



SAMPLE IMPACT REPORT FROM GOODFINITY · BALD RANGE WILDFIRE K51490 · Not an official document

Wildfire Impact Summerland, Peachland & the Bald Range Wildfire as of Aug. 19th 2026

About 150 structures damaged or destroyed, a district emptied at the peak of harvest, and a fire still growing on day 13. Six ledgers: the people, the built town, the utilities, the land, the animals, and the farms and visitors that make this valley what it is.

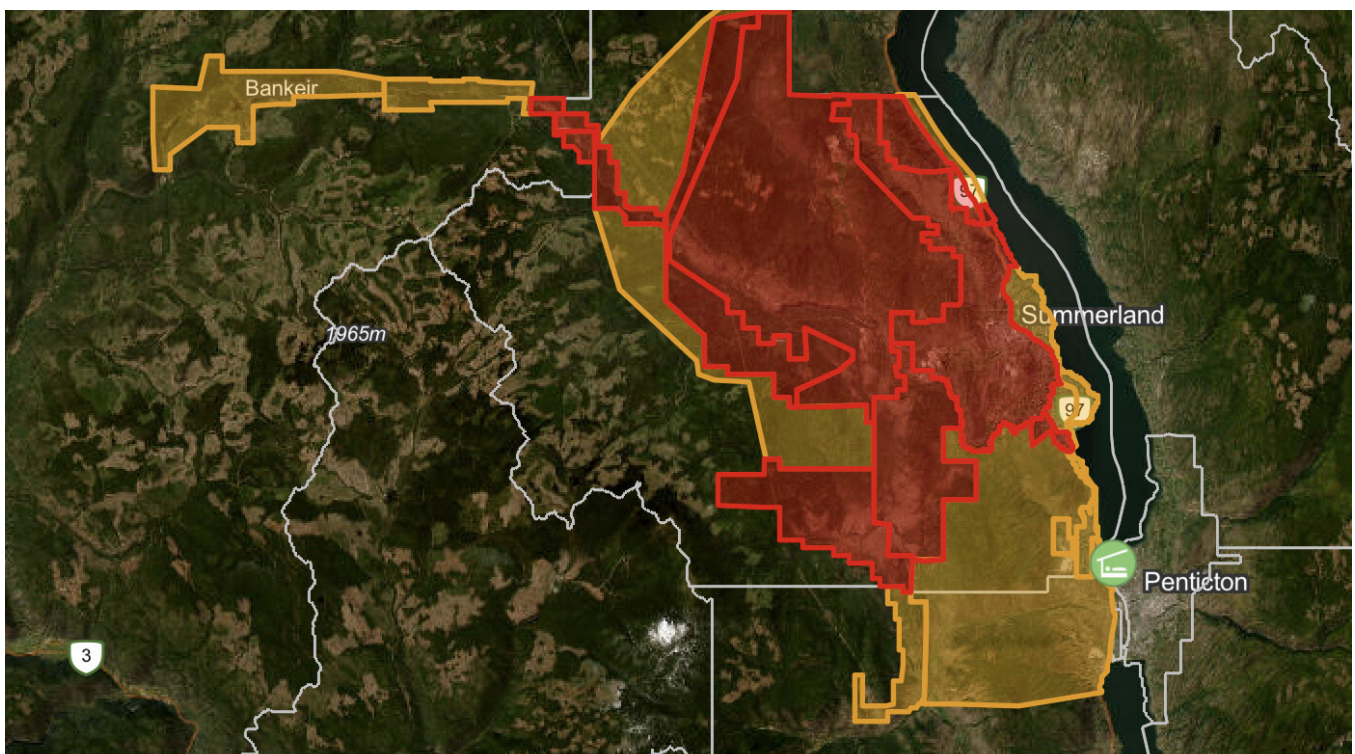
DEMONSTRATION ONLY

Prepared from public reporting as of the **morning of 19 August 2026**, during an **ongoing, out-of-control fire**. This sample impact report is not reviewed or endorsed by any affected government.

This report is built through the municipality lens; the affected area also includes Penticton Indian Band properties.

NOTE FOR THE RDCO & RDOS

Every figure in this report is flexible and expected to change. This is a live model, not a finished assessment. When RDOS, RDCO or the District of Summerland publishes current data (updated structure count, response costs, mapped burn severity, a boil-water lift date etc.) values will be updated. Corrections and better sources are welcomed and can be incorporated immediately.



August 17th. Evacuation alert and order areas in the RDOS. (Photo from RDOS)



THE EVENT, From the Public Record.



FIRE DETAILS

Bald Range wildfire, K51490

Ignited before 5pm on 7th August on Princeton-Summerland Road near Trout Creek, about 15 km west of Summerland. 50 ha at 5:50pm; 5,000 ha by 8:55pm the same night. Rank 5–6 behaviour with embers landing 1 km ahead of the front. Cause under RCMP criminal investigation.



STATUS, 19 AUG (AM)

22,693 ha and still growing — up 611 hectares overnight, and BCWS expects today to be more active, not less

BC Wildfire Service primary, at 7:29am on 19 August: 22,693 ha, up 611 overnight from Tuesday's 22,082. **8 Orders and 14 Alerts across five authorities** — RDOS, Summerland, Snpink'tn Indian Band, Peachland and RDCO. BCWS's own Wednesday assessment names the southwestern flank, Shingle Creek toward McNulty FSR, as the active and difficult ground; northwesterly winds gusted to 30 km/h overnight, and a shifting wind pattern with high temperatures is expected to increase activity today. Response is heavier rather than lighter: **284 firefighting personnel, 112 structure-protection, 70 heavy equipment, 15 helicopters**, one Incident Management Team, 24-hour coverage. The landfill is also burning.



EVACUATION

6,226 properties ordered out at peak — now 9 Orders and 14 Alerts, and still moving

At peak: Summerland 5,688 properties — the whole district, including the landfill — plus RDOS rural 451, Penticton Indian Band 38 with 1,082 more on alert, and Peachland 49 with 762 more on alert. Reception centres run from Penticton to West Kelowna to Chilliwack, 250 km away.

Re-entry, in stages: ~400 properties at Trout Creek went order-to-alert on 14 August, ~800 more on 16 August, and on Tuesday 18 August Summerland Proper west of Highway 97 and Area F west of 97 moved to alert — roughly **3,380 properties freed at midday**, about 90% of the district. A Recovery Centre has opened at the George Ryga Arts and Cultural Centre, 8am to 6pm daily, and structure-protection crews have been cut about 60% as risk to homes eased.

Who is still out: 530 properties remain on Order in Garnet Valley, Prairie Valley and Meadow Valley. A further 535 Summerland properties are targeted to go home Thursday — but **Faulder and Meadow Valley are explicitly not on that timeline**, which is precisely where the structure loss is concentrated.



HIGHWAY 97

Fully reopen 24/7 both directions since August 16th — nightly closure lifted

The main Okanagan artery between Penticton and Kelowna. Closed 8 Aug at 1:25am from Antlers Beach to Kickininee, reopened for limited through-traffic 14 Aug, and now fully open with reduced speeds. Side roads into evacuated areas stay closed.



PEOPLE (As of Aug. 17th) 13,250 people out, and the alert zone grew again today.

Eleven days away and counting, with no re-entry timeline — utilities, waste and roads all have to be restored first. Summerland has a higher proportion of older adults than the provincial average, which changes what an evacuation of this length requires: medication continuity, mobility and accessibility support, and heat exposure in congregate lodging at the height of summer.

13,250

People under Evacuation order

Derived from verified property counts: Summerland's census population of 12,042 for the whole district, plus roughly 1,200 across RDOS rural, Penticton Indian Band and Peachland order properties.

6,177

HOUSEHOLDS

Households affected

The official peak on Order: 451 RDOS + 5,688 Summerland + 38 Penticton Indian Band, from four bulletins of 12–13 August read at source. The 6,226 in the event summary above is the same count plus Peachland's 49 properties — both are correct, and they differ only by which jurisdictions sit inside the frame.

13

AND COUNTING

Days away so far

Counted from the first mass orders on the evening of 7 August through Wednesday 19th August, inclusive. Re-entry so far is edges only: Trout Creek and Peachland/Area West to alert on 14 August, and an ~800-property stage on 16 August. Most of the district is still out and the larger stage is undated, so this counter keeps running for most households.

5,300

PEOPLE

May need long-term mental-wellness support

A support-planning figure, never a diagnosis, using the Fort McMurray analog of a residential burn plus full evacuation.

\$834,750

One counseling session for each person likely to need support

At the BC registered clinical counselor rate of \$157.50 for a 50-minute session. A floor, not a course of care.

\$200

PER PERSON / DAY

Daily support rate applied

20 km to Penticton puts most evacuees in the local tier. Evacuees are receiving the \$200-per-household-per-night e-transfer now.

\$148,248

Road travel, household vehicles, both ways

6,177 households × 20 km each way at \$0.60/km. A one-time cost that does not grow as the order holds.

Evacuee support cost so far: \$19,956,998

**FOR COMPARISON** (Aug. 19th) Benchmarked against 2023 McDougall Creek Fire(RDCO)

To illustrate the impact of the Bald Range Wildfire as of August 19th, (with consideration to the wildfire's ongoing, out-of-control status), this table borrows data from the closest documented event: the 2023 McDougall Creek wildfire in RDCO's own jurisdiction. **Everything in the right-hand column is an RDOS impact; everything in the left is RDCO precedent.**

READ THE BENCHMARK AS A STARTING POINT, NOT A FORECAST. Every borrowed figure in this report is subject to change, and several of them will change substantially.

	MCDOUGALL CREEK · 2023 · FINAL	BALD RANGE · 2026 · LIVE, DAY 13
Area burned	13,970 ha ~140 KM²; FINAL AT "HELD"	22,693 ha STILL GROWING — 62% MORE GROUND THAN MCDOUGALL CREEK
Homes destroyed	300 FINAL COUNT	~150 PRELIMINARY OFFICIAL COUNT, RELEASED 17 AUG — DAMAGED OR DESTROYED, NO SPLIT PUBLISHED
Households evacuated	10,700 PLUS 10,700 MORE ON ALERT	6,177 OFFICIAL PEAK ON ORDER (6,226 INCL PEACHLAND); 9 ORDERS AND 14 ALERTS ACTIVE, EDGES RELEASED
Time to "Held"	36 DAYS 15 AUG TO 20 SEP 2023	Still growing DAY 13; +611 HA OVERNIGHT, AND BCWS EXPECTS MORE ACTIVITY TODAY
Landfill	\$1.4M · 10 days closed GLENMORE: ~1/3 OF GAS WELL HEADS LOST, SYSTEM TO ~60% EFFICIENCY	Burning ~1.5 KM FROM THE WATER TREATMENT PLANT; NO DAMAGE FIGURE
Watershed effect	+73% peak flow, year 1 ELEVATED 3–5 YEARS; FULL RECOVERY TAKES DECADES	Not yet modelled BUT THE FIRE IGNITED INSIDE THE DRINKING WATER WATERSHED, WHICH MCDOUGALL CREEK DID NOT
Recovery operations	78 DAYS RESILIENCY CENTRE 31 AUG–17 NOV; EOC 63 DAYS; 84 NEEDS ASSESSMENTS	Beginning ~90% OF THE DISTRICT FREED 18 AUG; RECOVERY CENTRE OPEN; 530 PROPERTIES STILL OUT
Debris	~20,000 t. concrete FROM ~200 STRUCTURES; CLEANUP PLANNED OVER TWO YEARS OR MORE	~15,000 t AT ~100 T OF CONCRETE PER STRUCTURE, ON RDCO'S OWN RATIO

(Additional contextual notes on the following page for reading this table.)



FOR COMPARISON, Additional contextual notes for reading the table above



Elevation and terrain differ

McDougall Creek burned a lakeside interface with roughly 18% of its area above 1,300 m. Bald Range ignited on rangeland roughly 15 km inland and west of Summerland and has run toward Thirsk Lake and Peachland, with the west flank at Shingle Creek now the priority front. Different elevation bands mean different snowpack, different melt timing and a different runoff signature — so the peak-flow figure above is an indication of scale, not a prediction for Trout Creek.



The watersheds are not comparable

The McDougall Creek analysis rated seven separate catchments and found increases ranging from 19% to 73% within the same fire, because the result tracks how much steep ground burned at high severity rather than total area. Summerland's burn severity has not been mapped, and Bald Range ignited inside the community's primary drinking water source; a condition McDougall Creek did not have. That combination could push Trout Creek either side of the benchmark.



What burned is materially different, and cannot be quantified yet

McDougall Creek's costs are dominated by 300 destroyed homes and their contents. Bald Range has a preliminary structure count of ~150, and is burning through orchard, vineyard and ranch land at peak harvest rather than dense residential subdivision, and includes a burning municipal landfill. This is a waste-composition emissions profile with no equivalent in the 2023 event. Until the damage assessment and burn severity mapping are released, the fuel and material mix cannot be quantified, and that mix drives both the dollar figures and the emissions profile.



One event is finished and the other is not

Every McDougall Creek figure is a final, post-event number. Every Bald Range figure is a day-13 number on a fire that gained 611 hectares overnight and is forecast to be more active today. Its burned area has grown, and its structure count is preliminary. Comparing a completed event against a live one understates the live one by construction.



WHAT THIS EVENT COSTS, Built from one person upwards



\$2,515/person

Lost income at \$125/day, the extra cost of eating away from home, \$200 to replace clothes and toiletries, and one counseling session.



\$8,446/household

The person costs for an average 2.2 person household, plus lodging at \$200/night, driving out and back, a \$500 spoiled fridge, clean air, and counseling for the 40% who may need it. The home itself is not in here.



**\$1,683,605,128/
whole community, total**

Household costs across 6,177 households, plus what the land lost. Up from \$1.35B on 12 August — it moves daily while the event is live.

How to read these totals

Each cost appears once, whoever pays it. The evacuee-support line further down is deliberately not added into the community total — those payments cover the same lodging and meals already counted in the household line. **The total is a floor, not a ceiling.** Kept out on purpose: all structure losses, the ~\$481M real-loss figure under Infrastructure is not inside this total, and adding it would roughly double the number; the \$514/person-day national benchmark, so agency staffing and reception centres are not in the box; and pets and babies, because family composition varies — add those lines per animal and per infant. **Local government response costs are still \$0 in this report** — overtime, EOC and equipment figures from RDOS and the District are not yet public. That line will only grow.

THE SMOKE PEOPLE BREATHED Measured at Debeck Road, the nearest Station



37.6 µg/m³

Fine-particle (PM2.5) month average, 11 July to 10 August. **The WHO guideline is 15; BC's daily objective is 25.**



17 of 31 days

Daily averages above the WHO health guideline — **more than half the month.**



195.3 µg/m³

The worst day, 8 August: a 24-hour average nearly 8× BC's daily objective, peaking at 302.1 at 1pm. That is day-scale exposure entire households lived through, not a momentary reading. and whether a worse day followed after 10 August is simply not captured here.



20.7% of hours

South Okanagan hours at High risk or worse on the AQHI — **roughly one hour in five.** Central Okanagan ran 7.3%.



THE BENCHMARK BASELINE

 Additional context for cost, timeline and impact assessment

\$88,536,500

What evacuations like this usually cost, all in: At \$514 per person-day including full response costs. With 193 firefighters, 14 helicopters and three reception centres running, the true public cost tracks this line.



\$3,088,500

Spoiled food, every household at once

6,177 households × \$500. The whole town lost power on night one, then stayed evacuated past every fridge and freezer clock. Insurance may cover \$1,000–2,000 per household; BC Hydro pays nothing. And replacing it costs more than it used to: food prices are up 27% on five years ago, so the same donation and the same grocery run buy measurably less than they did during the 2023 fires.



~\$399/per

Replacing a car seat and stroller left behind: Midpoint of a \$299–499 travel system. One-time, and not deferrable.



2 evacuations in 8 years

The repeat burden: The 2018 Mount Eneas fire also emptied parts of Summerland and Peachland. The region's fire-interface history runs through Garnet in 1994 and Christie Mountain in 2020, just south. Incident commander Graham Statt, Summerland's CAO, carries Slave Lake and Fort McMurray experience.



\$21,531,250

Household income lost during displacement:

At the verified national income-loss component of \$125 per person per day, at peak season, with Highway 97 severed. Service Canada is at the reception centre taking EI claims. Never added to the benchmark line above, which already contains it.



\$198 /infant (to date)

Diapers and formula, per infant

Retail-verified midpoints of \$21.50 for diapers and \$85 for formula per week. Add per infant — not included in the household box.



~78 days of recovery

How long recovery operations actually run:

From RDCO's 2023 snapshot: the Resiliency Centre opened 31 August, 16 days after ignition, and wrapped up with Emergency Support Services on 17 November. The Emergency Operations Centre ran until 17 October — 63 days. By mid-October the team had logged 84 needs assessments, 400 resident interactions and 700 referrals. Property site visits so residents could view their losses began 29 August and ran two weeks. Summerland should plan for a recovery operation measured in months, not the days the evacuation itself lasts.



THE BENCHMARK BASELINE

 Additional context for cost, timeline and impact assessment

10.4% OF THE YEAR'S WORKING DAYS

What a whole town pausing costs, in the economy's own units: Kelowna 2023 lost 26 working days across 29,566 evacuees, by Statistics Canada's own method. Jasper 2024 lost 8.0%. Summerland's figure becomes computable the same way once re-entry completes.



+41% EMERGENCY VISITS +10%

Hospital admissions when wildfire smoke is in the air: A Canada-specific pooled estimate. Nationally, wildfire smoke's health cost averages \$18B a year and reached **\$56.4B in the 2023 season**. This is the line that connects the measured smoke data below to lungs, hearts and hospital beds.



EI +141.6% · incomes -9.5% over 7 years

The long economic tail: Both verified precedents from Fort McMurray and Slave Lake. These are different lenses from the per-day income line above and are never summed with it.



\$803,010

Clean air at home for the smoke season: One purifier plus a year of filters per affected household. Filters recur, and demand for them arrives in October, after donation attention has moved on.



\$0-300 yourself
\$300-3,000 simple upgrades
\$3,000-30,000 contractor work

FireSmart measures

What one household can do about it: Verified FireSmart tiers. **Clearing gutters, vents and woodpiles costs almost nothing;** screens, skirting and ground cover a few thousand; roofing, siding and tree removal the most. Kamloops pays residents \$150-800 for exactly the first tier. If one line in this section is actionable, it is this one.



INFRASTRUCTURE Assessment published Aug.17th. Additional updates tbd.

The count is in: about 150 structures damaged or destroyed.

Released by the RDOS Emergency Operations Centre at 8:30pm on Monday 17 August, two days after Canada Task Force One finished its Rapid Damage Assessment. Roughly **110 in Electoral Area F (Faulder and Meadow Valley)** and **40 in the District of Summerland**. Downtown Summerland is intact.

"Damaged or destroyed" is one combined number, and no split has been published.

The 150 is **preliminary and expected to change**. It counts structures damaged or destroyed together, and how many are homes (versus outbuildings, barns or sheds) has not been broken out either. That matters for the dollar lines below, because they apply a **destroyed-structure unit cost** to the whole 150. **Read every figure in this section as a ceiling** until the "damaged" versus "destroyed" split publishes.

~150 ~110 AREA F · ~40 SUMMERLAND

Structures damaged or destroyed

(RDOS EOC bulletin #5844) The loss is concentrated in Faulder and Meadow Valley, which is also why those two communities are explicitly excluded from Thursday's re-entry while 535 other properties go home.

\$259,615,385 CEILING

Structure losses, insured

At the Okanagan-derived default of \$1.73M per structure, taken from the McDougall Creek fire in 2023.

\$480,769,231

Structure losses, the real total

Insurance covers roughly 54% of societal disaster losses, so the real figure runs about 1.85× the insured one. This is the number that matters for recovery planning — and it is now the single largest line in the social lens, larger than the entire evacuation to date by a factor of **twenty-four**.

\$796,050 PER YEAR, UNTIL REBUILT

Municipal tax revenue lost per year

At \$5,307 per destroyed structure, per year recurring (not one-time). Jasper's precedent show where this goes at scale: \$1.9M per year, roughly 10% of the municipal budget.

~15,000 TONNES, AT ~150 STRUCTURES

Concrete debris to be disposed of

Derived from RDCO's own McDougall Creek Debris Waste Management Plan, which anticipated roughly 20,000 metric tonnes of concrete from about 200 structures — about 100 tonnes per structure. Concrete is only one stream; **tree waste, demolition debris, metals and white goods come on top**. That plan expected cleanup to run two years or more, and required fire waste to be extinguished for at least seven days before a landfill would accept it — with Summerland's own landfill still burning.

Scale check: what a comparable Okanagan fire destroyed

RDCO's own snapshot records 300 homes destroyed across 13,970 ha during the 2023 McDougall Creek Fires. Bald Range has burned **22,693 ha — 62% more ground** — for roughly half the structure count so far. The difference is where each fire ran: McDougall Creek crossed a dense lakeside interface, while Bald Range burned largely rangeland and forest with settlement concentrated at Faulder, Meadow Valley and the lakeshore.

**INFRASTRUCTURE** Official findings to be determined after structure loss assessment.

Transportation, delays, detours, cancellations, and surviving home value.

**\$34.20** EACH WAY**One car forced around the highway detour**

Built from the province's own MOTI benefit-cost defaults: 1.2 extra hours at \$18.49 plus 89 extra km at \$0.135. The commercial detour ran 107–121 km via Highway 97C and Highway 33, against roughly 25 km of closed highway.

**\$77.95** EACH WAY**One commercial truck around the detour**

1.2 hours at driver \$31.25 plus truck \$14.65, plus 89 km at \$0.257. Every load between Penticton and Kelowna paid it, both directions, for six days.

**~6 days of rolling smoke cancellations****The airport next door, in August 2026**

Smoke disabled instrument approaches from the 6th–11th of August and airlines canceled flight by flight; YLW stayed open and was normal by the 12th of August. Most scheduled flights went on 8 August. Do not conflate this with 2023 — that was a genuine 8-day Transport Canada airspace closure, which made August 2023 YLW's only down month of the year at -5.4% and produced a \$12M–\$38M output-scale band.

**~\$959,000**

PER HOME, OKANAGAN MARKET

What a home here actually costs to rebuild

The Kelowna CMA building-permit average; Penticton runs \$1.05M. Owners rebuild on land they already hold, so construction is the whole bill. This is not the insured losses, which includes belongings and living costs.

Note: an example in Jasper demonstrates that local conditions can depart from national averages; a property insured for \$1.2M had a quoted rebuild cost of \$3.2M.

**\$543,793** ESTIMATED ONLY**If summer traffic had all detoured (estimated)**

15,899 vehicles a day, from a proxy counter outside the close segment — no counter exists inside it. A ceiling: evacuations suppress travel and many trips are simply never made. The measured precedent is a 62% traffic collapse on this same highway during Elephant Hill in 2017.

**3 times in 7 years****This corridor's third failure in seven years**

The 2019 rock slide closed it hard for 9 days plus 22 at reduced capacity, affecting 76% of Penticton chamber members, with the commercial detour running +6 hours per round trip. A 2023 slide at the same site still carries \$23.2 M of stabilization work. Neither was ever costed.

**Fully reopen since Aug.16**

Highway 97 Closed 8 August at 1:25am, limited through-traffic from 14 August, now open both directions 24/7 with reduced speeds.

**-5% to -16%****What a nearby fire does to a surviving home's value (US RESEARCH · NO BC STUDY EXISTS YET)**

Montana: 13.7% lower within 5 km, 7.6% at 5–10 km, gone by about 10 km. Colorado: an unburned town two miles from its fire lost 15–16%, measured five years out — the closest studied case to Summerland's situation. **A home that can see the burn scar carries an extra discount that showed no recovery within seven years.**



UTILITIES

The fire ignited inside the watershed that supplies the town's drinking water.

Summerland's treatment plant was bypassed on 7 August while directly threatened, to preserve firefighting flows. The whole district's municipally-owned electrical utility went dark overnight on 8 August. Both failures landed on the same 6,177 households at once.



Boil Water Notice— for all of Summerland

Water status: Boil water notice In effect for all Summerland Water System users since 7–8 August and still in force on the morning of 19 August. The District has now put a timeline on it: CAO Graham Statt, on the record 18 August, said third-party source testing plus the District's own lab work goes to Interior Health for final assessment, and "that can take easily a week... and then for them to give a final assessment could be more than a week." Day 13 is not close to the end of this.



1 NIGHT ONE

Household-days without power, for the whole district: Entire district-owned utility went dark overnight on 8 August, with partial restoration the same day by 7:20pm and roughly 90% restored community-wide by 11 August. Burn-area lines are still out. Note for anyone checking status: **Summerland runs its own municipal electric utility**, so power information comes from www.summerland.ca, not BC Hydro.



13 DAYS AND COUNTING

Days on boil-water notice



172,250 PERSON-DAYS

Days on boil-water, everyone combined



\$1,378,000 CEILING

Water replacement cost

At the \$8 per person per day bottled-replacement rate. Households under a boil-water notice can boil water instead.



6,177 HOUSEHOLD DAYS

Days without power, all homes combined A household-day is one home without power for one day — 6,000 homes × 1 night. Power is counted per household rather than per person because a fridge, a freezer and a furnace serve the whole house at once. Fridge and freezer clocks started for all 6,000 simultaneously.

POWER OUTAGE COST

At \$76 per household per day. The separate \$3,088,500 spoiled food line under People is the consequence that outlasted the outage itself.

\$469,452



UTILITIES Additional watershed and landscape context

Higher, dirtier flows for about 6 years

Downstream water effects

Not hypothetical here. The fire ignited in the Trout Creek watershed that supplies Summerland, and the verified science says a burned watershed runs higher and dirtier for roughly **six years**.

Worst in year 1 · reduced but present for 3–5 years · full recovery takes decades

How long the elevated hazard lasts

The same analysis states it plainly: post-wildfire effects on hydrology are greatest in the first year and reduced, though not eliminated, over the following three to five years, while full hydrologic recovery does not occur until the forest recovers, which can take several decades. At year five the modeled 100-year flow was still about 21% above pre-fire. (Source: RDCO–Area Precedent)

+73% (Context: MCDUGALL CREEK, 2023)

Peak flow increase, first year after the fire

From the post-wildfire hazards analysis commissioned for the 2023 McDougall Creek fire in RDCO's own area. The 100-year flow at Bartley Road rose from 7.92 to 13.67 cubic metres per second in year one. A neighbouring catchment with less high-severity burn rose only 19%, so the increase tracks burn severity rather than area alone — which is why Bald Range's severity mapping matters. (Source: RDCO–Area Precedent)

Elevated landslide & debris flow risk above town and HW97

Soil stability on burned slopes

17% of the landslides in BC's November 2021 atmospheric-river disaster started on previously burned ground. The McDougall Creek analysis divided its burn into seven assessment areas and rated each catchment for debris flow, debris flood and peak flow hazard against the elements at risk below it. Garnet Valley and Cartwright slopes warrant the same treatment before the fall rains.

GENERATIONAL CLOCK A BABY EVACUATED THIS MONTH WILL BE THIS OLD WHEN...



5 YEARS OLD

...the berry patches produce again. Some medicines return fast; fireweed and berries are fire-adapted.



50 YEARS +

...the burned forest resembles what their parents knew.



100 YEARS +

...old-growth character returns.



ENVIRONMENT

 Forests filter the water a town drinks and holds its hillsides in place.

This burned in one of Canada's rarest living landscapes. A forest filters the water a town drinks and holds its hillsides in place; when it burns, communities pay for machines and repairs to do jobs the land was doing for free. But the south Okanagan is not ordinary ground — it carries more at-risk species than almost anywhere in the country, which is why losses here weigh more than hectares alone suggest. The land lens is a different accounting from the evacuation and structure figures, the cost to the more-than-human world is significant and deserves attention.

Every figure here is derived from the 21,256 ha burn perimeter — the separate landfill fire is not inside any of them.

~31,770,200 living trees have died so far



22,693

HECTARES, AND STILL GROWING

Area burned: BC Wildfire Service via Kelowna Capital News and RDCO, around 4pm on 12 August — up 648 ha during that day alone.



5,273,853

TONNES CO₂E

Carbon the land can no longer hold

At the Secwépemc-derived severe-burn figure of 232.4 t/ha. Burn-severity mapping is pending.



2,859,318

TONNES CO₂E

Carbon released by combustion

Roughly the equivalent CO₂ emissions of 580,000 cars driven for a year.



\$1,450,309,630

What that lost carbon costs society, at the federal damage price of \$325 per tonne.



\$3,622,484

PER YEAR

What the land did for free each year, now lost:

Water filtration, slope stability, flood absorption, air cooling, pollinator habitat, berries and medicines — valued at \$159.63 per hectare per year.



\$181,124,180

Ecosystem services lost until forest grows

ENVIRONMENTAL SUBTOTAL

A different lens from the social subtotal.

(Carbon costs, Federal Damage + Ecosystem services lost). Excludes the Landfill fire entirely.



+



=

\$1,631,433,810



ENVIRONMENTAL CONTEXT To Support the findings on the previous page

\$54,122,805

Standing timber, for context: At the mature-stand average of \$2,385 per hectare.

\$1,631,433,810

Land Costs, in Dollars: Never added to the evacuation or structure figures — a different lens on the same fire. Excludes the landfill fire entirely, along with watershed treatment costs and the sediment load in Trout Creek. This is a floor for the environmental lens.

\$58,774,870

Cost to replant the burned area, if actively restored (not reflected in the subtotal) 22,693 ha at roughly \$2,590 per hectare, or 1,400 trees per hectare. A restoration decision waiting at the end of this fire.

SUMMERLAND LANDFILL FIRE ANCHORED ON GLENMORE LANDFILL, KELOWNA, AUGUST 2023

For the sake of reporting, records treats this as a separate fire rather than part of the Bald Range perimeter, so it sits outside every hectare-based figure on this page — the carbon, ecosystem-service and timber lines all derive from the 18,450 ha burn and contain none of it. A burning landfill is its own emissions and contamination event. The scenario below prices it against the closest available precedent Burning, ~1.5 km from the water treatment plant.

The closest available precedent is one regional district over, and it is RDCO's own record: on 18 August 2023 wildfire burned into Kelowna's Glenmore Landfill. **That event is the basis for every figure below.** Summerland's landfill is a different size and configuration, so read these as the shape and order of magnitude of the bill, not as an estimate of Summerland's loss, or final figures on the environmental impact of Summerland's Landfill fire.

\$1,400,000 2023 DOLLARS

Precedent: total damage at Glenmore Approved by Kelowna council from its Reserve for Sanitary Landfill. Split roughly \$900,000 for gas wells, pipes and associated infrastructure, and \$500,000 to relocate and place burnt waste.

10 DAYS

Precedent: days the landfill was closed 18 to 28 August 2023, reopening in phases and household waste first. Neighbouring regional landfills temporarily absorbed Central Okanagan waste. Summerland's landfill sits inside the evacuation order area, so a comparable closure lands on a district that also cannot return home.

~1/3 OF GAS WELL HEADS

Precedent: landfill gas system lost

With significant damage along the west side. The system was left running at about 60% efficiency — which is the environmental line that matters here: a damaged gas collection system means methane that was being captured is instead escaping uncaptured, for as long as the repair takes.

up to 80% OF ELIGIBLE COSTS

Precedent: recoverable through Disaster Financial Assistance Kelowna applied to the province and was eligible for up to 80% — but staff time, hydroseeding and landscaping did not qualify. Kelowna's staff noted the work had to be done whether the province funded it or not.



ANIMALS

Roughly a quarter of a million birds' nesting forest, burned so far

These are estimates of habitat lost, not counts of animals killed.

Every figure here is a published density for this kind of forest multiplied by the area burned. **No one counted these animals, and no one will.** The numbers describe how many **animals' homes were inside the fire perimeter** — not how many died.

The documented toll of a fire like this is displacement, stress and lost forage, and animals are forced to move.

What this report could not count accurately is the many small animals that often fall under our societal perspective during these events: voles, shrews, bats, reptiles, amphibians and insects are named in the research but not counted at all. And the burned area is still growing, so all three will rise.



~190 Species

Bird species that nest in the south Okanagan: Almost half of every bird species that nests anywhere in Canada, and likely the most of any similar-sized area in the country. Among them, BC's white-headed woodpecker — **down to roughly 10 adults**, and nesting nowhere else in the province.



227,000–295,000

At 10–13 Birds per hectare

Birds whose nesting forest burned at the height of the nesting season



~138,000

Mice, Squirrels, Hares

Small mammals whose home burned



~244

Home Ranges

Large mammals whose home range burned



Sediment in the spawning gravel is the slow bill

Trout Creek's kokanee: The fire ignited in the community watershed, and the verified mechanism says each added point of fine sediment cuts egg survival odds by about 17%, for years. For comparison, Elephant Hill's single-river restoration cost \$2.6M.



ANIMALS & AGRICULTURE A district rapidly evacuated, in the middle of the harvest window.

What follows is what is actually on the record to date, plus the scale of what sits in the fire's path.



1,231 farms · \$229M annual revenue · 25.5% of all BC fruit acreage

What is at stake in this census division: Okanagan-Similkameen, 2021 Census of Agriculture, read at source: 7,166 ha of fruits, berries and nuts, and roughly 865 ha of vineyards in Summerland alone — evacuated inside the harvest window. One grower has reported \$300K of peaches spoiling on trees, and only 20% have been picked.



Not yet declared

AgriRecovery program status: The 2017, 2021 and 2023 precedents all came weeks to months after peak fire. If the pattern repeats, expect reimbursement at roughly 70% of cost.



\$325 so far

Boarding one cat: At \$25/day. Pet food and supplies appeared on every frontline needs list.



One of Canada's 4 most endangered natural landscapes

The valley's antelope-brush shrubland
Just 9% of it remains untouched — under 5,000 hectares in total, and over 60% of what is left sits on Osoyoos Indian Band land. This is the context the hectare figures above do not carry on their own.



Cattle losses on ranches

Documented losses so far: Livestock relocation is running through ALERT and the RDOS buddy-farm program. Cattle losses on ranches are still being assessed.



Bee colonies are a recognized, compensable loss

Pollinators: AgriRecovery has paid up to 70% to replace lost bee colonies in every BC program year — a tell that pollinator loss is real and material in a region holding a quarter of BC's fruit acreage. Wild-pollinator valuation is still in research.



\$624 so far

Boarding one dog: At the verified Kelowna rate of \$48/day. Not in the household box, since ownership varies — add per animal. ESS does not board pets, and most evacuation hotels refuse them.



30% OF BC'S RED LIST

BC's most at-risk species living in the south Okanagan Nearly a third of every red-listed species in the province lives in this valley, and **seven species are found here and nowhere else on Earth.** (Like Behr's Hairstreak Butterfly)



AGRICULTURE & THE VISITOR ECONOMY

Wildfire in the middle of the peak season.

Summerland earns twice from the same acre — and this August it lost both at once. A vineyard here is a farm **and** a tourist attraction occupying the same ground. The evacuation stopped the harvest and closed the tasting room in the same hour. This is an example of two distinct and significant losses for many businesses in the community.



\$229.2M

SUMMERLAND AS A PRODUCER

Annual farm revenue, Okanagan-Similkameen census division

1,231 farms; 7,166 ha of fruits, berries and nuts, which is 25.5% of all BC fruit acreage. Statistics Canada 2020 revenue via the BC Ministry of Agriculture's Ag-in-Brief. Revenue is earned in the harvest window, not spread evenly across the year.



\$545M

SUMMERLAND AS A DESTINATION

Annual direct visitor output, Penticton area

646,000 visitors, 3,630 direct jobs, \$273M GDP —InterVISTAS for Travel Penticton, year ended March 2024. Wineries alone account for \$81M of GDP and 540 jobs.



**25 Wineries
and Cideries**

Wineries and cideries inside the evacuation zone

Wine Growers BC. Bottleneck Drive lists 18 wineries, 3 cideries, a brewery and a distillery. A floor, because hotels, restaurants, attractions and guides sit on top. The Penticton chamber's Business Economic Impact.



\$1,816,475

Average of \$72,659/ea

What those businesses lose

From the only measured survey of its kind, Cariboo 2017. Statistically, this puts it at \$20,000 each. Mostly uninsured.



\$28,036,357

Penticton-area visitor spending stopped

\$545M a year in direct visitor output. July to September carries 36% of BC visitor-nights spread over 13 weeks.



\$4,766,181

LINGERING LOSS

The year after, if the region reopens cleanly 17% of first-year loss, the measured Kootenay Rockies expectation — and that is the gentle case. The 2023 Kelowna travel ban was still being cited as reputational drag by Tourism Kelowna's president in 2026.



AGRICULTURE & THE VISITOR ECONOMY Wildfire in the middle of the peak season.



**1,231 farms · \$229M
revenue · 25.5%
of all BC fruit acreage**

What is at stake for agriculture

Okanagan-Similkameen, 7,166 ha of fruits, berries and nuts — evacuated inside the harvest window.



**"No red wine
this year"**

What growers are saying this week

Lightning Rock. The vines themselves are at risk without irrigation access. A replanted vine takes four years to re-crop.



**36% OF BC
VISITOR-NIGHTS,
JUL-SEP**

Share of the year earned in the the "closed" window

A week lost here is worth several times a week lost in the shoulder season. 36% of all visitor nights in BC occur during this peak season.



**~\$15,100,000
lost tourism
dollars (so far)**

≈ \$2.16M PER DAY

One peak week of visitor output : An **August-week** costs more than any other week. A closure at peak does not just remove the days it covers — it ends the season early for businesses whose year is concentrated into a few weeks, and the demand does not reschedule.

August holidays do not move to October. On the producer side it runs harder still, because fruit has no rebooking option — an unpicked peach is a rotted crop, and a vine lost without irrigation is four vintages, not one.



**A physical closure,
and detour
Highway 97**

The highway closure

Bald Range cut Highway 97 physically, from Antlers Beach to Kickininee, forcing a 107–121 km detour against ~25 km of closed road.



**6 days of
cancellations**

The airport, flight cancellations

In 2026 the airport never closed, but smoke disabled instrument approaches and airlines canceled many flights over roughly six days. The 2026 passenger gap will become measurable when YLW's August numbers are published in September.



NOTES AND SOURCES

Official sources

RDOS Emergency Operations Centre; coemergency.ca (RDCO); RCMP release; news.gov.bc.ca; BC Wildfire Service. As well as 123 additional sources, ranging from news outlets to research publications.

Landfill precedent sources

Castanet and Vernon Matters for the Glenmore Landfill damage, cost, closure dates and Disaster Financial Assistance application.

News sources

Penticton Western News, Castanet, Kelowna Capital News, CHEK, Global BC and CBC. The Summerland boil-water and landfill-fire record comes from Penticton Western News. Air quality was sourced from BC's raw hourly feed.



(BC Wildfire Service)