

Operational Evacuation Route Plan

Cosens Bay



Spring 2022

SUMMARY SHEET

Plan Ref.	[Insert reference #]
Purpose	Operational Evacuation Guide
Partners	EOC vetted staff and other, partner organizations as appropriate.
Date Plan comes into force:	[Insert date of adoption]
Date of Plan Review:	
Plan Owner:	Regional District of North Okanagan (RDNO)
Plan drawn up on behalf of:	RDNO – Cosens Bay
Plan drawn up by:	Sundog Solutions [REDACTED] www.sundogsolutions.ca
Location of Plan in Force	RDNO Emergency Operations Centre: 9848 Aberdeen Road, Coldstream, BC V1B 2K9

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Distribution List

Name	Hardcopy #	Role

Version Control

Revision date	Version	Outline of revisions	Approved by

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Foreword

This plan sets out the arrangements made by the Regional District of North Okanagan (RDNO) to ensure an informed and coordinated evacuation to an emergency event in the Cosens Bay area, which will protect life as the priority.

The purpose of the document is to enhance and provide guidance to the coordination of an evacuation response. It is designed to be used by the RDNO in conjunction with existing emergency plans, the Regional Evacuation Framework, area response maps and general emergency response procedures for the RDNO.

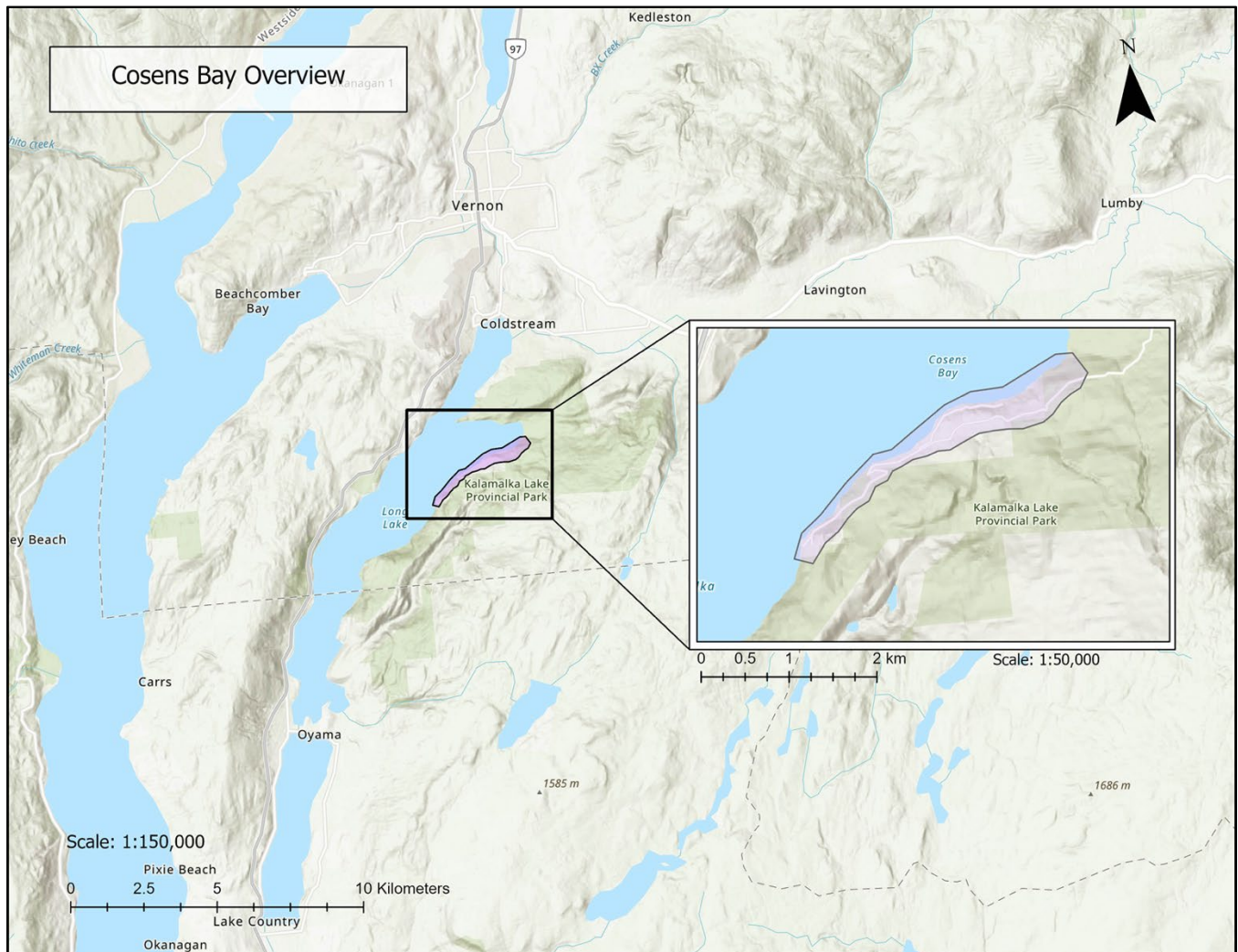
The Operational Guide is a controlled PROTECTED document and is CONFIDENTIAL. The contents should not be altered except when an update is issued via the designated Emergency Program Coordinator. The plan also holds personal telephone numbers for various organizations and stakeholders. This information must not be made available to anyone other than vetted EOC staff involved with managing an incident.

EOC staff will need to use their professional judgement and will require a level of competence to undertake the key incident management roles.

This guide does not replace the need for staff training and shall not operate as a stand-alone plan for evacuations within the RDNO but shall be read in conjunction with the existing emergency response plans and procedures that guide the activation an Emergency Operations Centre (EOC) and supporting roles.

1 Cosens Bay Summary

Located on the eastern shores and hillside of Kalamalka lake, Cosens Bay is a seasonal residential development. The lack of servicing has resulted in only modest redevelopment of properties along the lake in comparison to other lakefront properties in the Okanagan. Access to the Cosens Bay settlement is gained via Cosens Bay Road which is located off Coldstream Creek Rd in the Municipality of Coldstream. Cosens Bay Road bisects Kalamalka Lake Provincial Park before reaching the historic cabin colony.



Key Population considerations:

Zone	Population	Total Dwellings With/Without boat access	Clearance Time (minutes)	Contingency Time (minutes)	Total
ZONE 1 – Cougar Canyon		40	20	120	2hr 20min
ZONE 2 – Central Village		27	20	120	2hr 20min
ZONE 3 – South Village		13/2	20	120	2hr 20min
TOTALS	100	82/2	-----		

SITUATION ASSESSMENT: Evacuation Alert

- Trigger Point for Evacuation Alert determined by EOC Director
- “Critical Stakeholder Notification” contacts (below) to be advised of Alert when declared
- Place individual calls – request their email for conference call / webinar invites
- Establish Conference Call / Webinar schedule
- Messaging for residents at Alert Stage:
- Be prepared to leave immediately if given an Order
- Residents encouraged to pre-plan where to re-locate if given an Order
- Under an Evacuation Alert, livestock owners need to be notified that they should be addressing their livestock issue and not waiting for an Evacuation Order.
- If you want to relocate trailers – relocate during evacuation alert do not wait until order.
- Park Vehicles to allow easy evacuation.
- Upon an Order, only single vehicles will be permitted on the evacuation route, not trailered boats and RVs etc.
- Reference Evacuate Alert template.

SITUATION ASSESSMENT: Evacuation Order

- Need for evacuation determined by Incident Commander / EOC Director
- Declaration State of Local Emergency prepared / formalized for the affected Electoral Area or Municipality
- Evacuation Order prepared / formalized
- Board Chair advised, approves formal Orders and Declarations
- **“Critical Stakeholder Notification” contacts to be advised of Order when declared**
- Reception Centre location(s) need to be identified by the EOC and communicated to Incident Command
- **EOC Plans to use Zone Maps to produce map of Order and Address List and provide to Site Operations** (in consultation with appropriate stakeholders)
- Reception Centre / Group Lodging locations listed below

2 Evacuation Planning

Evacuation Trigger Points for interface wildfire can be determined by reviewing the hazard data available for Cosens Bay, its proximity to structures and the fuel to map a 2km and 5 km buffer. It will be important to consider the limited egress opportunities for residents in Cosens Bay be conservative when monitoring wildfire and flood activity. Preparations for an evacuation across water will take time and should be initiated in a timely manner when deemed the most viable option for facilitating evacuations.

2.1 Evacuation Decision-making Timeline

	Event Start	Minutes								
Activities	0	10	30	60	90	120	140	180	210	
Assessment and decision		→								
Authority and paperwork			←→							
Engage EOC resources			←→							
Mobilize site personnel					←→					
Public notification and media					←→					
Physical Evacuation							←→			
Contingency Time						←→				
Key Activities							Physical Evacuation Starts	Zone Clearance Time		

2.2 Zone Evacuation Decision Times

Decision Time	Time (Minutes)			Activity
	Zone 1	Zone 2	Zone 3	
Risk level identification and assessment	10	10	10	Sequential
Contact personnel and fill EOC positions	30	30	30	Sequential
Paperwork for drafting Alert/Order/SOLE	30-60	30-60	30-60	Simultaneous
GIS information for maps and civic addresses	60-90	60-90	60-90	Simultaneous
Mobilize personnel emergency Services	30	30	30	Simultaneous
Mobilize personnel Search and Rescue	90 to 120 (on site)	90 to 120 (on site)	90 to 120 (on site)	Simultaneous
Notification:	30-60	30-60	30-60	Sequential
Digital and non-digital social media, info releases	30 to 45	30 to 45	30 to 45	Simultaneous
Physical evacuation	T + 20mins	T + 20mins	T + 20mins	Sequential
120 minutes contingency	T + 120	T + 120	T + 120	Sequential

2.3 Worst Case Scenario Evacuation

A worst case scenario is based on

Number of Evacuees	Population category/requirements	Additional Considerations
150	Permanent residents, tourists and seasonal residents	This number is variable but accounts for the maximum number of people that may be in the area at any one time
10	Carless population	Due to the geography, landscape and rural nature of the area we have assumed less than 5% would be without a car. Time of day may increase this by an additional 5%
50	Require lodging	Not able to stay with friends and families in nearby population centres such as Vernon, Salmon Arm or are unable to return home if visiting.
10	Require transportation assistance	Time of day may impact a population who have no access to personal transportation.

2.4 Mass Evacuation Clearance Times

Vehicle occupancy	Community-wide evacuation in one direction
One	20min
Three	20min*
Four	20min*
<p>The assumed lane capacity for a single lane is calculated at 500 vehicles per hour. Allowance for official and mass transportation vehicles must be maintained as well. The main access to the neighbourhood (Cosens Bay Road) is unpaved and narrow so, speed and capacity will slow the operations. Vehicle speed assumed in 30km/h. Times are based on residents "ready to go" and in vehicles</p> <p>*Assumption that a minimum clearance time is 20min and does not account for arrival at final destination, only clearance from the neighbourhood.</p>	

Evacuation clearance times are estimated based on the maximum number of people that may be in the area at one time. This number will vary depending on the area being evacuated, the time of year, time of day, etc.

2.5 Vulnerable Population Contact Information

EOC Action: To liaise and share any Evacuation Alert or Order information with all facilities listed.

Agency	Contact	Phone
Interior Health	Director on-call	1-855-851-4193
BC Emergency Health Services	General Line	911
Red Cross	Regional Coordinator	250-491-8443 ext 211
Red Cross	24hr Emergency Line	1-888-800-6493

2.6 Transportation Loading times (nominal)

Vehicle Type	Capacity	Loading Time per Person (minutes)	Loading Time (minutes)
Bus			
• Standard	35	1	30
• Shuttle Bus	10		15
Wheelchair Van			
• Hydraulic lift	8	5	30
• Ramp	3		15
• Ambulette	2 (wheelchairs)		
Ambulance Basic Life Support (BLS)	1 laying down 3 Seated	10	10
Ambulance Advanced Life Support (ALS)	1 Laying down 2 Seated	20 (if accompanied by life support equipment)	20

2.7 Events and Festivals

Event	Event Date	Location
Dirty Feet Kal Park	May 1, 2022	Multiple trails
Park Nature Talk	June 14, 2022	Juniper Bay Picnic Area
Freaky Creeky 50	Sept 17 – 18, 2022	Kalamalka Lake Provincial Park

2.8 Additional Contacts

Organization	Role	Contact Person	Phone Number
RDNO Duty Phone	Manager, Protective Services	Alastair Crick	250-550-3700
Kaloya Contracting Ltd.	Provincial Park Operations		██████████
RCMP	Staff Sergeant	Steve Mancini	
North Okanagan Cycling Society	Cosens Creek Mountain Bike Area		trails@nocs.ca
Cosens Bay Property Owner's Association	President		
Irrigation District			
MoTI	Operations Manager	Aimee Barr	██████████
	Manager of AOI	Ken Namislo	██████████
ESS	through the CRC	24hr emergency line	1-888-800-6493
Okanagan Indian Band	EOC Director	Colleen Marchand	██████████
BC Wildfire	Kamloops Fire Center		250-554-5500
Vernon Search and Rescue		RCMP/EMBC	250-545-8732
Splatsin Indian Band (SIB)			██████████
MoF	Engineering Tech	Bill Borrett	██████████
Animal Care (CDART)	Cheryl Rogers		██████████
	Lynne Davis	National President	██████████
BC Hydro			1-800-224-9376
Provincial Spill Reporting Call Centre**			1-800-663-3456
FortisBC			1-800-663-9911
Transport Canada – Canutec	Dangerous Goods		1-613-996-6666 *666
Telus			1-888-811-2323

IMPORTANT: EMBC PREOC can assist in contacting all utility providers and coordinating buses through BC Transit.

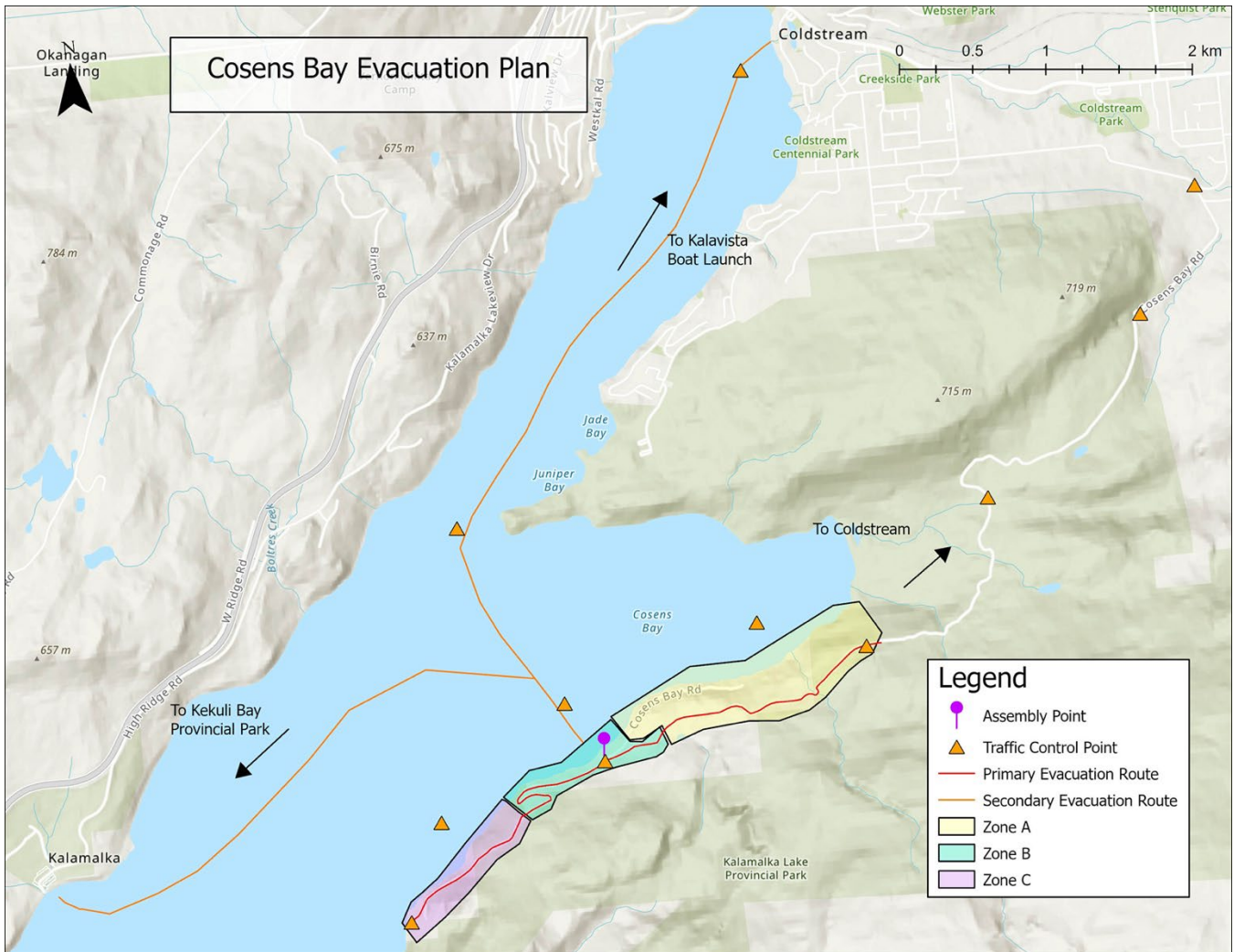
2.9 Transportation Options for Mass Evacuation

Company Name	Location	Fleet	Type of Vehicle	Capacity	Accessible (y/n?)	Primary contact (Name/#)
Vernon Transit and HandyDart	Vernon	1	Public bus	31	Yes	250-545-7221
SD 22	Vernon/Coldstream		School bus	56		
Vernon Taxi	Vernon		Car or Van	4-6		250-545-3337
Capitol Taxi	Vernon	5	Car or Van	4-6	1 wheel chair accessible	250-545-1355
Royal Stars Service	Vernon	1	Van	14	No	250-550-8128
Kalamalka Lake Boat Rentals	West Kelowna		Speed boat Pontoon	6-19 12-13		250-300-8685
Coldstream Boat Rentals	Coldstream		Speed boat	6		778-650-5118
Vernon Boat Rentals	Vernon		26' Pontoon	13		250-308-2088

3 Evacuation Considerations

A hazard event in the Cosens Bay area has the potential to be complex and challenging given its remote location and limited options for access/egress. Proper considerations must be given to determining the best course of action (evacuation/shelter-in-place) as well as the appointment of supports such as traffic control, signage and assembly points (see Regional Evacuation Planning Framework).

While recommendations for placement of these supports have been made, adhoc planning may be required and adjustments made to meet the needs of the incident. KMZ files accompany this document and can be used to facilitate future adhoc evacuation planning and situational awareness.



3.1 Evacuation Routes

Primary route: Cosens Bay Road North to Coldstream Creek Road. From there, residents can be directed to a Reception Centre in either Coldstream or Vernon, as deemed appropriate at the time.

There are three most-likely evacuation scenarios that the community of Cosens Bay could face.

- 1) a hazard, most likely a wildfire, threatens the community and a ground evacuation north towards Coldstream is initiated;
- 2) a hazard threatens the community, but Cosens Bay Road is also impassable requiring citizens to be evacuated by water;
- 3) a hazard, most likely a debris slide or flood, has blocked or compromised road access along Cosens Bay Road, leaving citizens with no ground access or egress. At this point, rather than implementing a shelter-in-place, it would be advisable to request that residents return to their primary residences by boat. If Cosens Bay is their primary residence, it is advisable to provide alternative temporary housing options – with limited services and resources available in the community, shelter-in-place would require significant resource provision and delivery by the RDNO. Residents will need somewhere to temporarily moor their vessels if this is the route chosen.

3.2 Evacuation Across Water

It is recommended that evacuations across water take place during the Evacuation Alert phase to allow for additional time. While it is assumed that the majority, if not all, waterfront properties have a boat readily available, there are several properties that are not waterfront and may not have a personal vessel. The RDNO should ensure that there is availability of a vessel(s) to accommodate any residents or visitors that may require transportation.

Destinations for evacuation by boat will likely be either Kekuli Bay Provincial Park boat launch or Kalavista boat launch. Travel from Cosens Bay to the Kalavista boat launch is approximately 5.5 kms. A pontoon boat with a gohp engine can easily maintain 30km/h cruising speed. Depending on boat traffic/time of year, the minimum time to reach the boat launch is 15 minutes. To safely moor and egress a boat a nominal figure of 5 minutes is given – marshalling required (additional factor).

Note: If considering an evacuation across water during a strategic evacuation there are several considerations and requirements that must be met to satisfy Transport Canada. For residents and visitors that do not have a personal vessel a boat, evacuation should only be initiated as a tactical evacuation when it has been deemed that there are no viable ground routes and/or a shelter-in-place is not appropriate.

4 Evacuation Plan

Evacuation Routes	
Briefly describe Evacuation Routes:	
Neighbourhood Muster Points	
Neighbourhood Assembly Points for Car-less Evacuees	
Assembly Point	
Assembly Point	
Assembly Point	
Assembly Point	
Assembly Point	
Traffic Control Points	
Intersections requiring Traffic Control during Evacuation	
Traffic Control Point	
Traffic Control Point	
Traffic Control Point	
Traffic Control Point	
Traffic Control Point	
Traffic Control Point	
Perimeter Control Points	
Perimeter Control Points required after the Evacuation Order has been issued	
Perimeter Control Point	
Perimeter Control Point	
Perimeter Control Point	
Perimeter Control Point	
Perimeter Control Point	

Perimeter Control Point	
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Reception Centres

Primary Reception Centre:

Secondary Reception Centre:

People Requiring Assistance

The following residences have been identified that, if impacted, could increase the severity of the event, increase the time for recovery or have special requirement during evacuation

Address:	Disability:	Contact Name:	Contact Number:

Public Information

Attach all Press Releases (including Orders, Alerts, etc.) provided to the public.

Provide Public Information Line # if possible.