

#### **General Description**

Open ocean with highly exposed offshore islands. Oceanographically, the salinity values of the open Pacific.

## **Planning Issues**

 recreational access within Scott Islands Park is limited to Lanz and Cox Islands. Remoteness and difficult ocean conditions limit accessibility to these locations

## **Planning Needs**

- development of a code of conduct for wildlife viewing operators important to tourism resource management
- need to manage recreational use to ensure wildlife is not jeopardized
- · may have future need for mineral, oil and gas exploration or development infrastructure support

### **Key Resource Information Gaps**

- need to identify whether any cultural resources exist
- · specific visual resources not yet identified
- opportunities for wildlife viewing need definition

#### **Resource Uses and Potential**

#### Aquaculture

• low capability for aquaculture using existing technologies and culture species

#### Marine Fish

- · important groundfish area
- squid spawning along Vancouver Island and Scott Island shoreline
- important geoduck and red sea urchin beds around Lanz-Cox

#### Marine Wildlife

- there are large critical seabird colonies and very important sea lion haulouts on Lanz-Cox Islands
- Anne Vallee ER is the site of the largest seabird and sea lion colonies in British Columbia
- principal migratory corridor for gray whales
- islands are home to endemic rodents

#### Minerals, Oil and Gas

- good potential for offshore oil and gas in sedimentary basins extending into area; Queen Charlotte Basin est. 3 billion bbl recoverable oil and 22 tcf recoverable gas; Winona Basin and others total est. 12 14 tcf recoverable gas.
- offshore oil and gas lease area extending into CPU under current moratorium
- potential for heavy mineral-rich sands

## Recreation Resources

- high wildlife values
- occasional diving opportunities

## **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

Total # Tenures: 0

## **Other Land Use Designations**

Beresford Island, Sartine Island and Triangle Island are Ecological Reserves (Anne Vallee ER on Triangle Island)

## **Existing Inventories/Plans/Studies**

Northern Vancouver Island Forest Recreation and Tourism Opportunities Study

## Stakeholders/Interest Groups

Council of B.C. Yacht Clubs Mount Waddington Community Resource Board Mount Waddington Regional District

## CPU-2: Northwest Coast (Lawn Point to Hope Island)

#### **General Description**

This planning unit consists of open ocean and highly exposed shoreline with few embayments. The salinity is always above 29 ppt and is highest during late summer when surface temperatures briefly reach 13 °C.

#### **Planning Issues**

- significant portions of upland area adjacent to the planning unit have been dedicated to recreational activities (Raft Cove and Cape Scott Park)
- Mount Waddington Regional District report: Northern Vancouver Island Forest Recreation and Tourism Opportunities Study:
  - ranks this CPU as having the best heritage site viewing within the Mount Waddington Regional District; sites include Cape Scott and San Josef Bay.
  - the location of the numerous heritage sites is confidential. The active involvement of First Nations communities will be essential to develop tourism based on these sites.
  - constraints to developing heritage resources include preserving the resources, ease of access, land tenure, lack of funds to restore and interpret the building and artifacts.

## **Planning Needs**

- tourism access needs to be considered in integrated planning
- need to preserve visual quality from upland protected areas
- may have future need for onshore mineral, oil and gas exploration or development infrastructure support

## **Key Resource Information Gaps**

None identified to date

#### **Resource Uses And Potential**

Cultural Heritage Resources

• 13 medium and high density heritage/traditional cultural sites identified

#### Forest Use

- limited potential for log-handling sites and associated infrastructure
- log salvage and hand logging opportunities exist along significant portions of the shoreline in this zone

#### Marine Fish

- important shrimp area off Quatsino Sound
- important groundfish area from Quatsino to Cape Scott
- important salmon area off San Josef Bay and offshore Raft Cove to Topknot Point

## Marine Wildlife

- primary route of the northern group of orcas
- gray whale milling areas
- several sea lion haulouts
- · several seabird colonies

### Minerals, Oil and Gas

- good potential for offshore oil and gas in adjacent offshore sedimentary basins
- offshore oil and gas lease area extending into CPU under current moratorium
- potential for heavy mineral-rich sands, paleoplacers

## Tourism Resources

• marine cruising, kayaking, sport fishing and diving

## **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

#### Total # Tenures:0

## **Existing Inventories/Plans/Studies**

Northern Vancouver Island Forest Recreation and Tourism Opportunities Study

## **Stakeholders/Interest Groups**

Council of B.C. Yacht Clubs Mount Waddington Community Resource Board Mount Waddington Regional District

## CPU-3: Northwest Queen Charlotte Strait

## **General Description**

Goletas Channel is a straight and broad waterway bordered on both sides by a near continuous line of rocky cliffs. The northwest is closed off by Nahwitti Bar, an area of very rough water. Seasonal winds are northwest in summer and southeast in winter. Waves can reach up to 2.4 m in the channel. Water temperatures for the upper 10 metres vary from 7 to 13 C over the year, while the salinity ranges from 30 to 32 ppt.

## **Planning Needs**

may have future need for onshore mineral, oil and gas exploration or development infrastructure support

## **Key Resource Information Gaps**

- · shellfish potential unknown
- visual resources are not identified. Need to consider the adjacent SMZ and PAs (Cape Scott Park and God's Pocket) and the ferry route through Browning Pass when determining the VQOs

## **Resource Uses And Potential**

## Cultural Heritage Resources

medium and high density heritage/ traditional cultural sites identified on Hope Island

#### Forest Use

- · important area for log-handling sites and associated infrastructure
- · opportunities for log salvage and hand logging along sections of the shoreline

#### Marine Fish

- geoduck beds on the northeast side of Hope Island
- high herring spawn concentration in outer Bull Harbour
- · commercial groundfish northeast of Vansillart Island and southeast of Doyle Island
- major salmon recreational fishing and trolling areas east of Hope and Nigei Islands
- · exceptional invertebrate species diversity and abundance
- · rockfish spawning and feeding area

#### Marine Wildlife

- important migratory route for orcas and dolphins
- several seal and seal lion haulouts, particularly at Rollie Bay and Hope Island
- · sea bird colonies are found in Queen Charlotte Strait

### Minerals, Oil and Gas

- good potential for offshore oil and gas in adjacent offshore sedimentary basins
- offshore oil and gas lease area extending into CPU under current moratorium
- potential for heavy mineral-rich sands, paleoplacers, nearshore aggregate resources

#### Recreation Resources

- popular marine cruising destinations throughout planning unit: Browning Pass, God's Pocket Marine Park
- Bull Harbour is a favoured local anchorage
- additional opportunities for kayaking and angling within Nahwitti/Shushartie extension of Cape Scott Provincial Park

#### Tourism Resources

- · extensive angling, scuba, cruising and kayaking opportunities
- Browning Pass possesses high potential for marine tourism

## **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

CommunityCommunity Facility1ResidentialPrivate Moorage1TransportationPublic Wharf1

**Total # Tenures:** 3

## **Existing Inventories/Plans/Studies**

Northern Vancouver Island Forest Recreation and Tourism Opportunities Study

## **Stakeholders/Interest Groups**

Council of B.C. Yacht Clubs Mount Waddington Community Resource Board Mount Waddington Regional District Malcolm Island Environmental Protection Society BC Wild

## CPU-4: Southern Queen Charlotte Strait and Broughton Strait West

#### **General Description**

Waters are cool (5.8-10.8 °C). Except for Port Hardy and Beaver Harbour, the southwest shore coastline is exposed, (winter swells to 3.0 m) and shallow for 2 - 4 km offshore.

#### **Planning Issues**

- Mount Waddington Regional District Northern Vancouver Island Forest Recreation and Tourism Opportunities
   Study highlights areas within this CPU with a high ranking for cruising, heritage site viewing, kayaking, and
   wildlife viewing.
  - constraints to cruising include the distance between harbours and anchorages, availability of fuel, and marine supplies and services
  - constraints to kayaking include the wide distribution of sites
  - likely to be increased competition among cruisers, kayakers, floating fishing camps and aquaculture operations for the best bays and coves
  - the location of the numerous heritage sites is confidential. The active involvement of First Nations communities will be essential to develop tourism based on these sites.
  - constraints to developing heritage resources include preserving the resources, ease of access, land tenure, lack of funds to restore and interpret the building and artifacts

## **Planning Needs**

• mineral, oil and gas exploration and development would require infrastructure support facilities

## **Key Resource Information Gaps**

None identified at this time

#### **Resource Uses And Potential**

#### Aquaculture

- moderate potential for salmon farming in Beaver Cove, the mouth of Port Hardy and Western Broughton Strait
- potential for shellfish culture on Malcolm Island

## Cultural Heritage Resources

- high density of cultural heritage sites located in the vicinity of Hardy Bay, Beaver Harbour, and Nimpkish River
- medium density of cultural heritage sites identified along coast

#### Forest Use

• important area for log-handling sites and associated infrastructure

#### Marine Fish

- important herring spawn areas in Port Hardy, Beaver Harbour, Deer Islands and along shoreline from Beaver Harbour to Cluxewe River
- major salmon and groundfish areas and seasonal concentrations of dogfish in west Broughton Strait
- clam beaches and commercial geoduck areas along the coastline from Port McNeill to Beaver Cove

### Marine Wildlife

- several species of whales; resident and transient orca pods; dolphin and porpoise
- many major sea bird colonies identified

#### Minerals, Oil and Gas

- important marine extension of Suquash Coal basin: resource est. 9 million tonnes coal (marine) and 9.1 million tonnes (terrestrial); possible coal-bed methane
- potential for paleoplacers and aggregate resources

## Recreation Resources

- coastal area experiences high recreational use
- important land/water interface: Peel, Cormorant and Malcolm Islands

#### Tourism Resources

• established wildlife (orca) viewing, angling, kayaking, scuba and marine cruising area

#### **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

Aquaculture	Finfish Tenure	1
Commercial	Commercial Wharf	3
	General Commercial	27
	Marina	5
Industrial	General Industrial	2
	Log Handling and Storage	9
Institutional	Institutional Miscellaneous	2
	Local/Regional Park	1
	Public Works	2
Misc. Land Use	Environmental Protection	1
	Other	2
Residential	Private Moorage	1
Transportation	Public Wharf	8
_	Navigational Aid	1
	Ferry Terminal	3
Utility	Electric Power Line	3
-	Sewer/Effluent Line	2
	Telecommunication Line	1
Total # Tenures:		74

## **Other Land Use Designations**

• pending WMA on Cluxewe Estuary and foreshore; reserves in Hardy Bay

### **Existing Inventories/Plans/Studies**

Northern Vancouver Island Forest Recreation and Tourism Opportunities Study

## **Stakeholders/Interest Groups**

Council of B.C. Yacht Clubs Mount Waddington Community Resource Board Mount Waddington Regional District

## **CPU-5: Johnstone Strait**

#### **General Description**

Generally exposed and subject to wind driven waves. Turbulent mixing of water masses occurs at sills at both ends of Broughton Strait resulting in significant upwelling of nutrients and increased phytoplankton productivity. Currents in excess of 2 m/sec occur in the area's northern entrance.

## **Planning Issues**

- due to sensitivity of Robson Bight, there is no public access to the landbase of the Michael Bigg Ecological Reserve
- large volume of marine traffic increases risk to wildlife due to pollution
- Council of B.C. Yacht Clubs submission:
  - Location of proposed boat havens(# refers to the Council's Boat Haven List)

#19 Otter Cove

Chart 3539 Map 92K 033

#19A No Name Cove West of Humpback Bay

Chart 3544 Map 92K 032

- request that Special Management Areas be created with the immediate upland of these proposed boat havens

#### **Planning Needs**

- possible need for shore-based development infrastructure to support mineral opportunities
- preservation of visual quality from travel corridor required

#### **Kev Resource Information Gaps**

None identified at this time

### **Resource Uses and Potential**

#### Aquaculture

- no existing fish farms in the planning unit
- moderate capability for aquaculture throughout the planning unit, however, there are periodic low oxygen levels in summer and autumn

## Cultural Heritage Resources

- high density heritage/traditional cultural sites located near Rock Bay
- medium density heritage/traditional sites identified in the vicinity of Sayward

#### Forest Use

- important area for log-handling sites and associated infrastructure
- opportunities for log salvage and hand logging along sections of the shoreline

#### Marine Fish

- whole strait is a major salmon migratory route
- commercial concentrations of shrimp and prawns from Cederstedt Creek to Palmer Bay
- significant crab fishing area in Kelsey Bay
- important groundfish areas from Rocky Point to the southern end of the planning unit

#### Marine Wildlife

- internationally recognized for concentration of resident orcas at Robson Bight
- limited numbers of seals, sea lions and porpoises in area

#### Minerals, Oil and Gas

• nearshore potential for aggregate and possibly paleoplacer resources

#### Recreation Resources

• travel corridor for cruise ships and marine cruising

#### Tourism Resources

- internationally significant wildlife viewing, particularly in vicinity of Robson Bight
- cruise ship activity, marine cruising, angling and kayaking, with existing infrastructure and extensive current use

#### Visual Resources

· topography makes shoreline prominent

#### **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

Commercial	General Commercial	2
Industrial	Log Handling and Storage	7
Institutional	Public Works	1
Transportation	Public Wharf	2
Utility	Sewer/Effluent Line	2
•		

Total # Tenures: 14

#### **Other Land Use Designations**

WMA at Kelsey Bay

## **Existing Inventories/Plans/Studies**

- Northern Vancouver Island Forest Recreation and Tourism Opportunities Study
- Provincial Boat Havens Catalogue & User Survey: West Coast Vancouver Island & Campbell River Fiordland Recreation Area. Council of B.C. Yacht Clubs

## **Stakeholders/Interest Groups**

Council of B.C. Yacht Clubs

Mount Waddington Commun.

Mount Waddington Community Resource Board

Mount Waddington Regional District

Outdoor Recreation Council of British Columbia

## CPU-6: Quadra/Cortes Strait

#### **General Description**

An island archipelago with numerous sheltered waterways and embayments. The area generally contains water that is well mixed and has sub-areas that are exceptionally stable. The exception to this is Discovery Passage which has cold water, is exposed, has high current velocities and is subject to pollution.

## **Planning Issues**

- recreational opportunities are dependent upon continued access to shoreline features
- Comments from Public submissions:
  - need to treat the potential for cultivation use as a resource value rather than as a subzone to allow for multiple resource use
  - anchorage, views from upland residences and trails should be added to visual resources
  - add camping and recreational shellfish gathering to recreation resources
  - tourism resources should include recreational diving and sport fishing
  - include seal and sea-lion haulouts under marine wildlife. Otters are present throughout the year. Cormorants and Marbled Murrelets use the area.
  - need to identify the areas used by wintering birds
- Council of B.C. Yacht Clubs submission defined good recreation opportunities in the CPU as:
  - sport fishing, kayaking, boating, diving
  - cruise ships travel in the area
  - ranked this CPU as the most important for planning recreational activities.
- Regional District of Comox-Strathcona documents
  - 1. Bylaw No. 1740. *Cortes Official Community Plan Bylaw*, 1995 Water Resource Area Policies (pp 3-14, 3-15)
  - 2. By-Law No. 1213. Quadra Island Zoning By-Law, 1990 includes marine and aquaculture zones
  - 3. By-Law No. 1460. *Electoral Area 'J' Desolation Sound Rural Land Use Bylaw, 1993* is intended as an initial step towards integrated resource management planning for the area and includes marine and aquaculture zoning

## **Planning Needs**

- important mining area Quadra Island (e.g., Rock Bay) may require load-out facilities to support future onisland mining; potential offshore extensions of on-shore mineral deposits.
- Comments from Public submissions:
  - need to include Regional District of Comox-Strathcona planning of Area "J" in the planning of CPU-
  - need to identify the areas used by wintering birds

## **Key Resource Information Gaps**

No information provided

#### **Resource Uses and Potential**

Aquaculture

• water conditions in several sub-areas are at the physiologically optimal temperature for the culture of many species, particularly salmonids

#### Cultural Heritage Resources

· very high concentration of heritage/traditional cultural sites on Quadra, Cortes, Read and Marina Islands

#### Forest Use

- important area for log-handling sites and associated infrastructure
- opportunities for log salvage and hand logging along sections of shoreline

## Marine Fish

- significant clam beaches from Kanish Bay to Cape Mudge and from Campbell River to Cape Lazo
- commercial geoduck concentrations along the east side of Cape Mudge and the west sides of Sutil Point on Cortes Island and Marina Island
- wild oyster concentrations on the southeastern sides of Quadra, Read and Cortes Islands
- important herring spawn areas in Kanish Bay, Heriot Bay, Sutil Point, Cape Mudge, southwest Marina Island, Southern Von Donop and Read Island
- significant salmon migration and concentration area in Discovery Passage, Village Bay and the area surrounding Cortes Island
- important groundfish area along the coastline of all islands in the planning unit
- diverse invertebrate life in Seymour Narrows
- significant Pacific octopus populations around Steep Island
- high concentrations of invertebrate life around Octopus Island and in Surge Narrows

#### Marine Wildlife

- important eagle habitat in Discovery Passage, Hoskyn and Okisollo Channels
- several small pockets throughout unit are important wintering areas for migratory birds (ducks, geese)
- very important cormorant colony near Quathiaski Cove
- seal and sea lion concentrations in Deep Water bay, Breton Islands
- migratory routes for Pacific White Sided Dolphins, Dal Porpoises and transient Orcas

#### Minerals, Oil and Gas

- potential tidal-energy sites
- Quinsam coalfield contains 33.33 million tonnes of coal proven reserves; a total of 52.13 million tonnes of coal resources
- potential for aggregate resources (Georgia Basin)
- high potential for oil and gas (Georgia Basin total for Winona, Tofino-Fuca and Georgia Basins is 12 to 14 trillion cubic feet)

#### Recreation Resources

- high sport fishing demand, beach activities, kayaking/canoeing and cruising, recreational diving opportunities
- shoreline trails identified in Official Community Plan

#### Tourism Resources

- · high-value marine touring and kayaking area
- · well developed commercial recreational angling opportunities.

#### Visual Resources

travel corridor; numerous routes

## **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

Aquaculture	Finfish Tenure	10
-	Shellfish Tenure	103
Commercial	Commercial Wharf	7
	General Commercial	15
	Marina	9
Community	Outdoor Recreation Area	1
Industrial	General Industrial	5
	Log Handling and Storage	24
Institutional	Institutional Miscellaneous	3
	Local/Regional Park	1
	Public Works	1
Misc. Land Use	Ecological Reserve	1
	Fisheries Facility	1
	Public Access	1
	Other	4
	Planning/Development Project	1
	UREP/ Recreation Reserve	5
Residential	Private Moorage	67
Transportation	Navigational Aid	1
	Public Wharf	10
Utility	Electric Power Line	3
	Sewer/Effluent Line	3
	Miscellaneous Utility	1
Total # Tenures:		277

## **Other Land Use Designations**

WMA at Campbell River Estuary

## **Existing Inventories/Plans/Studies**

Bylaw No. 1740 Cortes Official Community Plan Bylaw, 1995

Campbell River Estuary Management Plan

Electoral Area 'J' - Desolation Sound Rural Land Use Bylaw No. 1460, 1993

A Preliminary Biophysical Evaluation of Hoskyn Channel

Quadra Island Zoning By-Law No. 1213, 1990

## **Stakeholders/Interest Groups**

**Bruce Davies** 

L.A.Farqharson

Judy Johnson

Ralph and Lannie Keller

Campbell River Community Fisheries Committee

Council of B.C. Yacht Clubs

Quadra Island Protected Areas Committee Sierra Club of Quadra Island Quadra Island Conservancy and Stewardship Society Mitlenatch Field Naturalists Society District of Campbell River Regional District of Comox-Strathcona

## CPU-7: Cape Mudge/Cape Lazo

## **General Description**

This planning unit is characterized by gradual sloping foreshore, many extensive shoals along coastline and large beaches. The region south of Cape Mudge to Willow Point is renowned for large rip tides. This is due to the relatively long wind fetch and strong tidal currents that surge south from Discovery Passage. There is less tidal current further south, and several accretion type beaches along shoreline. Heavy residential development along the shoreline.

## **Planning Issues**

- Council of B.C. Yacht Clubs submission defined good recreation opportunities in the CPU as beach activities and sport fishing
- cruise ships travel in the area
- need to consider the Regional District of Comox-Strathcona Bylaw No. 1857 Oyster Bay Buttle Lake Official Community Plan Bylaw, 1996 which includes planning for the surface water extending into the Strait of Georgia

## **Planning Needs**

• potential need for onshore and/or offshore mineral, oil and gas exploration and development infrastructure, transportation, materials handling and disposal areas

## **Key Resource Information Gaps**

· specific visual resources not yet identified

#### **Resource Uses and Potential**

#### Aquaculture

• no sites are active in this area

#### Cultural Heritage Resources

- high density sites have been located in the vicinity of Comox
- a medium density site is located near Oyster River

#### Forest Use

- important area for log-handling sites and associated infrastructure
- log salvage and hand logging opportunities along sections of shoreline

#### Marine Fish

- important coho rearing area
- traditional pacific cod harvesting area
- important geoduck and clam fishing area; important groundfish area along the length of this coastline
- important spawn area particularly around Cape Lazo
- Pacific cod spawning around Cape Lazo
- shellfish resources at Oyster Bay

#### Marine Wildlife

- wintering area for brant, ducks and geese near Cape Lazo and offshore wintering area for waterfowl in Georgia Strait from Quadra Island to southern boundary
- critical marine bird feeding area (gulls, murrelet)

## Minerals, Oil and Gas

the Comox Coal Basin contains 47.5 million tonnes of proven reserves, 261.4 million tonnes resources (>90% underground mineable). The Comox Coal Basin extends beneath the Strait of Georgia for an undetermined distance

- good potential for coalbed methane (clean fuel resource totaling 1 trillion cubic feet on Vancouver Island)
- potential for aggregate resources (Georgia Basin)
- some gas potential below Georgia Basin

#### Recreation Resources

limited sport fishing and bird watching

#### Tourism Resources

extensive existing infrastructure and use, based mainly on angling and family activities (camping, cruising, etc.)

#### **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

Commercial	Commercial Wharf	3
	General Commercial	5
Institutional	Institutional Miscellaneous	1
	Local/Regional Park	3
	Public Works	1
Misc. Land Use	Fisheries Facility	1
	Military Site	2
	Other	1
	UREP/ Recreation Reserve	2
Residential	Residential Miscellaneous	1
Total # Tenures:		20

## **Existing Inventories/Plans/Studies**

Oyster Bay - Buttle Lake Official Community Plan Bylaw, 1996

## **Stakeholders/Interest Groups**

Council of B.C. Yacht Clubs Regional District of Comox-Strathcona Oyster Bay Association Oyster River Enhancement Society

#### PFS:CPU-8 Baynes Sound

## **General Description**

In Baynes Sound the mean monthly water temperature is 14.0 to 17.6°C. Comox Harbour is a large, productive estuary bounded by gentle sloping sand and gravel beaches. The sound is relatively sheltered with reduced wind and wave heights. The sea surface salinity is strongly affected by estuarine influx and the mean surface salinity ranges from 26 to 28 ppt increasing with distance away from the mouth of Comox Harbour.

## **Planning Issues**

- the majority of the provincial shellfish culture industry is located in this planning unit. Maintaining high water quality is critical.
- Council of B.C. Yacht Clubs submission defined beach activities as a good recreation opportunity
- need to consider the Regional District of Comox-Strathcona's *Baynes Sound Plan* which has a zoning bylaw governing the use of water surfaces

## **Planning Needs**

• potential need for onshore and/or offshore mineral, oil and gas exploration and development infrastructure, transportation, materials handling and disposal areas

## **Key Resource Information Gaps**

- Town of Comox submission states a list of archaeological sites is available from the Archaeology Branch.
- · specific visual resources not yet identified

#### **Resource Uses and Potential**

#### Aquaculture

· very high aquaculture capability and very intense use for aquaculture

#### Cultural Heritage Resources

· high density burial site located in Buckley Bay

#### Forest Use

- important area for log-handling sites and associated infrastructure
- log salvage and hand logging opportunities along sections of shoreline

#### Marine Fish

- important crab grounds at the mouth of Comox Harbour
- important herring spawn area
- important clam beaches along the Vancouver Island coastline in this planning unit
- significant salmon concentrations near south Denman Island

## Marine Wildlife

- significant marine bird habitat trumpeter swan, marbled murrelet, water birds and harlequin ducks
- seal and sea lion haulouts at Fanny Bay

#### Minerals, Oil and Gas

- some gas potential below Georgia Basin
- the Comox Coal Basin contains 47.5 million tonnes of proven reserves, 261.4 million tonnes resources (>90% underground mineable). The Comox Coal Basin extends beneath the Strait of Georgia for an undetermined distance.
- good potential for coalbed methane (clean fuel resource totaling 1 trillion cubic feet on Vancouver Island)
- potential for aggregate resources (Georgia Basin)
- the Cumberland coalfield is located midway along the length of the Comox Coal Basin

• the Tsable River mine is to the east, containing 11 million tonnes proven reserves, 87.9 million tonnes total resources

#### Recreation Resources

• diving and sport fishing, kayak/canoe area; extensive use by various industries

#### **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

Aquaculture	Shellfish Tenure	62
Commercial	Commercial Wharf	1
	General Commercial	8
	Marina	2
Industrial	General Industrial	1
	Log Handling and Storage	5
Institutional	Institutional Miscellaneous	1
	Local/Regional Park	1
Misc. Land Use	<b>Environmental Protection</b>	1
	Military Site	2
	Other	4
	Planning/Development Project	1
	UREP/ Recreation Reserve	1
Residential	Private Moorage	2
Transportation	Public Wharf	4
Utility	Electric Power Line	3
	Sewer/Effluent Line	3
Total # Tenures:		102

## **Existing Inventories/Plans/Studies**

Baynes Sound Plan

## **Stakeholders/Interest Groups**

Baynes Sound Stewardship Action Group Council of B.C. Yacht Clubs Courtenay River Estuary Management Group Regional District of Comox-Strathcona Town of Comox Comox Watershed Assembly

#### CPU-9 Strait of Georgia to Cowichan Bay

## **General Description**

This planning unit includes most of the Vancouver Island coastline of the Strait of Georgia. The coastline is moderately indented with many local tidal streams. The area is heavily urbanized and subject to sewage and industrial pollution. The Fraser plume influences the area.

## **Planning Issues**

- the major constraints to aquaculture include extensive sanitary closure for shellfish, restrictive regional zoning and proximity to human settlement
- Regional District of Nanaimo documents
  - Growth Management Plan has a policy to discourage further development of the remaining natural segments of the coastal zone
  - Growth Management Plan has a policy to protect or restore floodplains and other aquatic features to a natural condition
  - draft Nanoose Bay Official Community Plan coastal zone management section policies include discouraging any development that impedes public access to the foreshore

## **Planning Needs**

- need to maintain high local water quality which is important for tourism, aquaculture, and wildlife
- need to retain water access to Crown lands to preserve recreational opportunities
- draft Nanoose Bay Official Community Plan coastal zone management section policies include:
  - encouraging the development of a coastal resource inventory
  - requesting a cumulative impact assessment for new lease agreements

## **Key Resource Information Gaps**

None identified to date

#### **Resource Uses and Potential**

## Aquaculture

- moderately to highly capable for shellfish and moderately capable for salmon culture
- subject to periodic harmful algae blooms

#### Cultural Heritage Resources

high density sites located at Nanoose, Nanaimo: Newcastle Island, and Maple Bay

#### Forest Use

- important area for log-handling sites and associated infrastructure
- log salvage and hand logging opportunities along sections of the shoreline

#### Marine Fish

- important crab grounds from Nanoose Bay to Duke Point and in Ladysmith Harbour and Cowichan Bay
- significant shrimp and prawn populations south of Gabriola to the mouth of Sansum Narrows and in Saanich Inlet
- significant clam and geoduck concentrations along the coastline for the majority of this planning unit
- oyster concentrations in and around Nanoose and Ladysmith Harbours and Cowichan Bay
- important herring spawn areas extend from Baynes Sound to Departure Bay and from Duke Point to Ladvsmith Harbour
- significant salmon grounds along the length of this planning unit

#### Marine Wildlife

- from northern boundary to Cowichan Estuary, the immediate coast and nearshore area are important wintering areas for brant, geese and ducks
- Winchelsea Island to adjacent Vancouver Island coast is an important area for sea lions, bird colonies, eagles, cormorants, alcids, oyster catchers and numerous harbour seal haulouts
- very important bird colonies for cormorants, alcids and oyster catchers at Five Finger Islands
- rare diving duck habitat exists

#### Minerals, Oil and Gas

- the Comox Coal Basin contains 47.5 million tonnes of proven reserves, 261.4 million tonnes resources (>90% underground mineable). The Comox Coal Basin extends beneath the Strait of Georgia for an undetermined distance
- good potential for coalbed methane (clean fuel resource totaling 1 trillion cubic feet on Vancouver Island)
- potential for aggregate resources (Georgia Basin)
- the Tsable River mine is to the west, containing 11 million tonnes proven reserves, 87.9 million tonnes total resources
- contains entire Nanaimo Coal Basin, extends into Georgia Strait, previously mined in Nanaimo Harbour, 3.343 million tonnes Proven Reserves, 7.667 million tonnes total resources
- the Cowichan Basin and Gulf Islands are extensions of the Nanaimo Basin; there are known coal occurrences but there is very low potential
- important gas potential beneath Georgia Basin is largely untested

#### Recreation Resources

sport fishing, diving, kayaking/canoeing, cruising and many water-based recreational activities

#### Tourism Resources

extensive tourism infrastructure is based on scenic attractions, beach activities, wildlife viewing and angling opportunities

#### Visual Resources

extensive settlement area

#### **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

Aquaculture	Finfish Tenure	3
	Shellfish Tenure	17
Commercial	Commercial Wharf	8
	General Commercial	24
	Marina	19
Community	Community Facility	1
Industrial	General Industrial	3
	Log Handling and Storage	35
Institutional	Institutional Miscellaneous	4
	Local/Regional Park	12
	Public Works	4
Misc. Land Use	Fish and Wildlife Management	1
	Fisheries Facility	1
	Military Site	4
	Other	5
	Scientific Research	2

	UREP/ Recreation Reserve	10
Residential	Private Moorage	67
	Rural Residential	16
	Residential Miscellaneous	10
	Seasonal Residential	1
Transportation	Public Wharf	3
	Roadway	1
Utility	Electric Power Line	2
	Sewer/Effluent Line	14
	Telecommunication Line	4
	Water Line	2
Total # Tenures:		273

## **Other Land Use Designations**

WMA extends from Englishman River Estuary to Little Qualicum Estuary (all inclusive). There is also a potential WMA in Chemainus

## **Existing Inventories/Plans/Studies**

Cowichan River Estuary Management Plan Growth Management Plan for the Regional District of Nanaimo Nanoose Bay Official Community Plan Bylaw No. 1118 (draft)

## **Stakeholders/Interest Groups**

Council of B.C. Yacht Clubs Cowichan Valley Regional District Cowichan Community Land Trust Regional District of Nanaimo

#### CPU-10 East Saanich Inlet to Race Rocks

## **General Description**

This planning unit includes the east coast of Saanich Inlet to Race Rocks. It is generally a heavily urbanized coastline. The area is less influenced by the Fraser plume. The area is subject to sewage pollution. Unique deep fjord environment.

## **Planning Issues**

- maintenance of acceptable water quality a factor in tourist resource
- the major constraints to aquaculture include extensive sanitary closure for shellfish, restrictive regional zoning and proximity to human settlement
- Council of B.C. Yacht Clubs submission
  - Location of proposed boat havens (# refers to the Council's Boat Haven List)

#11 Tod Inlet

Chart 3441 Map 92B O53

- request that Special Management Areas be created with the immediate upland of these proposed boat havens
- Cowichan Valley Regional District *Cobble Hill Official Community Plan* shore zone management (sec. 4.1) policies include establishing specific zones for marine uses
- Capital Regional District Parks' Regional Green/Blue Spaces Strategy includes the following recommendations regarding the coastal zone:
  - Capital Regional District Parks' *Regional Green/Blue Spaces Strategy* identifies the following Blue Spaces:
    - Esquimalt Harbour to Sooke Basin
    - Saanich Inlet
    - several other areas on the south side of Saanich Peninsula

#### **Planning Needs**

- Capital Regional District Parks' *Regional Green/Blue Spaces Strategy* includes the following recommendations regarding the coastal zone:
  - transfer vacant Crown land with regional green/blue space value to a government agency, local government, or recognized non-profit organization that has a natural-area conservation mandate
  - establish marine protected areas
- possible future maintenance/ staging area for future offshore oil and gas platforms

## **Key Resource Information Gaps**

Specific visual resources not yet identified

#### **Resource Uses and Potential**

#### Aquaculture

• the area is moderate to highly capable for shellfish culture and moderately capable for salmon culture, however, it is subject to periodic harmful algae blooms

#### Cultural Heritage Resources

• numerous high density sites of heritage/traditional cultural significance located along the coast of the Saanich Peninsula, Victoria Harbour and Perry Bay

#### Forest Use

• important area for log-handling sites and associated infrastructure

#### Marine Fish

 important crab grounds extend from along the eastern shores of Saanich Peninsula and along the Victoria and Colwood waterfront

- significant abalone concentrations in Ballenas Channel and along the coastline near Swartz Bay
- important herring, shrimp and prawn spawn areas extend from Brentwood Bay to the Swartz Bay terminal and from the Gorge to Esquimalt Harbour and the Royal Roads waterfront

#### Marine Wildlife

- numerous harbour seal haulouts and bird colonies throughout
- important sea lion haulout at Race Rocks
- important cormorant, oyster catchers and guillemot colonies at Race Rocks, Chain Islet, Gordon Head, Halibut and Piers Islands

#### Minerals. Oil and Gas

- important potential for aggregate resources and potential paleo-placers (derived from Leech R. fault)
- ongoing requirement for barge load-out infrastructure (aggregates, energy products, limestone, rip-rap)
- undeveloped tidal energy

#### Tourism Resources

• extensive tourism infrastructure is based on scenic attractions, beach activities, whale and wildlife viewing and angling opportunities

## **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

Commercial	General Commercial	2
	Marina	97
Industrial	General Industrial	2
Institutional	Institutional Miscellaneous	7
	Local/Regional Park	11
	Public Works	3
Misc. Land Use	Ecological Reserve	2
	Fish and Wildlife Management	1
	Military Site	2
	Public Access	2
	Other	3
	UREP/ Recreation Reserve	1
Residential	Private Moorage	129
	Residential Miscellaneous	8
Transportation	Public Wharf	4
	Roadway	2
Utility	Electric Power Line	6
	Sewer/Effluent Line	4
	Water Line	4
	Miscellaneous Utility	1

## **Existing Inventories/Plans/Studies**

Total # Tenures:

Cobble Hill Official Community Plan. Cowichan Valley Regional District

Mill Bay - Malahat Official Settlement Plan

Provincial Boat Havens Catalogue & User Survey: West Coast Vancouver Island & Campbell River Fiordland Recreation Area. Council of B.C. Yacht Clubs

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Regional Green/Blue Spaces Strategy, Capital Regional District Parks

Stakeholders/Interest Groups
Capital Regional District
Council of B.C. Yacht Clubs Cowichan Valley Regional District Outdoor Recreation Council of British Columbia

## CPU-11 Race Rocks to Cape Beale

## **General Description**

The Juan de Fuca Strait is exposed to the Pacific Ocean which keeps water temperature below 12 °C below depths of 10 m for most of the year. Salinity in the upper layer can range from 26-28 ppt during spring runoff, to 33 ppt at the entrance to the Strait in the summer. This is a high salinity, high tidal current area. There are few major indentations in the coastline with Sooke Basin, Port San Juan, Sequim Bay and Nitinat Lake as exceptions. The shoreline ranges from rocky intertidal platforms that are engulfed in kelp in summer, to small beaches consisting of pebbles and cobbles in the eastern portion and many small pocket beaches of coarse sediments and a few of sand in the west.

## **Planning Issues**

- Capital Regional District Parks' Regional Green/Blue Spaces Strategy identifies the following Blue Spaces:
  - Loss Creek, Jordan River and San Juan River estuaries
  - three other areas on the coast

## **Planning Needs**

- Capital Regional District Parks' Regional Green/Blue Spaces Strategy includes the following recommendations regarding the coastal zone:
  - transfer vacant Crown land with regional green/blue space value to a government agency, local government, or recognized non-profit organization that has a natural-area conservation mandate
  - establish marine protected areas
- potential need for onshore and/or offshore mineral, oil and gas exploration and development infrastructure, transportation, materials handling and disposal areas

## **Key Resource Information Gaps**

None identified to date

## **Resource Uses and Potential**

Cultural Heritage Resources

- 7 moderate and high density sites located along the coast
- high density sites identified at Beechey Head and Sooke

#### Forest Use

- important area for log-handling sites and associated infrastructure
- log salvage and hand logging opportunities along sections of the shoreline

#### Marine Fish

- important crab grounds in Sooke Harbour and adjacent to Nitinat Lake, Jordan River to Sherringham Pt. and in Port San Juan
- important commercial groundfish areas in Sooke Bay, fronting Port San Juan and Carmanah Point
- important salmon holding grounds throughout this area
- significant population of northern abalone in addition to important octopus population

#### Marine Wildlife

- important area for cormorants, loons and grebes
- very high value killer whale habitat, sea lion haulout at Pachena Point
- migratory corridor for gray, killer and minke whales

#### Minerals. Oil and Gas

- minerals, oil and gas potential in the offshore
- high potential for oil and gas (Georgia Basin total for Winona, Tofino-Fuca and Georgia Basins is 12 to 14 trillion cubic feet)
- good site-specific marine placer gold potential: (e.g. Sombrio-San Juan River; Klanawa Nitinat area)
- good potential for offshore methane hydrate deposits (beneath continental slope)
- long-term future evaluation of offshore rift-zone metallic deposits and coastal geothermal may require
  activities in zone
- potential high quality near-shore aggregate deposits

#### Recreation Resource

• cruising, sport fishing and diving activities

## Tourism Resources

- existing use for angling and wildlife viewing
- Sooke Harbour is a key feature

#### Visual Resources

- extensive off shore travel and use
- important land water interface: Pacific Rim National Park

#### **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

Aquaculture	Finfish Tenure	1
	Shellfish Tenure	2
Commercial	Commercial Wharf	5
	General Commercial	11
	Marina	4
Industrial	Log Handling and Storage	17
Institutional	Local/Regional Park	1
Misc. Land Use	Other	1
Residential	Private Moorage	81
	Residential Miscellaneous	1
Transportation	Public Wharf	2
Utility	Electric Power Line	3
-		

Total # Tenures: 129

## **Other Land Use Designation**

n/a

## **Existing Inventories/Plans/Studies**

Regional Green/Blue Strategy, Capital Regional District Parks

## **Stakeholders/Interest Groups**

Capital Regional District Council of B.C. Yacht Clubs

#### CPU-12 Alberni Inlet

## **General Description**

This waterway is 69 km long, 1.3 km in average width and is a major marine navigation corridor. The inlet has a strong positive estuarine flow during the spring and winter months which flushes the inlet and mitigates some of the deterioration in water quality. Temperatures can range from 5.0°C to 17.7°C seasonally and with location. It is subject to a substantial pollution load from pulp mills, sewage and marina outfalls. Oxygen levels in the planning unit are usually depressed.

#### **Planning Needs**

- Barkley Sound Planning Strategy Goals:
  - 1. to maintain significant recreation and scenic features which provide the basis for high quality recreation and tourism.
  - 2. to protect environmentally sensitive areas and to promote the conservation of fish and wildlife habitat and sites of historic and cultural importance.
  - 3. to maintain navigation channels and anchorages for ships, marine carriers and recreational boaters.
  - 4. to limit access and settlement to defined areas in order to maintain a remote marine environment with extensive areas of undeveloped shoreline.
  - 5. to provide a balance between public recreation, recreational cottages and commercial tourism and to minimize the impacts of development on adjacent uses.
  - to maintain areas suited to marine-dependent resource industries, to encourage sustainable use of natural resources and to minimize impacts on the biological, recreational and visual resources of the area.
  - 7. to protect water quality for domestic purposes, fisheries and recreational uses by controlling pollution sources and monitoring water quality.
  - 8. to promote the conservation of fisheries and increased public involvement in fisheries management.
- potential future mining operations near the inlet (e.g., Macktush) may require infrastructure and be temporarily visible

#### **Key Resource Information Gaps**

None identified to date

#### **Resource Uses and Potential**

Aquaculture

- Upper Alberni Inlet is not recommended for salmon culture, however, lower Alberni Inlet is moderately suitable and San Mateo Bay is an area of good capability for both salmon and shellfish
- Uchucklesit Inlet is rated as moderately suitable for clam culture

### Cultural Heritage Resources

• 4 medium density sites located along Alberni Canal

#### Forest Use

• important area for log-handling sites and associated infrastructure

#### Marine Fish

- major migratory route for anadromous fish returns to Somass and Nahmint Rivers
- important prawn fishing area and important shrimp area from holding area from Pochantas Point to Chup Point

#### Marine Wildlife

- there is one existing seal haulout site near the mouth of Alberni Inlet
- numerous eagle nesting sites along the length of the inlet
- Barkley Sound Planning Strategy has identified:
  - -Trumpeter Swan and bald eagle
  - -seabirds: Marbled Murrelet, Common Murre, Brandt's Cormorant, Pelagic Cormorant, Black
  - marine mammals: grey whale, orca, sea lion, harbour seal

#### Minerals. Oil and Gas

• minerals, oil and gas potential in the offshore

## Recreation Resources

- sport fishing and access to Broken Group/West Coast; some diving
- Barkley Sound Planning Strategy has identified recreational fishing throughout the Inlet

#### Tourism Resources

access/travel route, emerging products based in Port Alberni; existing use and facilities

#### Visual Resources

- travel corridor for access to Coast, used by pocket cruise ship
- Barkley Sound Planning Strategy has identified Useless Inlet, upper slopes of Alberni Inlet

## **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

Aquaculture	Finfish Tenure	3
_	Shellfish Tenure	3
Institutional	Institutional Miscellaneous	2
	Local/Regional Park	1
Residential	Private Moorage	1
Total # Tenures:		10

## **Existing Inventories/Plans/Studies**

Barkley Sound Planning Strategy

## **Stakeholders/Interest Groups**

Regional District of Alberni-Clayoquot Council of B.C. Yacht Clubs

#### CPU-13 Barkley Sound

## **General Description**

Barkley Sound is open to Pacific swells which can infiltrate through the many barrier islands. Open portions of Barkley Sound have salinities approaching that of Pacific coastal sea water but in many of the bays and inlets high intensity west coast storm runoff decrease salinities significantly. There is a barrier sill which is a maximum of 88 metres deep which restricts convection to the open Pacific. Pipestem Inlet, a classic low runoff fjord, and Effingham, a high runoff fjord, flow into the sound. Pipestem Inlet has some of the warmest recorded surface temperatures (>21 °C) on the west coast of Vancouver Island. Barkley Sound is noted for its prolific plankton blooms which include *Protogonyalaux* (source of Paralytic Shellfish Poison) and *Heterosigma*.

## **Planning Issues**

- Council of B.C. Yacht Clubs submission defined this CPU as the second most important CPU for planning recreational activities
- potential as future staging area for future offshore oil and gas platforms

## **Planning Needs**

As per the following Barkley Sound Planning Strategy Goals:

- to maintain significant recreation and scenic features which provide the basis for high quality recreation and tourism.
- to protect environmentally sensitive areas and to promote the conservation of fish and wildlife habitat and sites of historic and cultural importance.
- to maintain navigation channels and anchorages for ships, marine carriers and recreational boaters.
- to limit access and settlement to defined areas in order to maintain a remote marine environment with extensive areas of undeveloped shoreline.
- to provide a balance between public recreation, recreational cottages and commercial tourism and to minimize the impacts of development on adjacent uses.
- to maintain areas suited to marine-dependent resource industries, to encourage sustainable use of natural resources and to minimize impacts on the biological, recreational and visual resources of the area.
- to protect water quality for domestic purposes, fisheries and recreational uses by controlling pollution sources and monitoring water quality.
- to promote the conservation of fisheries and increased public involvement in fisheries management.
- Council of B.C. Yacht Clubs submission
   -diving opportunities need to be defined

## **Key Resource Information Gaps**

None identified at this date

## **Resource Uses and Potential**

Aquaculture

- there are highly capable areas for salmon culture particularly in Effingham, Pipestem and Useless Inlet, and surrounding the Deer Group Islands
- numerous shellfish culture sites particularly concentrated in Useless Inlet
- there is good clam and oyster capability on the Maggie River beaches in Loudoun Channel and in Roquefeuil Bay and Bamfield Inlet
- Poett Nook and upper Effingham is rated good for clam culture

#### Cultural Heritage Resources

- Barkley Sound Planning Strategy has identified:
  - areas rated as High (1 site per km. or more) include: Broken Group Islands, Deer Group Islands, Bamfield and Grappler Inlets, Stopper Islands, Lucky Creek entrance to Pipestem Inlet

#### Forest Use

• important area for log-handling sites and associated infrastructure

#### Marine Fish

- significant herring spawn area along the northwest shore of Barkley Sound
- important crab area in Macoah Passage
- important geoduck area on the Maggies River shore and off Mills Peninsula
- important groundfish area in Loudoun and Imperial Eagle Channel
- important shrimp area in Imperial Eagle Channel
- important squid areas in Ucluelet Harbour
- important urchin area around Chrow Island to George Fraser Island
- Renate Reef is habitat for rare six-gill shark
- Barkley Sound Planning Strategy has identified herring spawn along N shore of London Channel; oysters are found in Pipestem Inlet

#### Marine Wildlife

- high habitat values for marine/coastal species: sea otter, bald eagle, marbled murrelet, waterfowl, seal and sea lion haulouts
- Barkley Sound Planning Strategy has also identified:
  - Trumpeter Swan
  - seabirds: Common Murre, Brandt's Cormorant, Pelagic Cormorant, Black Oystercatcher
  - marine mammals: grey whale, orca

#### Minerals, Oil and Gas

former Brynnor Mines loading facility

#### Recreation Resources

- sport fishing, kayaking, cruising, diving, beach activities and wildlife viewing
- important destination; important infrastructure and travel routes; based on wildlife/angling and scenic values
- Barkley Sound Planning Strategy has also identified many dive sites and recreational fishing in Trevor Channel, Deer Group Islands, east side of the Broken Group Islands

#### Visual Resources

- Barkley Sound Planning Strategy has also identified:
  - Broughton Peak area, slopes adjacent to Newcombe Channel (Mt. Ozzard); shoreline areas throughout Barkley Sound and the numerous small islands are particularly important.

#### **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

Aquaculture	Shellfish Tenure	8
Commercial	Commercial Wharf	7
	General Commercial	21
	Marina	4
Community	Community Facility	2
Industrial	Log Handling and Storage	11
Institutional	Institutional Miscellaneous	1
	School/Outdoor Ed. area	2
Residential	Private Moorage	52
Transportation	Public Wharf	8

Utility	Electric Power Line	3
	Sewer/Effluent Line	2
	Telecommunication Line	2
	Water Line	2

**Total # Tenures:** 125

# **Other Land Use Designations**

some aquaculture priority zones are within special management zones in Barkley Sound

# **Existing Inventories/Plans/Studies**Barkley Sound Planning Strategy

**Stakeholders/Interest Groups** Alberni-Clayoquot Regional District Council of B.C. Yacht Clubs

# CPU-14 Barkley Sound Outer Coast

# **General Description**

This planning unit is the approach to Barkley Sound and as such it is open to Pacific swell, and approaches salinity and temperature values of the open Pacific.

# **Planning Needs**

mineral, oil and gas potential in offshore may require future nearshore infrastructure support

# **Key Resource Information Gaps**

- no cultural heritage resources sites identified
- · specific visual resources not yet identified

#### **Resource Uses and Potential**

#### Aquaculture

• the area is currently rated as not acceptable for finfish culture and no aquaculture tenures exist

#### Forest Use

• important area for log-handling sites and associated infrastructure

#### Marine Fish

- major returning salmon holding area
- important groundfish area on Big Bank, Cape Beale and Lighthouse Bank
- · important shrimp trawl area
- important abalone area off Uculth Peninsula
- important urchin area off Chrow Island and George Fraser Island area

#### Marine Wildlife

- this area contains a major gray whale migration route
- resident pods of Orcas (J-K-L clan of southern group) transit to Trevor channel and into Effingham Inlet through this area

#### Minerals, Oil and Gas

- good potential for oil and gas (Tofino-Fuca Basin total for Winona, Tofino-Fuca and Georgia Basins is 12 to 14 trillion cubic feet)
- good potential for large offshore hydrothermal deposits (beneath continental slope)
- moderate potential for geothermal resources

### Recreation Resources

• sport fishing and whale watching

#### Tourism Resources

- key gray whale-watching area seasonally
- important angling opportunities; includes extensive use by major operations

# **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

Total # Tenures: 0

# **Existing Inventories/Plans/Studies**

No information provided

# **Stakeholders/Interest Groups**

Council of B.C. Yacht Clubs

### CPU-15 Nootka Sound and Associated Waterways

### **General Description**

Muchalat, Tlupana and Tahsis Inlets are deep water channels which intertwine through the Bligh Island archipelago where water depths are much shallower. Water temperatures in the Sound are relatively warm in the summer due to localized solar heating and a slow exchange of inlet waters. Prevailing summer northwest winds, daytime sea breeze and the relatively brackish Vancouver Island Coastal Current tend to retard the estuarine outflow at its mouth.

# **Planning Issues**

- Public group submissions
  - need to coordinate marine planning process with the proposed Nootka Rural Land-Use Bylaw process of the Regional District of Comox Strathcona.
- Nootka Resource Board submission
  - need to identify confidential First Nations cultural, traditional use, fishing and harvesting sites in planning without compromising site integrity by public identification/disclosure of sites.
  - ecologically significant zooplankton assemblage locations in inlets should be identified in planning
  - locations of critical marine ecosystem physical and biological oceanographic component processes (e.g. locations of critical zooplankton assemblages/ refugia and turbulent mixing/upwelling areas within inlets) should be identified.
  - locations of critical areas for larval settlement, recruitment and rearing of marine invertebrates (shellfish, zooplankton), marine (commercial, non-commercial and forage), and other fish species and assemblages should be identified.
- Council of B.C. Yacht Clubs submission
  - Location of proposed boat havens (# refers to the Council's Boat Haven List)

#2 Resolution Cove

Chart 3664 Map 92E O68

#3 Vales Bay

Chart 3664 Map 92E O78

- request that Special Management Areas be created with the immediate upland of these proposed boat havens
- the area is recognized for sport fishing and kayaking.

# **Planning Needs**

- Nootka Resource Board submission
  - development proponents must be required to prove that developments will not negatively impact sites, traditional uses and ecosystem sustaining processes before approvals are granted.
  - develop a respectful consultation mechanism with each First Nation to allow protection of confidential sites.
  - ensure that upland First Nations Indian Reserves, and future Treaty Lands are identified and linked to  $\ensuremath{\mathsf{CPU}}$
- potential need for onshore and/or offshore mineral, oil and gas exploration and development infrastructure, transportation, materials handling and disposal areas
- Council of B.C. Yacht Clubs submission
  - diving opportunities need to be defined.

#### **Key Resource Information Gaps**

specific visual resources not yet identified

#### Aquaculture

- wild oyster recruitment and harvest occurs in Hisnit Inlet and upper Tlupana Inlet
- there are highly capable areas for aquaculture in Tlupana Inlet particularly in Head and Nesook Bay, also in Hisnit Inlet, Kendrick Inlet, Mooyah Bay in Muchalt Inlet, Kendrick Inlet and near northern Bligh Island

#### Cultural Heritage Resources

- · important confidential First Nations cultural sites throughout
- important traditional fishing and shellfish gathering locations throughout
- numerous medium density cultural heritage sites located along Tahsis and Muchalat Inlets
- numerous cultural heritage sites on Nootka & Bligh Island and Tlupana Inlet

#### Forest Use

- Tahsis and Muchalaht Inlets support significant shipping traffic to Gold River and Tahsis mills
- important area for log-handling sites and associated infrastructure
- log salvage and hand logging opportunities along sections of shoreline

# Marine Fish

- major salmon out migration and rearing areas throughout
- important estuarine salmon rearing areas at heads of all inlets and at all streams along Tahsis, Tlupana, Muchalat and Matchlee Inlets
- significant wild clam fishing and prawn fishing areas throughout
- Juvenile rockfish rearing areas throughout inlets (e.g. Pacific Ocean Perch rearing in Matchlee Inlet)
- Tlupana, Muchalat and Matchlee Inlets recently supporting Pacific Sardine recurrences
- Outer Nootka Sound important dogfish pupping area
- major returning salmon holding area in Nootka Sound and Tlupana Inlet
- important crab areas in Tlupana, Hisnit, and Kendrick Inlets, Head and Moutcha Bays, Kleeptee and Silverado Estuaries, Mooya Bay, King Passage and lower Tahsis
- important herring spawn area from Spanish Pilot Group to Clerke Peninsula and from Friendly Cove to Marvinus Island
- · important urchin area in lower Zuciarte Channel and off southeast Nootka Island

#### Marine Wildlife

- the estuaries of Burman, Leiner, Gold, Tahsis, Sucwoa, Conuma and Tlupana rivers important areas for wintering waterfowl
- Escalante Point important marine mammal area
- important seal haul-outs in Spanish Pilot group- Bligh Island Park and Savaedra Islands

# Minerals, Oil and Gas

• mineral, oil and gas potential in the offshore

#### Recreation Resources

mainly sport fishing, limited diving, popular kayaking area; boating

#### Tourism Resources

- destination angling resorts
- kayaking
- limited but high-value existing infrastructure
- extensive use based on trophy salmon
- management of commercial sport fishing resources important to viable tourism industry

#### Visual Resources

• views of Conuma Peak and Tlupana from Yuquot and Santa-Boca Park.

#### **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

Aquaculture	Shellfish Tenure	5
Commercial	General Commercial	8
	Marina	2
Industrial	General Industrial	1
	Log Handling and Storage	34
Misc. Land Use	<b>Environmental Protection</b>	1
	Fisheries Facility	2
	Hunting/Fishing camp	1
	UREP/ Recreation Reserve	2
Transportation	Public Wharf	3
	Navigational Aid	1
Utility	Electric Power Line	1
	Telecommunication Line	1
Total # Tenures:		62

# **Other Land Use Designations**

- shellfish reserve status suggested by BC Fisheries.
- Tsowwin Beach approved by DFO as pilot commercial beach for Mowachaht/Muchalaht First Nations.

# **Existing Inventories/Plans/Studies**

Regional District of Comox Strathcona is beginning a plan for Nootka Sound

DFO WCVI Clam Beach Atlas

BC Fisheries shellfish suitability and capability studies

DFO records of historical herring spawning locations

Provincial Boat Havens Catalogue & User Survey: West Coast Vancouver Island & Campbell River Fiordland

Recreation Area. Council of B.C. Yacht Clubs

#### Stakeholders/Interest Groups

Area G Troll Association

Area F Community Clam Mgmt. Board

Regional District of Comox-Strathcona

Council of B.C. Yacht Clubs

Friends of Nootka Sound

International Forest Products Ltd.

Mowachaht/Muchalaht First Nations

Nootka Resource Board

Gold River Rod & Gun Club

Nootka First Nation Forest Products Ltd.

Nootka-Kyuquot Sport Fishing Advisory Committee

Nuu-chah-nulth Tribal Council

Outdoor Recreation Council of British Columbia

Villages of Gold River, Tahsis and Zeballos

WCVI/ Nuu-chah-nulth Regional Fisheries Mgmt. Board

West Coast Sustainability Association

Western Forest Products Ltd.

# CPU-16 Nootka, Kyuquot and Esperanza Sound Approaches

# **General Description**

Open to Pacific swell and approaches salinity and temperature values of the open Pacific.

### **Planning Issues**

- Public interest group submissions
  - foreshore of Union Island is included in CPU-18 and, with the intent to combine on-shore waters under one planning unit, the inter-island areas of CPU 16 fit better in CPU-18.
  - need to coordinate marine planning process with the proposed Nootka Rural Land-Use Bylaw process of the Regional District of Comox Strathcona.
- Nootka Resource Board submission
  - need to identify confidential First Nations cultural, traditional use, fishing and harvesting sites in planning without compromising site integrity by public identification/disclosure of sites.
  - locations of critical marine ecosystem physical and biological oceanographic component processes (e.g. locations of critical zooplankton assemblages/ refugia and turbulent mixing/upwelling areas within inlets) need to be identified.
  - locations of critical areas for larval settlement, recruitment and rearing of marine invertebrates (shellfish, zooplankton), marine (commercial, non-commercial and forage), and other fish species and assemblages need to be identified.

# **Planning Needs**

- Nootka Resource Board submission
  - development proponents must be required to prove that developments will not negatively impact sites, traditional uses and ecosystem sustaining processes before approvals are granted.
  - develop a respectful consultation mechanism with each First Nation to allow protection of confidential sites.
  - identification and protection of all historical herring spawn areas required.
  - ensure that upland First Nations Indian Reserves, and future Treaty Lands are identified and linked to CPU.
- potential need for onshore and/or offshore mineral, oil and gas exploration and development infrastructure, transportation, materials handling and disposal areas

# **Key Resource Information Gaps**

• specific visual resources not yet identified

#### **Resource Uses and Potential**

#### Aquaculture

• currently there are no operating aquaculture sites

#### Cultural Heritage Resources

- important confidential First Nations cultural sites throughout
- important traditional fishing and shellfish gathering locations throughout
- numerous traditional use, traditional fishing areas/cultural sites of Northern Nuu-chah-nulth First Nations (Mowachaht/Muchalaht, Ka:yu:'k't'h'/ Che:ktles7et'h', Ehattesaht and Nuchatlaht) throughout

### Forest Use

- important area for log-handling sites and associated infrastructure
- log salvage and hand logging opportunities along sections of the shoreline

#### Marine Fish

- important geoduck areas in Clear Passage and the Mission group
- important gooseneck barnacle area in the Barrier Islets
- important groundfish area from Bajo to Tatchu Point and at the entrance to Nootka and Kyuquot Inlets
- important salmon grounds fronting Bajo Reef and the Bunsby Islands
- important local salmon juvenile and local adults migration routes and staging areas through entrances to Kyuquot, Esperanza and Nootka Sounds and associated waterways
- important staging and migration routes for non-local salmon over entire planning unit
- important herring spawning area around Bajo Point, usually not reported due to weather constraints
- important Dentalium shell beds between Grassy and Catala Islands/Rolling Roadstead

# Marine Wildlife

- this area contains a major gray whale migration route at 1.5 to 2.5 km offshore
- resident pods of orcas (16-170) transit this area
- important sea otter and sea lion habitat exists
- Spring Island has important populations of sea otters moving out from adjacent Checleset Bay Ecological Reserve

#### Minerals, Oil and Gas

- mineral, oil and gas potential in the offshore
- good potential for oil and gas (Tofino-Fuca Basin and Winona Basin total for Winona, Tofino-Fuca and Georgia Basins is 12 to 14 trillion cubic feet)
- good potential for large offshore hydrothermal deposits
- moderate potential for geothermal resources

#### Recreation Resources

• limited cruising, sport fishing and kayaking

# Tourism Resources

- modest current use and facilities
- opportunities have been identified based on wildlife viewing, angling, kayaking and scuba in specific sites
- limited surfing visits to outer Nootka Island
- significant recent growth in marine sport fishing effort between Maquinna-Bajo Pt., Ferrer-Tachu Pt., Highest and Spring/Lookout Islands

#### **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

**Total # Tenures:** 

# **Existing Inventories/Plans/Studies**

DFO WCVI Clam Beach Atlas BC Fisheries shellfish suitability and capability studies DFO records of historical herring spawning locations BC Fisheries Kelp Inventory

# **Stakeholders/Interest Groups**

Area F Community Clam Mgmt. Board

Area G Troll Association

Regional District of Comox-Strathcona

Council of B.C. Yacht Clubs

**Ehattesaht First Nation** 

Friends of Nootka Sound

Gold River Rod & Gun Club

Hesquiaht First Nations (extreme southern end of unit)

International Forest Products Ltd.

Ka: yu:'k't'h'/Che:ktles7et'h' First Nations

Kyuquot Management Board

Kyuquot Economic & Environmental Protection Society

Mowachaht/Muchalaht First Nations

Nootka Resource Board

Nootka First Nation Forest Products Ltd.

Nootka-Kyuquot Sport Fishing Advisory Committee

Nuchatlaht First Nation

Outdoor Recreation Council of B.C.

Western Forest Products Ltd.

Villages of Gold River, Tahsis and Zeballos

WCVI/ Nuu-chah-nulth Regional Fisheries Mgmt. Board

West Coast Sustainability Association

West Coast Expeditions

### CPU-17 Esperanza Inlet

# **General Description**

This planning unit includes Zeballos, Port Eliza, Queen Cove, Espinosa and Little Espinosa Inlets. Esperanza Inlet may be classed as a low to intermediate runoff fjord. The waters may be subject to occasional upwelling of anoxic deeper waters. Reported values of oxygen concentration range between 5 to 8 ml/L for the upper 10 m of the water column.

### **Planning Issues**

- Public group submissions
  - need to coordinate marine planning process with the proposed Nootka Rural Land-Use Bylaw process of the Regional District of Comox Strathcona.
- Nootka Resource Board submission
  - need to identify confidential First Nations cultural, traditional use, fishing and harvesting sites in planning without compromising site integrity by public identification/disclosure of sites.
  - locations of critical marine ecosystem physical and biological oceanographic component processes (e.g. locations of critical zooplankton assemblages/ refugia and turbulent mixing/upwelling areas within inlets) should be identified.
  - locations of critical areas for larval settlement, recruitment and rearing of marine invertebrates (shellfish, zooplankton), marine (commercial, non-commercial and forage), and other fish species and assemblages should be identified
- Council of B.C. Yacht Clubs submission
  - Location of proposed boat havens (# refers to the Council's Boat Haven List)

#4 Mary Basin S.E. of Lord Island Chart 3663 Map 92E O76 #5 Queen Cove

Chart 3663 Map 92E O86

- request that Special Management Areas be created with the immediate upland of these proposed boat havens
- third most important CPU for planning recreational activities.
- planning for potential onshore and/or offshore mineral, oil and gas exploration and development infrastructure, transportation, materials handling and disposal areas

# **Planning Needs**

- Nootka Resource Board submission
  - development proponents must be required to prove that developments will not negatively impact sites, traditional uses and ecosystem sustaining processes before approvals are granted
  - develop a respectful consultation mechanism with each First Nation to allow protection of confidential sites
  - identification and protection of all historical herring spawn areas required
  - ensure that upland First Nations Indian Reserves, and future Treaty Lands are identified and linked to
- potential need for onshore and/or offshore mineral, oil and gas exploration and development infrastructure, transportation, materials handling and disposal areas
- Council of B.C. Yacht Clubs submission
  - diving opportunities need to be defined

# **Key Resource Information Gaps**

· specific visual resources not yet identified

#### Aquaculture

- Savey Beach in Espinosa Inlet approved as Nuchatlaht First Nation Pilot commercial clam beach. Another beach is pending approval for Ehattesaht First Nation
- high capability for aquaculture in, Port Eliza and inner Nuchatlitz Inlets, Zeballos Inlets, Tahsis Narrows and lower Hecate Channel

#### Cultural Heritage Resources

- numerous heritage/traditional cultural sites identified, particularly along Espinosa Inlet
- numerous traditional use, fishing areas/cultural sites of Ehattesaht and Nuchatlaht First Nations

#### Forest Use

· important area for log-handling sites and associated infrastructure

#### Marine Fish

- important local salmon juvenile and local adults migration routes and staging areas throughout Esperanza, Port Eliza, Espinosa, Zeballos and Nuchatlitz Inlets
- important estuarine salmon rearing habitat in all stream estuaries. Important herring spawning area inside Nuchatlitz, in times of higher herring abundance spawns occur in Port Eliza Inlet.
- important rockfish rearing areas throughout inlets
- important Pacific Ocean Perch rockfish rearing area at fish farm site at junction of Esperanza/Hecate Channel
- important Lingcod nesting sites on reefs at Outer Esperanza
- six-gill sharks have been caught in upper Zeballos, and giant ocean sunfish in Hecate Channel
- · outer Esperanza, particularly Nuchatlitz Bank and Port Langford are all important herring spawning areas
- important crab areas in and fronting Nuchatlitz Inlet, in Hecate Channel to Tahsis Narrows and off Rolling Roadstead
- important geoduck areas off Nuchatlitz, Rolling Roadstead and Birthday Channel
- important gooseneck barnacle area off Catala Island and Gillam Channel
- important clam and oyster areas in most estuaries
- important groundfish area at the mouth of Esperanza Inlet
- important salmon area in outer Esperanza Inlet from the mouth of Espinosa Inlet west

#### Marine Wildlife

- Esperanza Inlet is apparently a secondary orca leading inlet leading to or out of Tahsis Inlet
- gray whale and sea lion milling area in outer Nuchatlitz
- · river otters, mink and raptors reported at the heads of Espinosa and Zeballos Inlets
- sea otters are found in the outer reaches and approaches to sounds and inlets

#### Minerals, Oil and Gas

- mineral, oil and gas potential in the offshore
- high mineral potential onshore at Zeballos and eastern Nootka Island may extend under area; may involve coast-based exploration and development activities, barging, waste management

#### Recreation Resources

- · kayaking and sport fishing
- wildlife viewing (sea otters)

# Tourism Resources

- limited existing use based on angling, growing kayak and cruising activity
- few facilities; tourism interests focus on outer reaches and coast

#### **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

Aquaculture	Finfish Tenure	5
	Shellfish Tenure	2
Commercial	General Commercial	1
Industrial	General Industrial	2
	Log Handling and Storage	12
Institutional	Institutional Miscellaneous	2
Misc. Land Use	Other	2
	UREP/ Recreation Reserve	2
Transportation	Public Wharf	8
Utility	Electric Power Line	1
Total # Tenures:		37

# **Other Land Use Designations**

Savey Beach in Espinosa Inlet approved as Nuchatlaht First Nation Pilot commercial clam beach. Another beach is pending approval for Ehattesaht First Nation.

# **Existing Inventories/Plans/Studies**

DFO WCVI Clam Beach Atlas

BC Fisheries shellfish suitability and capability studies

DFO records of historical herring spawning locations

Provincial Boat Havens Catalogue & User Survey: West Coast Vancouver Island & Campbell River Fiordland

Recreation Area. Council of B.C. Yacht Clubs

# Stakeholders/Interest Groups

Area G Troll Association

Area F Community Clam Mgmt. Board

Regional District of Comox-Strathcona

Council of B.C. Yacht Clubs

**Ehattesaht First Nation** 

Friends of Nootka Sound

International Forest Products Ltd.

Nootka Resource Board

Nootka-Kyuquot Sport Fishing Advisory Committee

Nuchatlaht First Nation

Nuu-chah-nulth Tribal Council

Outdoor Recreation Council of British Columbia

Villages of Gold River, Tahsis and Zeballos

WCVI/ Nuu-chah-nulth Regional Fisheries Mgmt. Board

West Coast Sustainability Association

West Coast Expeditions

Western Forest Products Ltd.

### CPU-18 Kyuquot Sound

# **General Description**

This planning unit includes all of Kyuquot Sound and the inner basin which extends into a series of typical fjords: Amai, Cachalot, Easy, Fair Harbour, Kashutl and Tahsish Inlets. Sizable rivers empty into all except Easy Inlet. Kashutl and Tahsish are probably best classified as intermediate runoff fjords. Recorded temperatures for the upper 10 metres average from 9 to 12 °C but likely exceed 14 °C as a maximum. Oxygen levels range from 7 to 11 mg/l.

### **Planning Issues**

- Public group submissions:
  - The Mission Group (which includes Spring Island) should be part of CPU-18, rather than part of CPU-16.
- Nootka Resource Board submission:
  - Existing fish farm has agreement with Ka:yu:'k't'h'/Che:'ktles7et'h' First Nation <u>not to</u> culture Atlantic Salmon- a condition upon which the farm application was supported.
  - Developments must not create a 'dependency' for salmon enhancement activities to maintain stocks as is now the case in many other WCVI areas.
  - Existing fish farms are located in important salmon holding areas.
  - Need to identify confidential First Nation's cultural, traditional use, fishing and harvesting sites in planning without compromising site integrity by public identification/disclosure of sites.
- Council of B.C. Yacht Clubs submission:
  - Location of proposed boat havens (# refers to the Council's Boat Haven List)

#6 Volcanic Cove Chart 3682 Map 92E O64 #7 Dixie Cove Chart 3682 Map 92L 004/005

- request that Special Management Areas be created with the immediate upland of these proposed boat havens
- the area is good for kayaking
- Locations of critical marine ecosystem physical and biological oceanographic component processes (e.g. locations of critical zooplankton assemblages/ refugia and turbulent mixing/upwelling areas within inlets)
- Locations of critical areas for larval settlement, recruitment and rearing of marine invertebrates (shellfish, zooplankton), marine (commercial, non-commercial and forage), and other fish species and assemblages

#### **Planning Needs**

- Nootka Resource Board submission:
  - Development proponents must be required to prove that developments will not negatively impact sites, traditional uses and ecosystem sustaining processes before approvals are granted
  - Develop a respectful consultation mechanism with each First Nation to allow protection of confidential sites
  - Ensure that upland First Nations Indian Reserves, and future Treaty Lands are identified and linked to CPU
- potential need for onshore and/or offshore mineral, oil and gas exploration and development infrastructure, transportation, materials handling and disposal areas
- Council of B.C. Yacht Clubs submission:
  - diving opportunities need to be defined

### **Key Resource Information Gaps**

· specific visual resources not yet identified

#### Aquaculture

• there is high aquaculture capability in lower Kashutl Inlet, on the north side of Moketas Island, in the channel between Union and Hohoae Island, and in Chamiss and Diesel Bay

# Cultural Heritage Resources

• numerous sites located throughout Kyuquot Sound

#### Forest Use

- important area for log-handling sites and associated infrastructure
- log salvage and hand logging opportunities along sections of the shoreline

#### Marine Fish

- this CPU and Checleset Bay contain the last significant un-enhanced salmon stock complex on the WCVI
- Tahsish, Kashutl, Amai and Cachalot Inlets recently supporting Pacific Sardine recurrences
- important crab grounds in Cachalot Inlet and the head of Tahsish Inlet
- important geoduck areas in Markale Passage, Pinnace and Kyuquot Channels
- important local herring spawning areas fronting Union Island, and Amai/Cachalot Inlets, and likely others.
- important herring area in Crowther Channel
- important prawn grounds in inner Kyuquot, and throughout Kashutl and Tahsish Inlets
- important sea cucumber area in Crowther Channel
- important salmon holding area in Kyuquot channel and surrounding Moketas and Hohoae Channel

#### Marine Wildlife

- higher than average seal populations and a secondary resident orca route around Union Island
- minerals, oil and gas potential in the offshore

#### Recreation Resources

· kayaking and sport fishing

#### Tourism Resources

- angling, kayak and marine cruising products
- entry point for Brooks Peninsula destinations

#### Visual Resources

views of `Twin Ears' from Inlet

#### **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

Aquaculture	Finfish Tenure	4
	Shellfish Tenure	1
Commercial	General Commercial	3
Industrial	General Industrial	2
	Log Handling and Storage	20
Residential	Private Moorage	1
Total # Tenures:		31

# **Other Land Use Designations**

- Pilot Commercial Clam beach approval pending from DFO for Ka:yu:'k't'h'/Che:'ktles7et'h' First Nation.
- Geyserite tenure at Montieth Bay.

# **Existing Inventories/Plans/Studies**

DFO WCVI Clam Beach Atlas

BC Fisheries shellfish suitability and capability studies

DFO records of historical herring spawning locations

Provincial Boat Havens Catalogue & User Survey: West Coast Vancouver Island & Campbell River Fiordland

Recreation Area. Council of B.C. Yacht Clubs

# Stakeholders/Interest Groups

Area F Community Clam Mgmt. Board

Area G Troll Association

Regional District of Comox-Strathcona

Council of B.C. Yacht Clubs

International Forest Products Ltd.

Ka: yu:'k't'h'/Che:ktles7et'h' First Nations

Kyuquot Economic & Environmental Protection Society

Kyuquot Management Board

Nootka-Kyuquot Sport Fishing Advisory Committee

Nuu-chah-nulth Tribal Council

Outdoor Recreation Council of British Columbia

WCVI/ Nuu-chah-nulth Regional Fisheries Mgmt. Board

West Coast Expeditions

West Coast Sustainability Association

Western Forest Products Ltd.

# CPU-19 Brooks Peninsula Approaches

# **General Description**

Significant wave heights along the coastline are likely to exceed 6 metres during storm winds. This region is an upwelling zone during the summer which reduces surface temperatures by 5 °C. The 50-metre isobath is located a relatively long distance from the shoreline. All of the shoreline of this area is within a protected area with the exception of Ououkinsh and Malksope Inlets.

# **Planning Issues And Needs**

- Public group submissions:
  - since both Ououkinsh and Malksope Inlets are connected by a road to Kyuquot Sound, they might be more easily managed as part of CPU 18
  - numerous cultural heritage sites have been identified, which is different than the information in the draft CPU report.
- Nootka Resource Board Submission
  - the Checleset Bay Ecological Reserve, Brooks Protected Area and Proposed Marine Protected area covers essentially all of the Ha-houlthee of the Che: ktles7et'h First Nation
  - need to identify confidential First Nations cultural, traditional use, fishing and harvesting sites in planning without compromising site integrity by public identification/disclosure of sites
  - locations of critical marine ecosystem physical and biological oceanographic component processes (e.g. locations of critical zooplankton assemblages/ refugia and turbulent mixing/upwelling areas within inlets)
  - locations of critical areas for larval settlement, recruitment and rearing of marine invertebrates (shellfish, zooplankton), marine (commercial, non-commercial and forage), and other fish species and assemblages
  - consultation with the Ka:yu:k't'h'/Che:ktles7et'h' First Nation in how to best achieve cooperative planning with the Che:ktles7et'h' First Nation
- Council of B.C. Yacht Clubs submission
  - Location of proposed boat havens (# refers to the Council's Boat Haven List)

#8 Battle Bay
Chart 3683 Map 92L O13
#9 Columbia Cove
Chart 3617 Map 92L O52

- request that Special Management Areas be created with the immediate upland of these proposed boat havens
- the area is recognized for kayaking.

#### **Planning Needs**

- Nootka Resource Board submission:
  - Development proponents must be required to prove that developments will not negatively impact sites, traditional uses and ecosystem sustaining processes before approvals are granted.
  - Develop a respectful consultation mechanism with each First Nation to allow protection of confidential sites.
  - Ensure that upland First Nations Indian Reserves, and future Treaty Lands are identified and linked to CPU.
- Council of B.C. Yacht Clubs submission
  - diving opportunities need to be defined.
- potential need for onshore and/or offshore mineral, oil and gas exploration and development infrastructure, transportation, materials handling and disposal areas.
- Cultural heritage site inventory must be rationalized with current information.

# **Key Resource Information Gaps**

· specific visual resources not yet identified

#### Aquaculture

• due to the exposure and relatively large shallow shelf this area is generally not suitable for finfish aquaculture

#### Forest Use

• basically north of the Brooks Peninsula

#### Marine Fish

- important geoduck and herring spawn areas in Checleset Bay and Ououkinsh and Malksope Inlets.
- important commercial crab area off the northwest coast of Brooks Peninsula and in the northwest section of this planning unit off Quatsino Sound
- important groundfish area throughout
- important geoduck and herring spawn areas in Checleset Bay and Ououkinsh and Malksope Inlets
- important herring area in outer Klashkish Inlet
- important salmon area off the northwest coast of Brooks Peninsula and in southeast Checleset Bay

# Marine Wildlife

- a population of hundreds of sea otters exist in Checleset Bay Ecological Reserve
- the annual gray whale migration centers on a corridor about 1 to 2 km off the coastline
- there are numerous sea lion haulouts and seabird colonies
- pods of resident orcas also transit this area

#### Minerals, Oil and Gas

• minerals, oil and gas potential in the offshore

#### Recreation Resources

• limited use for cruising

#### Tourism Resources

· limited use

#### **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

**Total # Tenures:** 

#### **Existing Inventories/Plans/Studies**

DFO WCVI Clam Beach Atlas

BC Fisheries shellfish suitability and capability studies

DFO records of historical herring spawning locations.

Provincial Boat Havens Catalogue & User Survey: West Coast Vancouver Island & Campbell River Fiordland Recreation Area. Council of B.C. Yacht Clubs

# **Stakeholders/Interest Groups**

Area F Community Clam Mgmt. Board

Area G Troll Association

Regional District of Comox-Strathcona

Council of B.C. Yacht Clubs

Interfor

Ka: yu:'k't'h'/Che:ktles7et'h' First Nations

Kyuquot Economic & Environmental Protection Society

Kyuquot Management Board

Mount Waddington Regional District

Nootka Resource Board

Nootka-Kyuquot Sport Fishing Advisory Committee

Nuu-chah-nulth Tribal Council

Outdoor Recreation Council of British Columbia

WCVI/ Nuu-chah-nulth Regional Fisheries Mgmt. Board

West Coast Expeditions

West Coast Sustainability Association

### CPU-20: Quatsino Sound

# **General Description**

High salinity fjord; important marine biota and habitat concentrated near the mouth. Southern ends of Rupert and Neroutsos Inlets affected by major industrial development. Tidal rapids in Quatsino Narrows.

# **Planning Issues**

- Council of B.C. Yacht Clubs submission
  - Location of proposed boat havens (# refers to the Council's Boat Haven List)

#10 Pamphlet Cove

Chart 3617 Map 92B O53

- request that Special Management Areas be created with the immediate upland of these proposed boat havens

# **Planning Needs**

• planning needed for potential onshore and/or offshore mineral, oil and gas exploration and development infrastructure, transportation, materials handling and disposal areas

# **Key Resource Information Gaps**

None identified to date

#### **Resource Uses and Potential**

#### Aquaculture

- very high aquaculture capability for several species in Winter Harbour, the area between Koprino and Drake Island, and in Coal Harbour
- acceptable capability elsewhere with lowest capability at the entrance and at the heads of Neroutsos and Holberg Inlets

# Cultural Heritage Resources

 shipwrecks, old fish cannery ruins and numerous heritage/traditional cultural sites located throughout Quatsino Sound

#### Forest Use

- important area for log-handling sites and associated infrastructure
- log salvage and hand logging opportunities along sections of the shoreline

#### Marine Fish

- major herring spawning grounds in Winter Harbour and Forward Inlet
- six gill sharks abundant near Drake Island
- important crab areas in Monday Rocks, Koskimo Bay, Koprino Harbour, fronting Hathaway Creek, in Holberg, in upper Rupert and Neroutsos Inlet estuary
- important geoduck areas in Forward Inlet, Koprino Harbour and Winter Harbour
- important prawn grounds in Quatsino Inlet from Monday Rocks to Drake Island and throughout Holberg and Neroutsos Inlets
- · important sea cucumber areas around Hastad and Koskimo Islands and in Koprino Harbour
- important shrimp ground in outer Quatsino Inlet
- important abalone grounds near Flint Rock and Koskimo Bay
- important urchin area in Koskimo Bay

#### Marine Wildlife

- large seabird colony and sea lion haulout on Gillam Islands
- · orcas frequent outer Sound
- area important for marbled murrelet summer feeding

#### Minerals. Oil and Gas

- minerals, oil and gas potential in the offshore
- coal measures at Quatsino Sound/Coal Harbour
- site of former Island Copper Mine at Rupert Inlet; ongoing monitoring of benthic re-colonization of submarine tailings
- significant limestone deposits adjacent to Rupert Inlet under evaluation for development may require barging infrastructure

#### Recreation Resources

 Quatsino Narrows, Winter Harbour and Drake Island are important features for boating, sport fishing, wildlife viewing

#### Tourism Resources

- modest existing use and infrastructure but substantial potential in specific sites
- good potential in select sites for high-value nature-based products

#### Visual Resources

• lower profiles on inner reaches are of less importance than outer reaches

#### **Land and Resource Tenures**

The following list of tenures is generalized information meant to illustrate existing patterns of land use activities at the time of publication. For current information, refer to appropriate Land Records Files.

Aquaculture	Finfish Tenure	6
Commercial	General Commercial	9
	Marina	1
Industrial	General Industrial	4
	Log Handling and Storage	35
Institutional	Institutional Miscellaneous	1
	Local/Regional Park	2
Misc. Land Use	Other	1
Residential	Private Moorage	4
Transportation	Public Wharf	4
Utility	Electric Power Line	1
	Telecommunication Line	1

#### Total # Tenures: 69

# **Existing Inventories/Plans/Studies**

- Provincial Boat Havens Catalogue & User Survey: West Coast Vancouver Island & Campbell River Fiordland Recreation Area. Council of B.C. Yacht Clubs
- Northern Vancouver Island Forest Recreation and Tourism Opportunities Study

# Stakeholders/Interest Groups

Council of B.C. Yacht Clubs

Mount Waddington Regional District

Outdoor Recreation Council of British Columbia