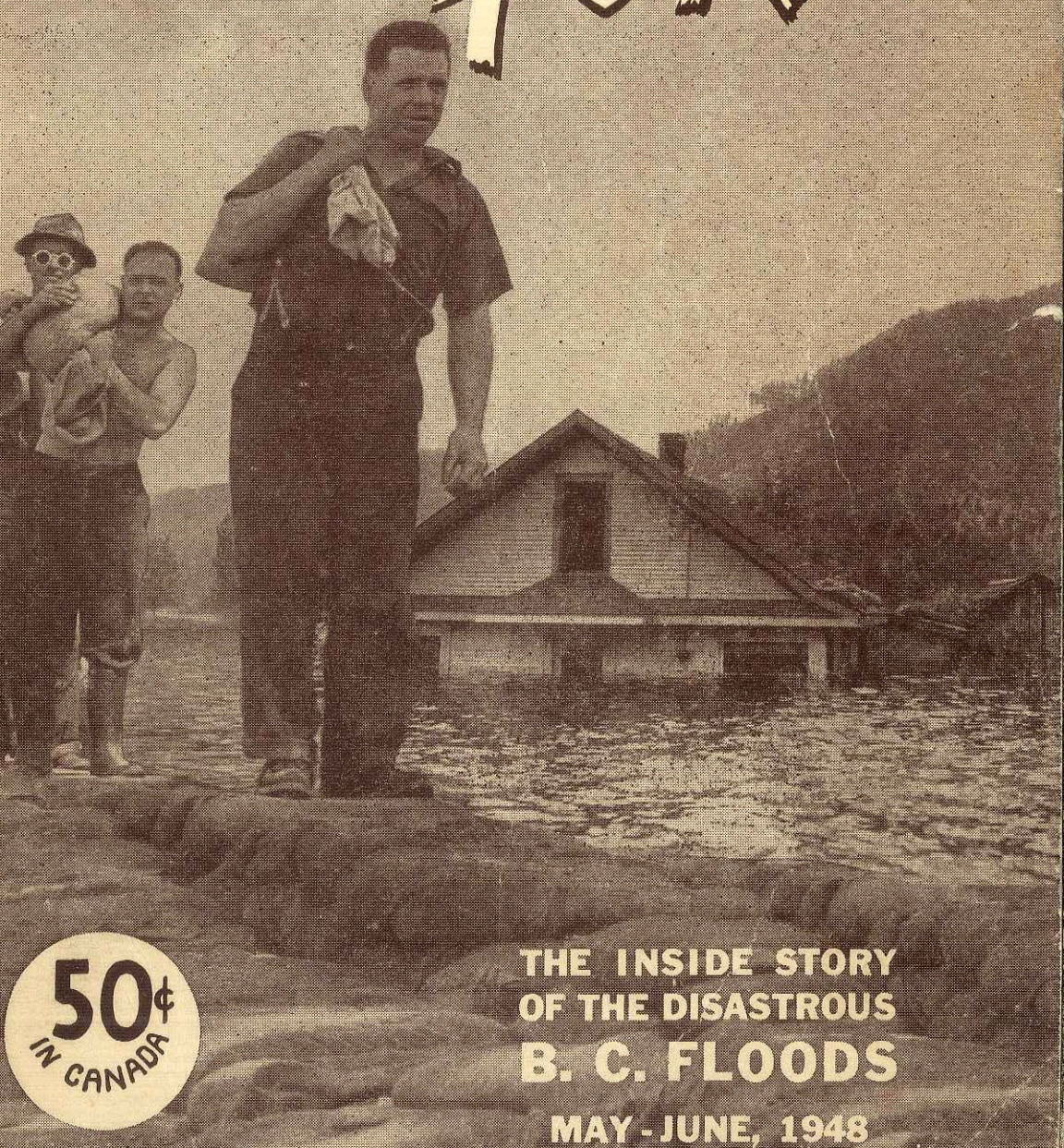


NATURE'S FURY



THE INSIDE STORY
OF THE DISASTROUS
B. C. FLOODS

MAY - JUNE, 1948

50¢
IN CANADA



NATURE'S FURY

The inside story of the disastrous British Columbia floods of 1948 which inundated thousands of acres of fertile farmland, left hundreds of persons homeless, and wrought ruin and devastation throughout the province.



COMPILED FROM THE WORKS OF NEWSPAPERMEN WHO SPENT ALMOST THREE WEEKS IN THE FRASER, COLUMBIA, KOOTENAY AND OKANAGAN VALLEYS TO BRING FIRST-HAND ACCOUNTS OF THE DISASTER TO THE PUBLIC.

THIS IS THEIR STORY

Aerial Photo of Fraser Valley from
15,000 feet, looking west from Sumas
to the Gulf of Georgia . . .

by Artray Ltd.

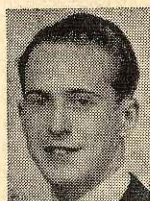
These Men Wrote NATURE'S FURY

o o o



ERIC SANDERSON—Editor of *Nature's Fury*. News Editor of the *Vancouver News-Herald*, who like other editors correlated information sent in by reporters on the scene of the flood to place an honest, factual story before the public. He made several trips into flooded areas to see the devastation.

STAN J. MONCRIEFF—Staff writer for the *Vancouver Daily Province*, who spent three weeks travelling between Agassiz and New Westminster to check and double check rumors prevalent during the disaster. His story of the desperate battle of Queensborough and Lulu Island is on Page 39.



BRUCE D. LEVETT—Telegraph editor for the *Vancouver News-Herald*, who made several trips into the field of action. When the dykes on Nicomen Island broke he almost drowned in an attempt to bring an eye-witness story to the outside world. His story of this disaster is on Page 21.

BILL GILL—*Vancouver Sun* reporter, who "covered" the floods in practically every area. He spent almost two weeks in Chilliwack area alone, obtaining many eye-witness accounts for his paper.



WO/1 DICK WOOLARD—who handled public relations for the Army during the crisis. By jeep he travelled throughout flooded areas, substantiating reports of Army operations, and kept the press informed of activities of the various regiments engaged.

TED SCHRADER and **DAVE BUCHAN**—*Vancouver Sun* writer and photographer, were among the first to arrive in Agassiz when disaster threatened. They were marooned there for over a week, to find while there the true spirit of the people of the Fraser Valley. Ted's story of Agassiz is on Page 17. Dave's outstanding photographs are very prominent throughout the book.





PAUL ST. PIERRE—*Vancouver Sun* staff writer, who lived in and around Matsqui for two weeks. His adventures took him into water 12 and 15 feet deep. In slack hours he helped the army signal unit. His story of the Matsqui tragedy is on page 34.

LIEUT. C. T. McNAIR, R.C.N.—Public relations officer who handled press releases from H.M.C.S. *Antigonish* headquarters for "Operation Overflow." In three weeks he travelled over the entire area to keep the public informed of the navy's part in the tragedy. His story appears on page 50.



NORM MICHIE—*Canadian Press* Staff Writer, who spent a week in and around flooded areas. He covered Kimberley, Pitt Meadows, Barnston Island and Queensborough. He was the only newspaperman on Barnston Island the night the dykes crumbled.

MURIEL EVISON—of the *Fraser Valley Record*, Mission, who kept the outside world posted on Mission's gallant fight against the Fraser. Her story of the battle is on page 48.



HAL MALONE—*Vancouver News-Herald* writer, who made several aerial flights over flooded areas. He was on the last plane to leave Kimberley when disaster struck there.

BRUCE RAMSEY—Librarian for the *Vancouver News-Herald*, who was sent into the field shortly after the first break. He made trips to Mission and lived aboard H.M.C.S. *Antigonish* for more than a week, relaying reports from naval craft deployed throughout stricken areas.



TOM HAZLITT—*Vancouver Daily Province* reporter, who spent more than two weeks in and around Matsqui, Mission, Ridgedale, Hope and Greendale with Photographer Don McLeod.

These Men Pictured Nature's Fury

o o o



AL KIPNES—Photo Editor of *Nature's Fury*. Photographer-reporter, who spent more than three weeks in the Fraser Valley for the *Vancouver News-Herald*. He travelled more than 3000 miles by car, train, plane and boat to picture and write about the disaster. Some of his pictures and his story of Hatzic appear in *Nature's Fury*.

ROY LE BLANC—of Croton Studios, New Westminster, who worked through the entire flood for the *Vancouver Province* and the *British Columbian*. He travelled hundreds of miles by car, boat and on foot to produce pictures of exceptional merit.



JOHN McINNES—*Vancouver Daily Province* photographer, whose exceptional pictures of Matsqui as well as other districts are a highlight of *NATURE'S FURY*. He waded through mud and water, slept in his car and went hungry in many cases to get his pictures.

CHARLIE WARNER—Staff photographer for the *Vancouver Sun*, who visited almost every area affected by the devastating floods. He spent much time between Chilliwack and Abbotsford, as well as making several flights to the interior.



A. J. (BERT) CLIFFORD—of Clifford Studios, Mission. He was on the scene when the Dewdney peninsula dykes went May 27. He covered Nicomen Island, Hatzic and Matsqui. His knowledge of the district was invaluable to army officials in reconnaissance work. On many occasions he left his camera behind to aid in rescue operations.

DON McLEOD—of *Vancouver Daily Province*, was assigned to the Matsqui area and later traversed all other flood districts in the Fraser Valley. His lens caught several unusual photographs which tell an "inside story" by themselves.



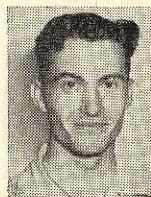


D. J. THORNDICK—Naval photographer, who with P.O. NORM KEZZIERE kept a constant flow of photographs on Naval Operations to newspapers across Canada. Their excellent photographs are in this book through the courtesy of the Royal Canadian Navy.



MICKIE JONES—Vancouver Sun Staff Photographer. He spent much of his time near Pitt Meadows and Barnston Island, and made several trips to Matsqui, Hatzic and Mission. His outstanding work is on several pages of this book.

GEORGE DIAK—Vancouver Sun photographer, who can't remember how many miles he covered, or how many sleepless nights he spent while picturing the floods. He was on Barnston Island when the dykes gave way. His photos are a feature of NATURE'S FURY.



ART JONES



TOM CHRISTOFFERSON



RAY MUNRO

ARTRAY LIMITED—Whose photographs of the flood were published in more than 50 daily newspapers across Canada. Munro flew an average of 16 hours a day to produce some of the best aerial photos of the floods. Jones and Christofferson covered hundreds of miles by land and water to produce an excellent pictorial story. More than 25 of their pictures appear in "NATURE'S FURY."

Cover by Ruth Wortman, Vancouver Engravers, from a photo by Roy Le Blanc, Croton Studios

PHOTOGRAPHIC LAYOUTS IN "NATURE'S FURY" BY AL. KIPNES

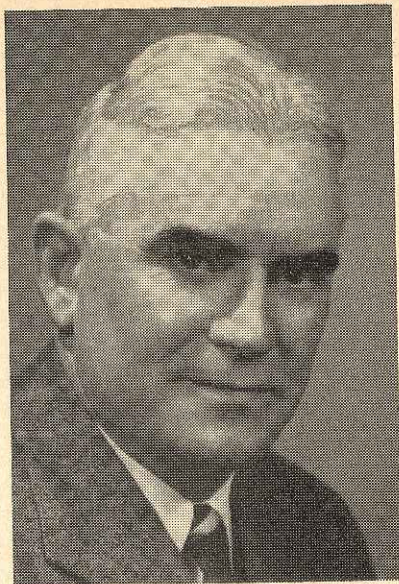


Any time there's trouble along commercial communication lines, the amateur radio operator is ready to lend a hand.

During the flood emergency every "ham" operator in the ravaged areas gave time and risked thousands of dollars worth of equipment to keep messages rolling.

Several young operators narrowly escaped with their lives as flood waters advanced over advance "stations" which they had set up to flash messages to flood control headquarters.

C.P. and C.N. Telegraph Company officials both said: "thanks" for a swell job. The "Hams" saved the day.



My Dear Mr. Sanderson:

I would like to take the opportunity afforded me by your very splendid publication of expressing my unbounded gratitude and sincere appreciation to all organizations and persons who played so valiant and unselfish a part in fighting the floods which befell not only the Fraser Valley but other parts of the province.

It is only natural, due to the concentrated damage, that the Fraser Valley floods should be regarded as a national disaster. Here we saw the private citizens, men, women and children, the Navy, the Army, the Air Force, the Canadian Red Cross Society, Municipal and Dyking authorities, emergency committees, hurriedly established, as well as the B.C. Flood Emergency Committee and the B.C. Flood Relief Fund Committee, all working to one end, namely, the mitigation of distress, the prevention of the loss of life and the endeavour to restrict damage to as small an area as possible.

This same spirit pervaded in all parts of the province which were stricken by floods. It was my personal experience to witness these people and organizations at work and I do not know when I have ever seen such an indomitable spirit as there existed on the flood front.

The unstinted thanks of the Government of British Columbia goes to all those who played a part in this battle whether it be large or small, spectacular or unnoticed.

Once again thanking you for this opportunity of expressing the appreciation of a grateful people to the courageous flood fighters, I am,

Yours faithfully,

Burton J. Johnson

Premier

FOREWORD



This is the story of a disaster—not confined to one locality but a national disaster which will show its mark for years to come.

It was written by daring newspapermen and photographers who spent more than three weeks in flooded areas gathering information for stories that alerted a nation.

The complete story of the dangers these men and women went through to bring the public an accurate description of the British Columbia floods of 1948, probably will never be known. All travelled hundreds of miles in untiring effort to bring back the news.

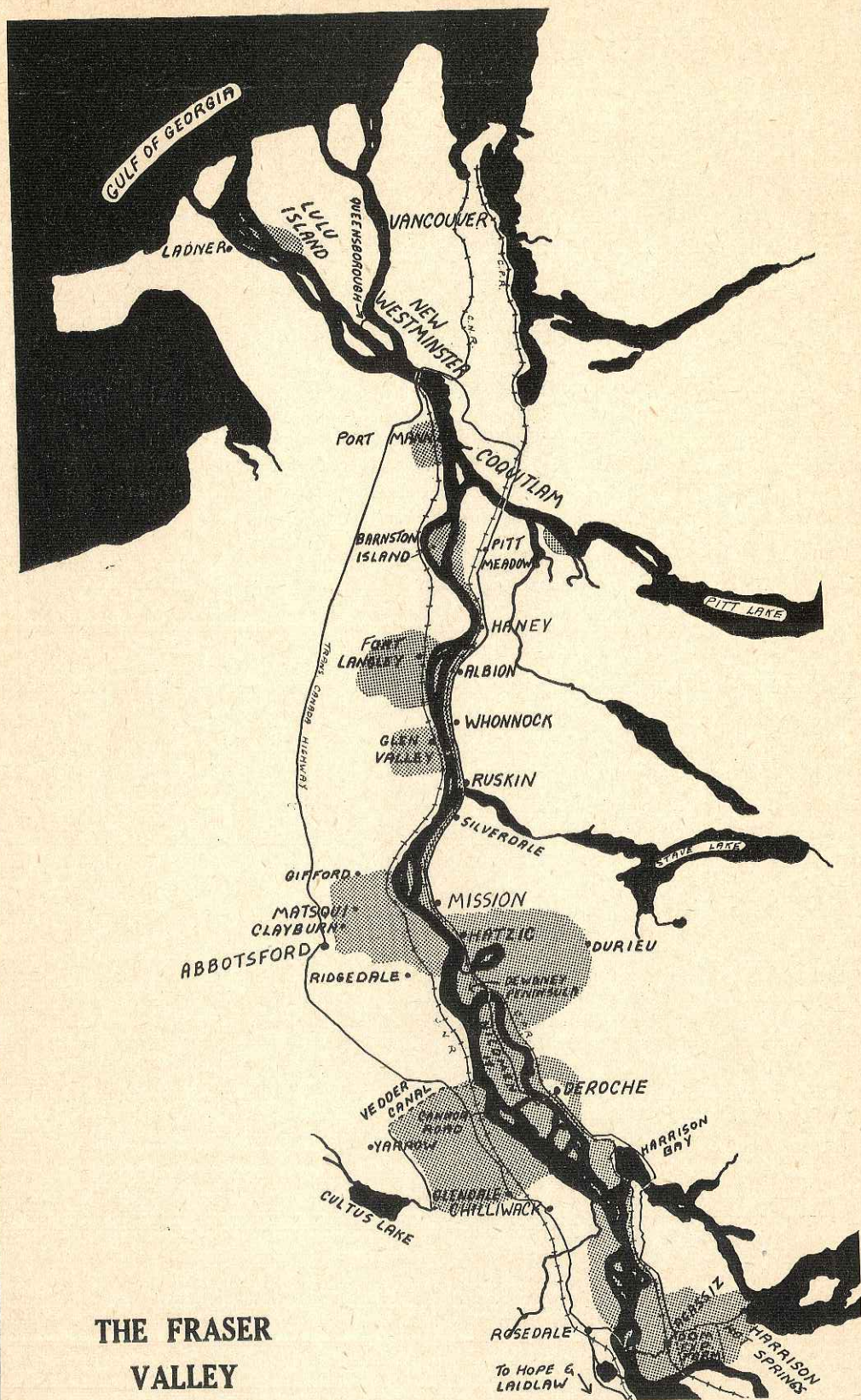
Although few did any material work toward protection of farmlands and strengthening of dykes, they worked hard and long to carry out their assignments. They wrote the story for a tense and waiting country.

Many went without sleep for days. A change of clothing was a rarity. Stories were transmitted by telephone, telegraph, bus, radio or whatever means were available. No transmission was guaranteed—yet these writers got the news through.

Pictures were transported by a dozen different methods, trucks, cars, planes—anything that would rush them to press.

In compiling this book the editors of NATURE'S FURY have taken every precaution to obtain correct information from the various flood areas.

Most of the pictures, the climax to a hundred dangers traversed by each photographer, are self-explanatory, they show NATURE'S FURY from every angle.



NATURE'S FURY

By **ERIC SANDERSON**

(Vancouver News-Herald)

British Columbia has survived one of the worst disasters in its 77-year history, thanks to the courage, the faith, the help and prayers of the nation.

The heroism of the people who battled the 1948 floods against the tremendous odds of elements beyond their control cannot be told in simple words, but citizens can take pride and inspiration from the example that was given by British Columbians in particular and Canadians in general in meeting the catastrophe that forced 16,000 persons to flee.

Even before the damage toll was reckoned the Federal and Provincial Governments formulated plans to restore broken dykes and ruined homes and crops.

The story of the thousands who faced the menace of flood waters ravaging many parts of the province, creating a national emergency, will long be remembered.

The "battle of the dykes" is a story of uncounted acts of mercy and kindness and succor to those in need. But, the story is not limited to individual acts of courage and heroism and good-will.

It is a story of a common humanity and sympathy, with help coming from the furthest reaches of Canada and many parts of the United States.

Outstanding is the co-operation of great corporations, business enterprises and governments. The extraordinary construction job by Canadian Pacific Railway engineers at Hatzic, replacing washed out bridges and railbeds, rivals some of the feats of the '80's when the Rocky Mountains yielded to man's ingenuity and engineering skill.

The Canadian National Railways had similar, if less spectacular, challenges to meet and met them well.

During the three weeks of the Fraser Valley flood, Trans-Canada Airlines made 272 flights to transport 8,000 passengers over the mountains. Canadian Pacific Airlines played an active part flying hundreds of C.P.R. passengers between Penticton, Calgary and Vancouver.

Provincial government, army and municipal road engineers made highways passable in record time so food and necessities could get through.

And, there is the amazing generosity evident in the B.C. Flood Emergency Fund, which more than doubled its original objective of \$1,000,000, and to which rich and poor alike contributed. Donations from industrial firms and large corporations included substantial gifts from Eastern Canada. All members of the flood fund committee, headed by Maj. Austin C. Taylor, donated their services.

The story of the great fight against torrential rivers began on May 24.

With more than 30,000 civilian volunteers, the Canadian navy, army and air force joined hand in hand with the "little people"—farmers, villagers and townsfolk who fought night and day to save what they could of their belongings.

The people of British Columbia took a holiday on May 24. It was the last day of a long week-end and the sun licked warmly over the thousands of acres of valuable farmland throughout the province.

But, it was that day that nature picked to go on a spree.

First warning of what was to become a national disaster came when tiny Bonaparte Creek began crowding the top of its banks where it joins Cache Creek on the junction of the Cariboo Road and the Trans-Canada Highway.

Only a few heard the warning.

But the entire country took heed when usually-quiet Mark Creek rose sharply, then burst its banks, blasting an avenue of destruction through the centre of the mining centre of Kimberley.

A blazing sun had been beating down on the peaks of the Rocky and Cascade Mountains, turning winter's snow into bubbling freshets and the bubbling freshets into roaring torrents.

Through the stunned province, rivers, without warning snaked out like whirlpashes over uncharted courses, carrying everything with them.

The plight of Kimberley became the plight of Grand Forks within a few hours as the Kettle River turned the main street there into a surging torrent, putting the entire town to flight.



Through debris and the racing stream of the flood-mad Fraser River, Naval craft plied their way. They were used in rescue of both cattle and residents, as well as to transport feed and milk. Above is one of the landing craft returning from Agassiz to Mission.—R.C.N. Photo.

From that time until the rivers reached their peaks, then dropped back within their banks a month later, the story became one of destruction and heartbreak; heroism and fear.

Little people—farmers, villagers, truck drivers—young and old, who asked no more of life than contentment and security, toiled like giants on the dykes. Thousands of city folk went to help.

Hundreds of Vancouver businessmen, service club members and employees, showed a sacrificing spirit of community service by spending their nights and spare hours on the dykes.

The threatened farmers were desperate, but they never let that desperation sap their courage and will to hold back the force tearing out the very roots of their existence.

At some points in the Fraser, Kootenay, Columbia and Okanagan Valleys the workers won their battle. Their fight is a tribute to their energy and belief in work. It was only their sustained efforts, co-operation and undaunted spirit that stopped the ferocious rivers from causing even greater damage and possible high loss of life.

Names of Fraser Valley towns, one after the other, were blazoned in headlines across Canada as they were struck by the uncontrollable river.

Agassiz was the first to suffer. Farmers attempted to bolster river banks, but by midnight, May 24, they saw it was useless and evacuation plans were made. That was the start of a mass movement of women and children through the lower mainland.

Before it was over an estimated 16,000 persons, including 3,800 children, were removed from their homes to evacuation centres or to stay with friends during the emergency.

The Fraser took little pity on Agassiz and citizens barely had time to get out. At that, almost 200 were billeted in a tent city at the graveyard—nestled on high ground on the outskirts of the town. Great herds of cattle also were driven to the cemetery.

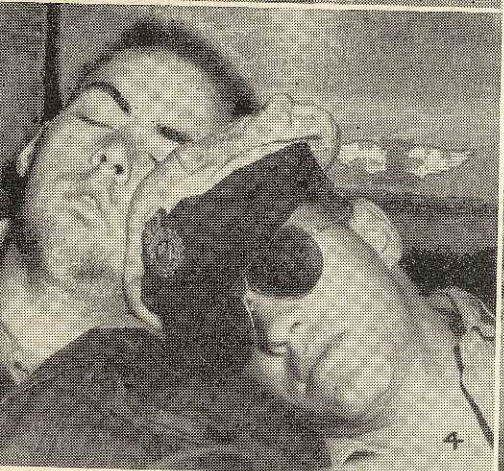
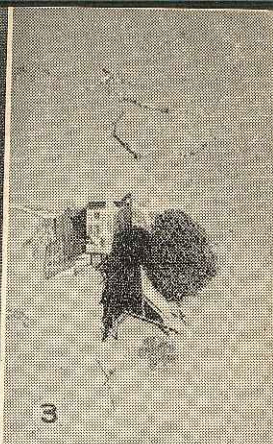
Agassiz became isolated from the outside world except by air, and food was parachuted to those stranded in the graveyard.

Every able-bodied man and boy joined the army of dyke workers to try to stop the river.

Citizens of Dewdney district and Nicomen Island were ordered from their homes on May 26 as the roaring Fraser breached Tremblay Dam. Soldiers were rushed from Chilliwack, the C.P.R. main line was cut at Harrison Mills and Hatzic Prairie farmers were warned that dykes there might go any minute.

Vancouver became isolated, except by plane, after the Agassiz floodwaters backed up to meet Harrison Lake, and later east-west train connections were cut off for two weeks when a 15-foot wall of water ripped through the C.P.R. main line double-track right-of-way at Hatzic Lake.

Premier Byron I. (Boss) Johnson arrived in Agassiz May 27 and spent some five days in the Fraser Valley before proceeding to Ottawa. He spoke with workers and farmers and saw at first hand the destruction being wrought.



1—Cars were stranded in Mission; 2—Evacuees from Nicomen Island; 3—Houses smashed at Dewdney; 4—Naval personnel worked to exhaustion at Sumas; 5—Berry crops were washed away; 6—Families were stranded at Agassiz; 7—Barnston Island was buried under water, sandbagging efforts were futile; 8—Pets were rescued from floating debris; 9—C.P.R. tracks at Sumas were sandbagged; 10—At Pitt Meadows the reserve army and later the permanent forces kept the dykes reinforced.

PICTURE CREDITS—1—McInnes; 2, 6—Le Blanc; 3, 7—Artray; 4, 9—Warner; 5—McLeod; 8—Diak; 10—Kipnes.

His observation wasn't wasted. He flew to Ottawa and back in less than a week to make a deal with the Federal Government.

"Boss" Johnson talked so persuasively, pleaded the case of the flood victims so well and earnestly, that he got Ottawa to pay 75 per cent of the cost of repairing the dykes. B.C. would pay the remainder.

Later the Fraser Valley Dyking Board—a joint Dominion-Provincial body—was set up to undertake the reconstruction of between 170 and 200 miles of dykes in the Fraser Valley.

The board was headed by J. B. Carswell. F. G. Goodspeed, chief engineer of the Dominion Public Works department, and Bruce Dixon, provincial dyke inspector, were other appointees. They were to be aided with advice of dyking experts from both Canada and the United States.

Premier Johnson announced that dyking work elsewhere would be treated independently of the Fraser Valley Dyking Board, since any work outside the valley was the responsibility of the province and not shared by the Dominion.

The same day that Premier Johnson toured the Fraser Valley, Dewdney was evacuated and Matsqui became the danger focal point.

And, while thousands joined in the battle of the dykes in the valley, interior B.C. towns in the Tulameen and Similkameen Valleys were being threatened.

The city of Trail was menaced by the roaring Columbia River and Creston took warning when the Kootenay rose daily.

Nicomen Island and Glen Valley were the next areas to go under water after Dewdney fell. Then Matsqui Prairie—an area of more than 16,000 square miles—became a lake.

It was at Matsqui that the telegraph first clicked out the news in 1871 that B.C. had joined Canada. Now, Matsqui needed Canada to help her back from her trouble.

On June 1, Chilliwack district was hit when 8,000 acres near Greendale were inundated. New districts were hit daily, causing millions of dollars damage.

So great became the threat that Premier Johnson ordered a state of emergency and called on Colonel (now Brigadier) T. E. D'O. Snow, army commander in B.C., to take over command in the flooded areas.

Reserve army men were called to duty and troops rushed to threatened areas.

The R.C.A.F. played its part transporting men and supplies and the navy commandeered a fleet of civilian craft to help evacuate flood victims and transport food and supplies to weary dyke workers.

Some 1,200 active army personnel also were called to duty—most of them being flown from prairie training centres. Over 1,400 reserve army men left jobs to help stem the river.

The Royal Canadian Navy had 55 power boats and innumerable small craft in its fleet. H.M.C.S. Antigonish was dispatched to New Westminster, where an operational base was established.

Among craft used to combat the river were harbor tugs, fish boats, whalers, assault landing craft, crash boats and motor cutters. Over 100 former naval officers and 750 navy personnel were engaged in "Operation Overflow."

B.C.'s battle to rescue some of its richest and most valuable farmlands was in full swing.

The entire facilities of radio station CHWK in Chilliwack were turned over to an Emergency Flood Control committee set up to direct operations. An auto was equipped with short wave equipment to patrol dykes and reported all leaks and breaks. Working 24 hours a day, the station kept the public constantly informed of developments.

In New Westminster, CKNW officials made a similar move and army authorities set up headquarters in the studio. Announcers and news room employees worked double shifts to broadcast flood bulletins.

Radio station CJOR in Vancouver, which usually closes at midnight, lent a welcome hand by staying on the air 24 hours a day for 10 crucial days, broadcasting warnings and appeals. Its staff also went into the "field" to obtain dozens of first-hand stories for listeners.

Throughout the stricken districts, Boards of Trade and Chamber of Commerce jumped into the battle, helping to organize transportation for dyke workers and obtain volunteers.

In all more than 1200 trucks took part in the fight, 40 per cent of them

donated by drivers—members of the Truckers and Teamsters Union (AFL) and owners.

Other firms put steam shovels and bulldozers at the disposal of flood control committees.

Red Cross workers were everywhere and before the crisis passed some 7,500 women and men, Red Cross volunteers, helped feed dyke workers, manned hostels, motor transport field kitchens, three emergency hospitals and distributed food to evacuee centres.

And, as embattled British Columbia clung to gains made against flood waters, Premier Johnson called a special session of the legislature so rank and file representatives of the people could give the government authority to spend money to rehabilitate the flood victims and ratify financial agreements with Ottawa.

At a brief session—July 7 and 8—Premier Johnson was congratulated for his success in obtaining “a good deal” with the Federal Government and received the go-ahead signal to proceed with measures proposed by his government.

Under the Dominion-Provincial arrangements:

The Dominion agreed to share 75 per cent of the cost of emergency measures and protection of the dykes in the Fraser Valley. The Provincial Government to bear 25 per cent of the cost.

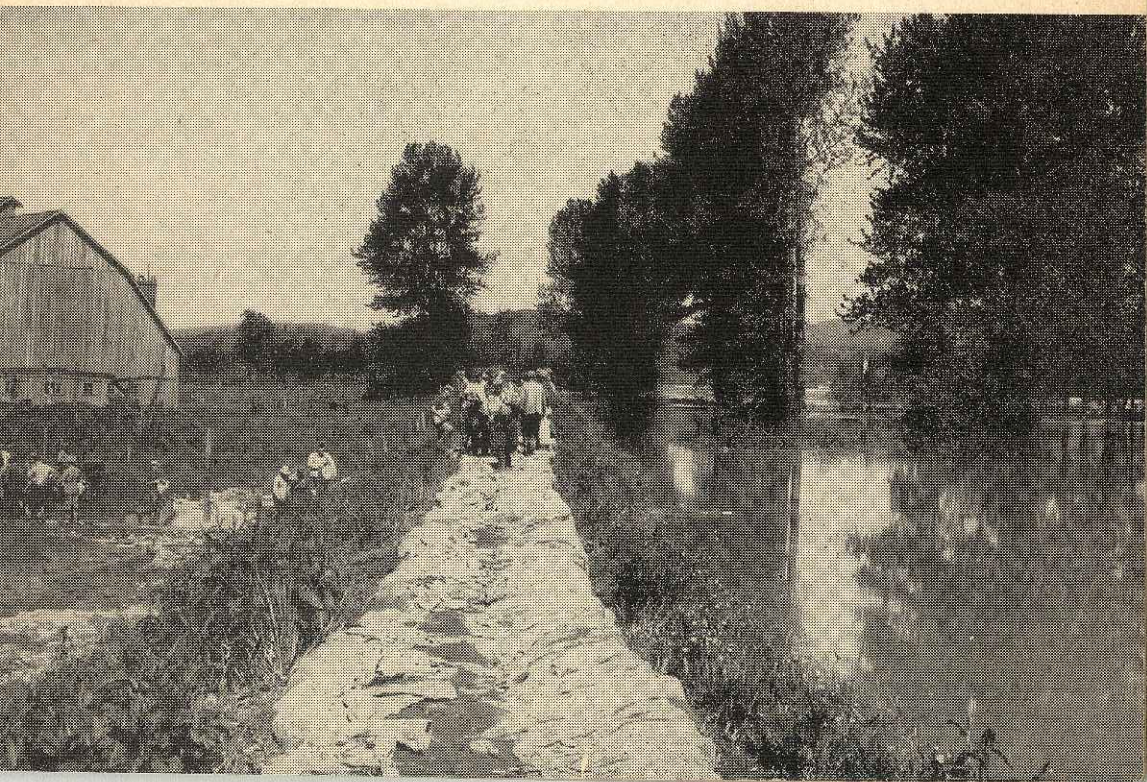
The Dominion to pay 75 per cent of the cost of removing water and debris from flooded areas, repairing, constructing and complete reconstruction of the dykes in the Fraser Valley.

The Dominion Government made an outright grant of \$5,000,000 to assist the Provincial Government in its rehabilitation program and the cost of providing temporary relief such as providing livestock with feed.

The B.C. Government assumed full responsibility for immediate relief and assisting in the general rehabilitation of homes, farm buildings and damage sustained by provincial and municipal property.

Administration of the Flood Emergency Fund, which more than doubled its objective was taken over by the Red Cross. This money was used to provide personal belongings lost in the flood and for the purpose of replacing or repairing essential household furnishings, food and other necessities urgently needed.

Scenes like this one taken by Sun Photographer Charlie Warner at Sumas were familiar sights throughout endangered areas. Thousands of volunteers and millions of sandbags were thrown into the battle against the rampaging river.





This unusual photograph, taken by Sun Photographer Mickie Jones, is a striking example of the way cattle and horses were stranded in the rushing floodwaters. It was taken on Barnston Island the morning after the dykes gave way.

While the Fraser Valley Dyking Board was appointed to direct dyking work, Premier Johnson appointed W. L. Macken and Col. D'Arcy Baldwin, who did outstanding work in connection with flood fighting in the Chilliwack area, as a two-man Provincial Commission to supervise rehabilitation work.

They were given authority to expend such sums as were required to assist owners of property in efforts to rehabilitate their homes and farm buildings.

Various estimates have been made of the cost of the flood, but none could show value in dollars of crop losses and years of hard work put into the thousands of farms inundated throughout the province.

Unofficial figures placed total cost of repairing flood damage, rebuilding of dykes and combatting the river in the Fraser Valley alone at \$13,000,000. Loss of crops, furniture and personal belongings was not included in the total.

So as the waters receded, "ghost towns" of the Fraser Valley slowly returned to life once more. Water surrounding some places, however, was expected to remain until autumn.

No families, however, were permitted to return to their homes until all structures had been inspected by health authorities. This task had been undertaken by Health Minister George S. Pearson's department to prevent spread of disease or sickness.

Premier Johnson had divided the flood relief task into four phases. Agriculture Minister Frank Putnam took over the problem of providing feed to livestock both for immediate use and the 1949 winter's supply.

Municipal Affairs Minister R. C. MacDonald, was instructed to restore houses and buildings on inundated land as nearly as possible to their former condition, to get people back into the homes.

Lands Minister E. T. Kenney made a survey of the entire flood areas and appointed Bruce Dixon, dyking commissioner, as director of operations in repairing dykes, pumping water from flooded land, removing debris and complete reconstruction of the dyking system.

The road back was a road of misery for many of the evacuees. They returned to find stoves rusted, kitchen cupboards warped and twisted, floors warped, carpets ruined, walls stained and soaked and bedroom suites a total loss. Water-soaked furniture crumbled in many instances at the touch of a finger.

Around many homes, once gleaming white and neat, lay silent, stagnant water.

But the water that curdled against bridge pilings, barns and other structures or cascaded on ridges of land during the emergency was receding.

In its stead was ruin and devastation.

Barnston Island

Barnston Island lies in the Fraser River directly opposite Pitt Meadows. It's night lights wink over the always rapid water.

It's a tiny island, about $2\frac{3}{4}$ miles long and $1\frac{1}{2}$ miles wide. On it about 320 people raised sheep, cattle, tended vegetable crops, fished and lived quiet, contented lives.

In shape, Barnston resembles an inverted sun helmet, with the bulge or crown facing south. The Fraser River splits on its eastmost point and flows around it in two narrow arms.

On May 30 the west end became badly flooded as a result of the high river. A highway on a fairly substantial looking dyke separated the small flooded area from the remainder. Threat of a general flood over the whole island lurked hourly and farmers as a precaution herded their cattle to the mainland. Most wives and children also left to stay with friends elsewhere. The army and navy came to help farmers reinforce dykes. The servicemen did most of the flood work.

The troops concentrated on the dyke at the east end, which bore the brunt of the river's attack. They raised it and thickened it. But on June 3, the blow fell.

Evading the concentrated east-point defences, the cagey Fraser River churned through the dyke to the northeast.

The muddy water spread slowly over the island, marching for 17 hours over the possessions and life savings of farmers.

The army, under Col. John Toogood, issued the abandonment order about midnight, saw the few remaining civilians carried off to nearby Port Kells, and turned to the saving of equipment.

There was no hurry and no confusion. It was as though someone had pulled a plug and the island was slowly settling down into the river.

General opinion in the last stages of the dyke battle was that the situation was hopeless. But old John Barnsley, caustic survivor of the 1894 flood, didn't fall in with the majority.

"We licked her in '94," he said, "and we'll lick her again." He refused to allow his sheep to be moved until the last minute.

"Contented" might well be the title of this striking photo by Roy Le Blanc, taken on Nicomen Island, the day before the dykes broke. Cattle were standing in water which had seeped through the dykes.





AGASSIZ

1—Agassiz graveyard; 2—The last train; 3—Business as usual; 4—The school-house; 5—The first morning; 6—Dynamiting dykes to relieve pressure; 7—Inundated hop yards; 8—Main street of Agassiz; 9—Harrison Hot Springs; 10—The second day; 11—Evacuation by boat.

PICTURE CREDITS—1, 2, 10, 11,—Artray Ltd.; 3, 4—Roy Le Blanc; 5—Charlie Warner; 6, 7, 8, 9—Dave Buchan.

Agassiz

By **TED SCHRADER**
(Vancouver Sun)

Agassiz was a little-known farming community of 2,000 people, living on a peninsula of land where the Fraser River describes an elbow, 80 miles from Vancouver.

The people had paid \$200 to \$300 per acre for their small farms. Their bright homes, clean barnyards and healthy Guernsey herds were a tribute to their industry. They worked hard and long, and local option kept beer parlors out of Agassiz. They wanted it that way.

They watched the Fraser River rise this spring, but the rise disturbed few people. In 1946 the army had sandbagged the river, and farmers felt safe.

They felt safe until midnight, May 24. The adult population was celebrating the Monday holiday in the Memorial Hall. The small orchestra was playing a supper waltz. A policeman appeared at the doorway.

Quietly, without being noticed, men began to disappear. Soon all youths and men were gone. They left to raise the banks of the Fraser.

They worked all night and all day Tuesday. That was the first night's sleep they lost. They didn't realize that few people would snatch any sleep during the next six nights and days.

Still, nobody was disturbed. The danger point gauge disappeared Tuesday morning, and the last reading was 20 feet. But sandbags could stop it, they thought.

"I waited three hours for the Agassiz-Rosedale ferry today," Bob Little remarked. He didn't realize that within a day it would be impossible to drive within five miles of the ferry slip. (Ferry service was cut until the first week in July).

There was no rush of water. There was no blitz. The flood crept up the roads like twilight slipping into night—slowly, relentlessly, and with terrifying finality.

There was Pete McColley's 120-acre farm. It was dry. Two hours later, only seven acres of his farm was left. Thomas Neilsen said: "I'm going to stick it out." Several hours later Neilsen's farm was gone. Ivan Walker moved his nine children and 20 head of cattle. Soon his farm had disappeared.

Agassiz people watched green trees being swept down the river. They noticed 270 acres of the Indian reservation, on a point of land, getting soaked. All of this was three miles from town. They thought heightened banks would prevent any rush of water.

Then everything happened at once. At 2 a.m. Wednesday, May 26, water, which had been sneaking up roads, swirled across farms and roared into sloughs. Urgency gripped the tiny community.

Steve Mahyr moved his stock and family into the hayloft, and Mary Mahyr was rushed to Mission hospital where she gave birth to a four-pound premature boy. F. J. Heal, a Devon, England, farmer who had started farming 45 acres at Agassiz a week before, drove his 30 head of cattle before him. Friends rushed to the Doherty farm to save chickens. Bawling cattle, crying as pathetically as neglected children, lumbered to higher land.

Harry Bouchard herded cattle in a rowboat . . .

"Nothing can be done," said Reeve George McCullough, who celebrated his 65th birthday May 24—the day the fight started. Although exhausted from marshalling his civilian forces, he worked on without outside help.

The first help arrived on Sunday, May 30, when the flood was beyond control. Nor did dyke workers find any relief from hot coffee until Mrs. Jim McKinnon went out on her own, in the pitch darkness of 3 a.m., and brewed black coffee on her own gas stove. She worked without rest for hours on end.

The fight was useless, but not hopeless.

"You have to have hope," said Evan Jones, provincial public works engineer from New Westminster, who was helping.

Sideroads hummed with the emergency. Patrols prevented unnecessary driving. Cattle clogged roads and wagons loaded with household possessions piled high resembled war's evacuation of European refugees.

The Valley's unique refugee camp was established May 29.

Highest point of land in the district was Mount View Cemetery, about three miles west of town. Farmers drove their cars there and 185 fugitives from the Agassiz flood moved in. Cattle grazed among tombstones and children played in the sun-drenched graveyard.

Before they went in, they arranged with Pilot Ron Wells that a sheet flapping in the wind would mean they needed food. Two sheets would mean they needed clothes and bedding. Three sheets were for medical supplies. The refugees were cut off from the outside May 29, but they didn't fly their sheets.

A few days after being isolated, B.C. Telephone Company linemen poked through the deep water to string an emergency line into the camp. And Dr. William Craig, whose foresight was as good as anybody's, joined the marooned colony and kept it free from disease.

The cemetery population consisted of 50 women, 25 children ranging from infants of three weeks to youths, and 110 men. There were 750 head of cattle.

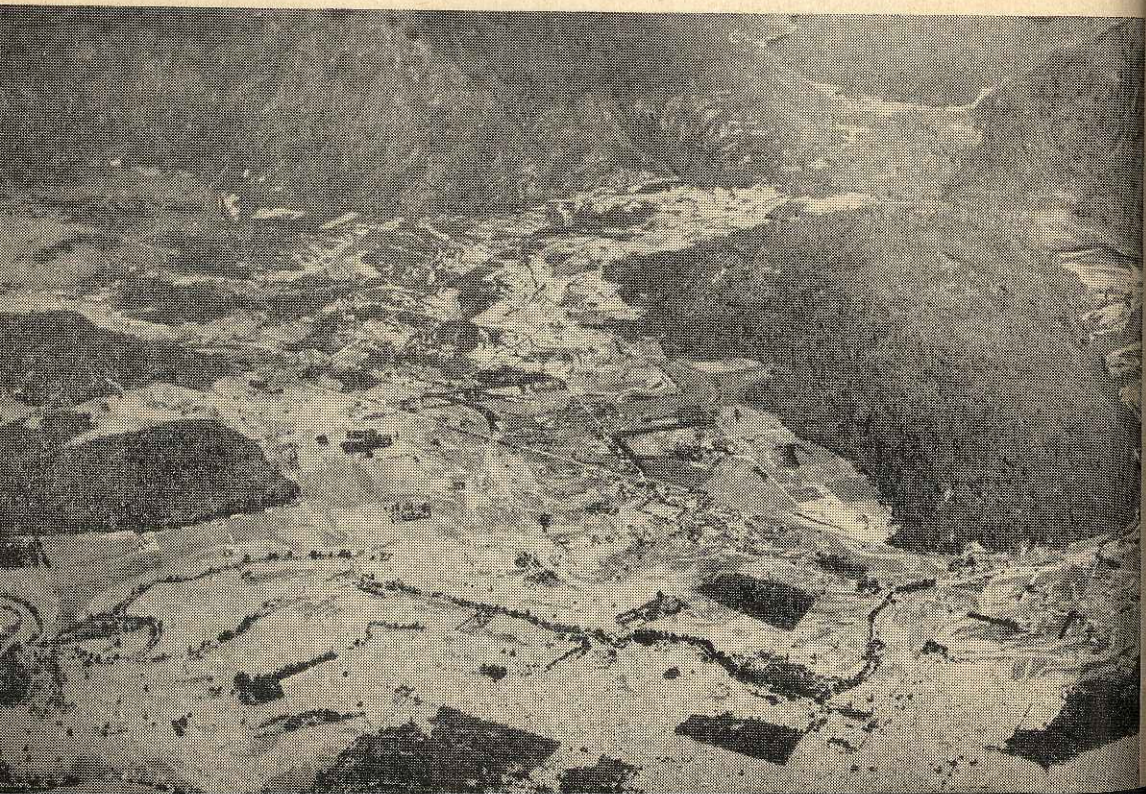
The local branch of the Red Cross rose to the emergency under Mrs. W. A. Jones, helped obtain blankets and served hot meals. Arrangements were made with the Vancouver Red Cross to handle 100 Agassiz refugees.

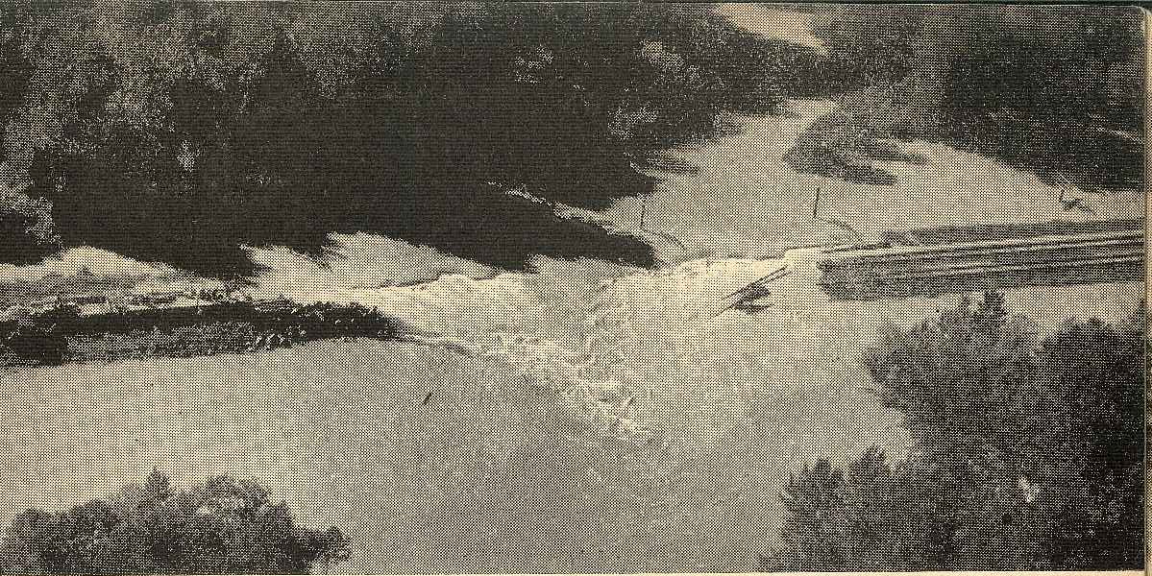
So quick did the water rise that by 5 a.m. May 27, it was waist deep on the school grounds, in the centre of town. That day it began to rain, adding to the discomfort of the evacuees. Stories buzzed through town that people were still living in the flood-consumed district.

Boat after boat scoured the farming area and dozens of people were brought to safety. W. H. Hicks, superintendent of the experimental farm, which by some fluke never completely flooded, was named evacuation officer. People doubled up in homes, and about 250 refugees bought tickets on an evacuation train to flee the threatened town.

It took hours to put telephone calls through to Vancouver, and then messages were clipped brief. Telegraphs were jammed. Power went off at uncomfortable intervals.

For the first time in history, the Fraser River flowed into Harrison Lake. After the break at Agassiz, the water backed up, covering thousands of acres. The lake overflowed its banks and the two waters met. Only area left dry was the Dominion Government Experimental Farm and the Agassiz graveyard.
—Artray Photo.





Rushing water between Agassiz and Harrison Mills undermined the railroad bed and severed rail connections. Evacuees had to reach Harrison Mills by whatever transportation was available to board trains to Vancouver. Later the break at Hatzic cut off all connections for two weeks.—Artray Photo.

Merchants opened their doors wide. Murky, coffee-colored water swirled in back doors and out the front. T. Onions couldn't get across from Chilliwack to open the Agassiz bank. Bank doors, too, were opened but no money flowed out.

Fire destroyed the Building Supply in Agassiz at 7 a.m., May 29. Flood water oozed around the \$5000 structure but there was no water to fight the fire. The building burned to the water level.

The second flood birth was recorded at 4:30 p.m., May 30. A 9½-pound Indian boy was born in the Agassiz railway depot.

As water swirled to the mountain barriers and moved through a dale to Harrison Lake, more people were evacuated. School buses hustled invalids, elderly women and children to boats at Paul Raake's wharf. Col. Andrew Naismith ordered them rushed to Harrison Mills and on to Vancouver. On Sunday airplanes filled the sky with a ceaseless drone, shuttling back and forth with fleeing passengers.

Agassiz was cut off completely at 5 a.m. Sunday, May 30. Roads to Harrison Lake closed in. And gradually a large brown stain appeared on Harrison's blue lake, five miles from Agassiz and about 10 miles from the original Fraser channel. At noon, the stain had become a rushing flow of water as the Fraser joined Harrison Lake.

Water was three feet deep on the main street at Harrison. Harrison Hot Springs Hotel employees rowed boats in the back door to salvage goods in the basement. The 18 guests at the hotel dwindled to two newspapermen.

A ferry service was installed by the Navy.

Naval craft punched through trees to carry feed to cattle. Navy reservists helped milk cows.

Many of them went 120 hours without seeing a bed. Fatigue, combined with a flood-inspired esprit de corps, promoted what came to be known as "flood happy" people. The most inane remark would launch laughter.

They laughed when some wag doctored up a sign at the lush, but soaked, Harrison Hot Springs Hotel gardens. "No vehicles or bicycles allowed," the sign said, and the wit added: "Or boats." That stopped nobody. They rowed through the gardens anyway.

Morale was always high and everyone helped.

One woman commented: "If everyone could go through a flood and learn the true neighborliness we have found, there would be no more wars."



This is what Nicomen Island looked like the morning of May 29—12 hours after the dykes broke. Residents who had refused to evacuate their homes had to be evacuated by boat. Cattle were stranded on knolls. Houses were inundated to the eaves. The Lougheed Highway, which runs the length of the island, was washed out. Army and Navy personnel worked for days to evacuate the island.—Artray photo.

Nicomen Island

By **BRUCE D. LEVETT**

(Vancouver News-Herald)

Sixty-five miles east of Vancouver was a tiny island surrounded on one side by a quiet slough and on the other by the Fraser River.

Nicomen Island isn't more than seven miles long and two miles wide and to the 100 families who lived there it had everything.

Spotlessly-white barns gleamed in the sun and fat herds of dairy cattle lolled in the neatly-fenced pasture land.

On either side, rolling hills rose to frame a picture of pastoral calm.

On the night of May 28, the picture vanished into the filthy, brown waters of a rampaging river.

When the Fraser began its relentless climb toward the tops of its banks, anxious farmers turned worried eyes toward the southeast corner of the island.

Here a small mud retaining wall on the boundary of Farmer Tremblay's property kept the full force of the river from smashing against the main dyke, which was all that kept the Fraser from joining the slough on the north side of Nicomen.

The battle began in earnest on the morning of May 27, when workers strengthening the top of Tremblay dam noticed a spot where the water had eaten a tiny gap.

The gap widened despite the dirt and sandbags piled into it, and by late afternoon—when the call for help went out to the army—the roaring torrent was pouring through a 30-foot breach.

The tiny island became a battleground as jeeps and dispatch riders churned over country paths previously traversed only by farm trucks and livestock.

Huge trucks loaded with pontoon boats, an amphibious "duck," truckloads of sandbags, an ambulance and radio trucks poured through the main street of Dewdney, the roadside community near the bridge to the west end of the island.

Fifty soldiers—sappers, paratroops and artillerymen—arrived with the trucks at midnight and were rushed to the dam without taking time to eat.

All night, they and the civilian workers toiled together, filling, passing and packing sandbags while standing ankle-deep in mud.

Behind them during the night the Fraser burst its banks at the west end of Nicomen, flooding the main street of Dewdney to a depth of four feet and stalling all traffic.

Morning showed the gap a little wider and seepage had developed in the main dyke.

The only road out to the danger spot was a dirt path over the top of the main dyke. Heavy-duty army tires soon turned it into an axle-deep morass and drivers took their lives in their hands every time they trucked a load of sandbags over it.

As the day wore on, sandbag-loaded trucks travelling over the dyke-top road became slower and when it became apparent that the fight was lost, the army was pulled out for duty elsewhere.

The civilians were advised to leave their homes and find shelter with the Red Cross at Mission, six miles west of Nicomen Island.

But they stayed and the farmers continued the battle alone until nightfall when it would have been suicide to try to take a truck over the crumbling road.

And that night the main dyke burst.



It was at this spot where the dykes on Nicomen Island broke at 9:30 p.m., May 28. News-Herald Photographer Al. Kipnes caught this picture of desperate sandbagging attempts earlier that day.

Young Lindsay McCormick, daughter of one of the farmers, was working on the dyke when it happened. "All of a sudden a tree 60 feet high shot into the air like a bomb had been exploded under it," she said.

"The water came through with a roar like a yard full of freight trains."

News of the peril arrived at Mission in a small, wildly-careening old model coupe.

The car—equipped with a public address system—drove down the main street with the loudspeaker blaring, asking for workers and men with trucks to rush to the island and help rescue the families which had refused to leave their homes.

Men poured from cafes and hotels—from houses and Red Cross hostels. Some gave up their first chance of sleep in days as they climbed aboard the grim cavalcade racing eastward.

Like one long truck, 100 vehicles of all ages and types wound over the twisting, torturous six miles to Dewdney.

Here they stopped. The four feet of water covering the only approach to Nicomen Island was too deep for even the highest-bodies truck to ford.

Rain, which had been drizzling all day, began to fall in torrents.

But a nearby lumber yard saved the situation.

The trucks were chained together in fours and two huge lumber carriers—their motors high on the front of their grotesque bodies—towed them through the flooded town to high ground on Nicomen Island.

On each trip back through Dewdney for another four trucks, each lumber carrier towed cars and ancient farm trucks loaded with refugees and household goods.

Once on the island, several of the trucks drove to where a Royal Canadian Navy river craft was moored. Sailors strained with large whalers, lifting them aboard open-deck trucks and piling on after them.

These courageous drivers then drove their trucks into the advancing flood waters until it was deep enough to launch the whalers or until their motors stalled.

One newspaper photographer was walking along the Loughheed Highway, the main road, when the flood reached him. In the time it took to focus his camera on the muddy tide, the water was up to his knees. It had reached his waist by the time he climbed into a stalled truck to await rescue.

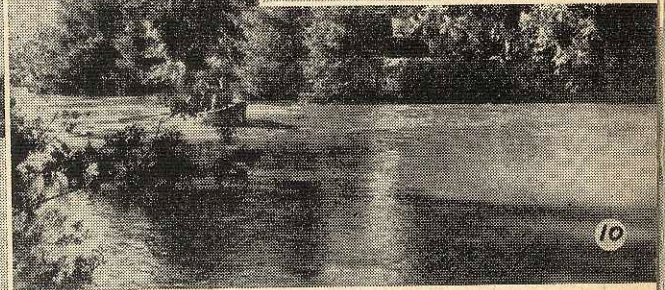
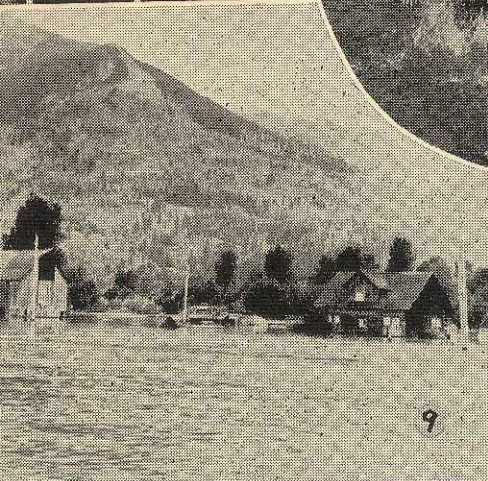
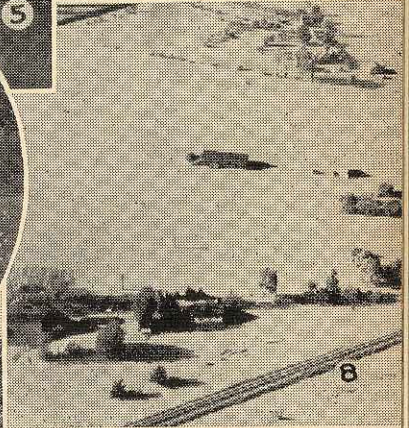
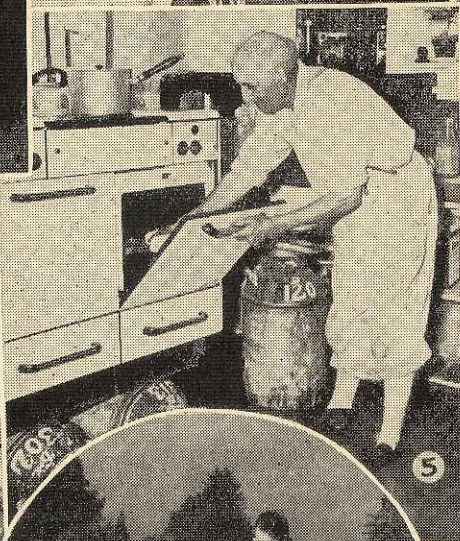
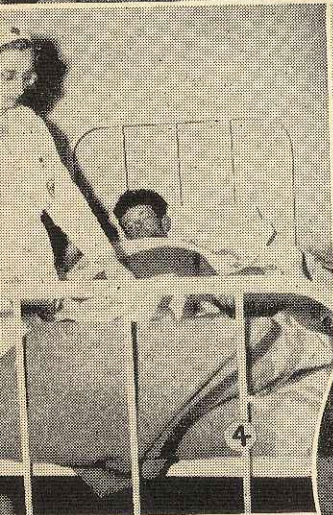
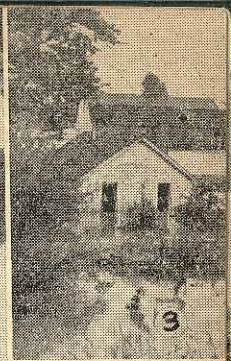
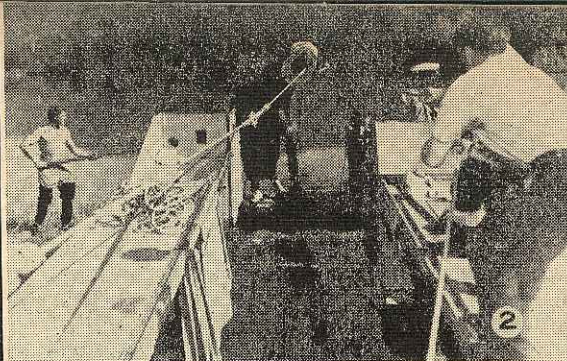
Meanwhile, large trees were uprooted, houses toppled over and hundreds of cattle drowned or were shot by their owners.

That night, 350 persons, ranging in age from a five-week-old baby to a 90 year-old grandfather who was carried in by soldiers, poured into Red Cross hostels.

The Loyal Order of Orange Hall, a former Japanese temple, and the armories at Mission, all were requisitioned to take care of them.

But the miracle of the entire operation was that no human lives were lost.

The next morning, only the tops of trees and the rooftops of some of the taller barns were visible.



1—Exhausted children slept anywhere they could; 2—Horses and cattle had to be rescued from small knolls; 3—At Dewdney, houses and berry fields were ruined; 4—The Red Cross cared for the sick and injured; 5—In Ridgedale, furniture was propped up off the floor; 6—The Lougheed Highway to Nicomen Island was washed out at Dewdney; 7—Children swam in shallow water; 8—Matsqui, eight hours after the break at Gifford; 9—Farms at Deroche were inundated; 10—Here too, rescue had to be made by boat.

PICTURE CREDITS—1—M. Jones; —Kipnes; 3, 9—Clifford; 4—McInnes; 5, 10—McLeod; 6—R.C.N.; 7—Croton; 8—Dave's Photo.

Chilliwack

By **BILL GILL**
(Vancouver Sun)

The Flood of '48 has passed into history but wherever the people of the Fraser Valley gather the legend of Chilliwack's iron men and mud dykes is told and retold.

The story, stripped of all the drama which personal contact can give it, is simple.

Throughout the long holiday week-end of May 24th the waters of the Fraser were rising steadily, but only a few thought any real danger lay ahead.

The Chilliwack dyke defences lie outside the Provincial dyking system, and until May 24 nothing was done to strengthen them. That week-end a group of men in Rosedale, seven miles east of Chilliwack, realized the danger and on their own began to raise the dykes.

They pressed their own trucks into service, turned a 10-acre pasture into a gravel pit and formed the nucleus of an army of 3,500 men. The group saved Chilliwack and much of the surrounding district from complete inundation.

The waters continued to rise and it was soon apparent that the Rosedale effort alone could not hold back the Fraser.

In the usually busy city of Chilliwack all normal business stopped. Rumors of evacuation and broken dykes spread rapidly. A large portion of the city's population left, and behind them from the welter of confusion arose an Emergency Flood Control Committee.

Under D'Arcy J. Baldwin, the committee was formed with absolute powers of requisition and order. More than 200 men were sworn in as volunteer policemen with the full authority of a constable in B.C.'s renowned Provincial Police.

Col. L. G. Lilley, officer commanding the Royal Canadian School of Military Engineering at Chilliwack, became Baldwin's right hand man. Lyle J. Macken was appointed Premier Byron Johnson's personal representative on the committee. The premier himself made several visits to the district for E.F.C. conferences.

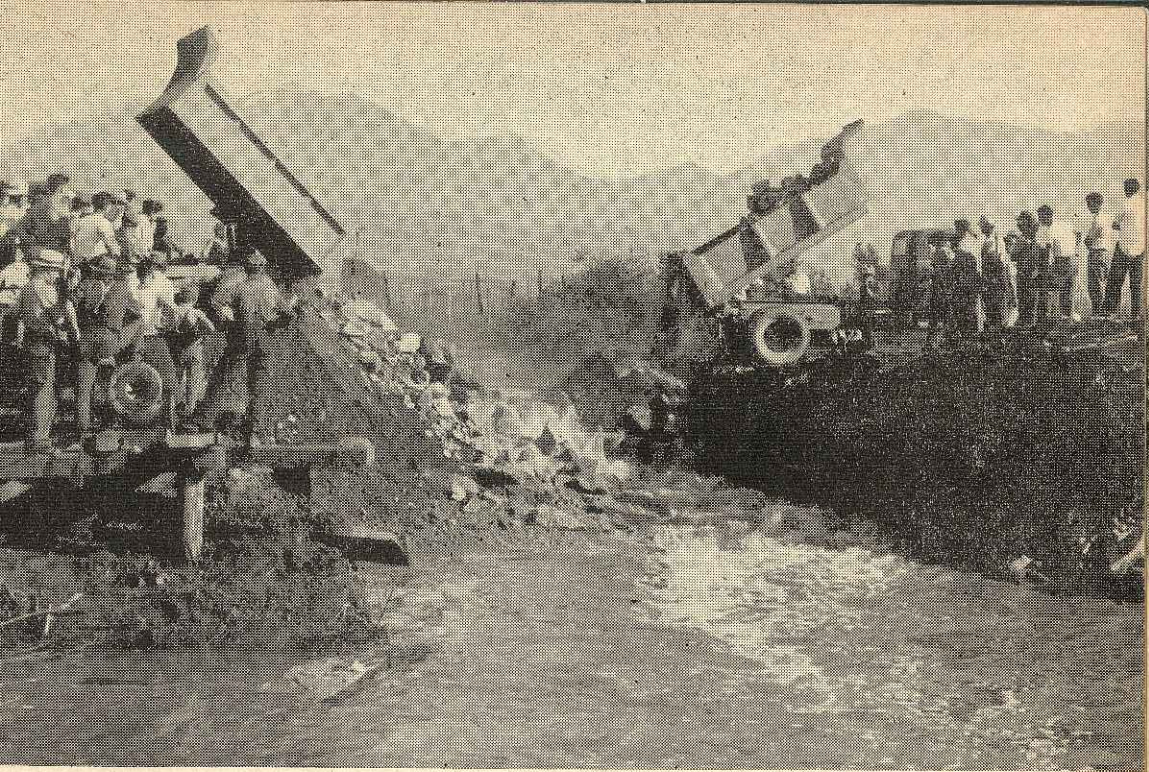
In the Canadian Legion Memorial Hall a full Operations Headquarters was set up. A red E.F.C. sticker became synonymous with action, and the only pass along roads closed to civilian traffic.

A labor pool was formed, men and machines were organized, transportation and equipment were commandeered, and gradually a semblance of order came out of chaos. Baldwin himself spoke to the people each night over the local radio station.

Radio station CHWK, as it signed off each night, warned its listeners to leave their radios on and at full volume. In case of a sudden emergency the station would broadcast a flood warning and waken the residents.

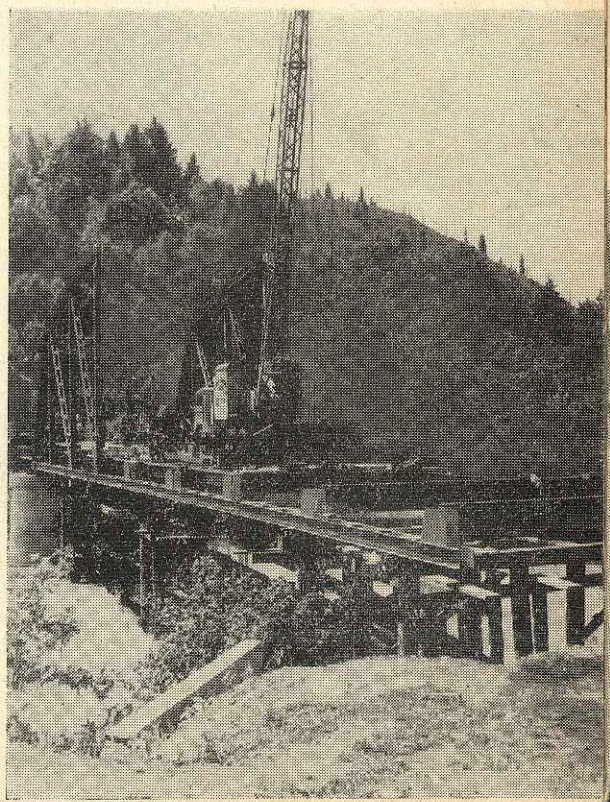
Chilliwack itself was deserted by its normal crowd of prosperous shoppers, instead a new mobile population moved in. An army of trucks roared continuously through the streets; tired men fought sleep as they delivered load after load, ton after ton, of dirt and gravel to the 18 miles of dyke system. Slowly the dykes rose. Sand boils were plugged, leaks repaired.

Beyond the heavily-sandbagged dykes the seething Fraser licked hungrily at the mud walls holding it back. Weather aided the ever-rising river. Rain poured down and men sloshed knee-deep in mud trying to distinguish leaks from seepage. Driftwood, roots and giant timbers piled against Rosedale bridge, which once led to the Agassiz ferry slip, deflecting the full force of the water towards the tiny ribbon of new dirt on the Rosedale dyke, protecting all Chilliwack.



The wonderful organization and co-operation at Chilliwack is what saved that city from destruction. Here, 20 minutes after a break in the dykes along the Semiault River, trucks are seen pouring thousands of tons of rock and gravel into the breach. An hour later the flow of water was stopped and pumps were put to work reclaiming the damaged area.—Don McLeod Photo.

Traffic to and from Chilliwack had to detour over the Cultus Lake road through Yarrow, after the break at Cannor. Rush construction of a new bridge at Vedder Crossing was necessitated to accommodate the heavy flow of trucks, busses and cars using the road 24 hours a day. The bridge was opened to traffic in less than 10 days.—Photos by Don McLeod and Al. Kipnes.





This was Glendale on the outskirts of Chilliwack. The break in the Semiault River swept hundreds of fruit crates over the main highway. Water forced business houses to close. Although the water was only about four feet deep, it caused considerable damage.—Al. Kipnes Photo.

Army engineers charged the bridge with 500 pounds of dynamite and a detonator cord was laid to the dyke, ready to destroy the structure should the river rise any higher. Despite numerous reports this never happened and Rosedale bridge became only a battered survivor of the flood.

The relentless river drove men into working 30 hours without sleep; high school students, clergy, store clerks and soldiers joined forces to fill and lay sandbags along the dykes.

The first break-through occurred Friday, May 28, at Semiault Creek, normally a sleepy little stream meandering south of Chilliwack. With Fraser flood waters forcing it back, it became an angry living thing that sluiced water into Chilliwack airport. For 16 hours men and machines worked desperately and restored the dyke. Later the Semiault broke twice more before a secondary dam was built to equalize the tremendous pressure which tore at the dyke's quicksand foundations.

Saturday morning, May 29, a hastily-erected dyke near Glendale, one mile west of Chilliwack, gave way. Swiftly flooded were the districts of Cottonwood Corners, Glendale and Chinatown. Chilliwack had to fight for its very existence.

The worst break came where it was least expected. The Mennonite community of Greendale, five miles west of Chilliwack, overnight became a lake 34 feet deep.

Provincial, not the Chilliwack dykes, protected Greendale from the Fraser. According to Provincial Dyke Commissioner Bruce Dixon, these dykes were "as sound as anything in the valley." Another giant break occurred June 1, when a large log torpedoed the sodden dyke at Cannor. Repairs were impossible because of a jungle of trees along the top of the dyke. All attention centred on evacuating the area.

More than 200 Army troops with amphibious equipment aided in the evacuation. In less than 24 hours 12,000 acres of fertile ground lay rotting under water.

Three churches in the area suffered flood damage. In Greendale school, desks bobbed crazily against the ceiling, while at Eddie's Nurseries farther west, prize roses flung their blooms to the surface in a last attempt to bring beauty to the world. Houses, driven by the wind, collected together as if seeking lonely companionship. Bridges and barns floated past.

Following the Greendale break, Chilliwack took stock of its own defences and found them wanting.

To the east lay the flimsy Rosedale dyke, to the west a new lake was throwing its stench into the valley air, to the north lay the Fraser and to the south the only way of escape lay across a flimsy, one-way bridge over the Vedder River, now racing madly for the Fraser.

A startled call for help went to Premier Johnson. Within 36 hours work began on a \$75,000 steel bridge over the Vedder—for which the cement approaches had been built over a year ago. Army flood-lighting changed night into day and steel monkeys and pile drivers worked around the clock, forcing the bridge across in the very teeth of the river.

Back in Chilliwack the ceaseless roar of the trucks never slackened. Dykes were raised. In many cases original dykes could not be seen. Tired men sand-bagged; tired men levelled dirt; tired men drove and tired men planned.

After a two-day lull—June 5 and 6—the river again began misbehaving as it hit 24.71 feet at the Mission gauge, for an all-time record since the high of 1894. Still the Chilliwack dykes held against the increased pressure. Rosedale, McGrath Road, Jespersion, McDonald Road, names that now read like battle-fields, stood firm, and Chilliwack breathed again.

Rosedale became a port as the fish-packer "Salmon Queen" braved the swollen vortex of the Fraser to cross to the isolated town of Agassiz and bring 13 tons of badly needed milk every day.

For the following week dyke workers kept constant vigil.

By June 12 it was apparent the Chilliwack dykes would hold if the water came no higher. Finally, on Monday, June 14, only patrols were left on the once busy dykes. Tuesday afternoon E.F.C. ordered dyke patrols to stand down. The Fraser had signed an armistice with Chilliwack.

Iron men and mud dykes saved the Chilliwack district from complete destruction. The costly job of rehabilitating flooded-out farmers lay ahead.

Hope became the main terminus of the railways when the C.P.R. rail bed was washed out at Hatzic. Passengers were taken there by bus. Mail and express was trucked to be entrained for eastern points. The same procedure was used for westbound traffic.—Don McLeod Photo.





HATZIC

1—Wreckage of homes left in the wake of; 2—the raging torrent. 3—Homes were isolated and 4—families were stranded on rooftops. 5—Bridges floated endlessly. 6—The Navy turned farmers. 7—They set up first aid posts. 8—They rescued cattle, sometimes forcibly. 9—Homes floated miles from their foundations and 10—trucks and cars were stranded. 11—The C.P.R. set about immediately repairing the railway break.

PHOTO CREDITS—1, 3, 4, 5, 9—Kipnes; 2, 11—Artray; 6, 7, 8, 10—R.C.N.

Hatzic

By AL. KIPNES

(Vancouver News-Herald)

Just a few miles east of Mission lies some of the best farming country in British Columbia.

On it, you could see rows of trees in blossom or in fruit, gardens, neat farms, white picket fences and comfortable homes.

Until June 3, 1948, Hatzic Prairie was that scene of beauty. But on that date it vanished beneath the murky waters of the Fraser River.

The town is small, but the surrounding farmland is centred with a calm, placid lake. In the centre of the lake is an island.

No great part of the outside world had ever heard of Hatzic, and the people who lived there were the last to care.

But on June 3, the name Hatzic spread like wildfire. It was blared from every radio station, and headlined in every newspaper across the country.

On that fateful day, at 9:30 a.m., the railroad dyke crumbled. The swirling flood waters inundated every farm within 12 square miles, and broke Vancouver's lone rail connection with the east. The C.P.R. tracks were washed out for hundreds of feet.

Although the area covered at Hatzic was only a small percentage of the land eaten up in the disastrous floods, the damage and destruction there will go down in history as the greatest tragedy in the 1948 battle of the dykes.

The town itself still stood high above the swirling waters on the side of a hill. But 10,000 acres of rich farmland were hidden in dark murky water.

The lake was 10 square miles larger, and the scene of calm and serenity was replaced by one of utter devastation.

Where staunch white barns once stood as landmarks of prosperity, only traces of roofs remained. Where cattle grazed peacefully among shady knolls, only the top branches of trees were visible.

Debris floated everywhere. Houses bobbed on the crest of waves, miles from their foundations. Bridges which once traversed the Lougheed Highway, floated endlessly. Telephone poles, snapped by the initial rush, appear like matchsticks in a swimming pool, their wires hanging limply into the stagnant waters.

But the story of Hatzic's part in the floods goes back to May 27, when the dykes on Dugald McDonald's farm on the Dewdney peninsula crumbled, and the murky waters backed up against the railroad dyke.

This was the first indication that Hatzic was in danger. The water quickly swept over the small peninsula, and sent 100 persons scurrying for shelter. The Mission gauge was barely touching 21 feet, and the river was still rising.

May 29, Nicomen Island went under, and the danger to Hatzic Prairie became more apparent. The water was creeping higher. The people were warned to get out. Most of them did.

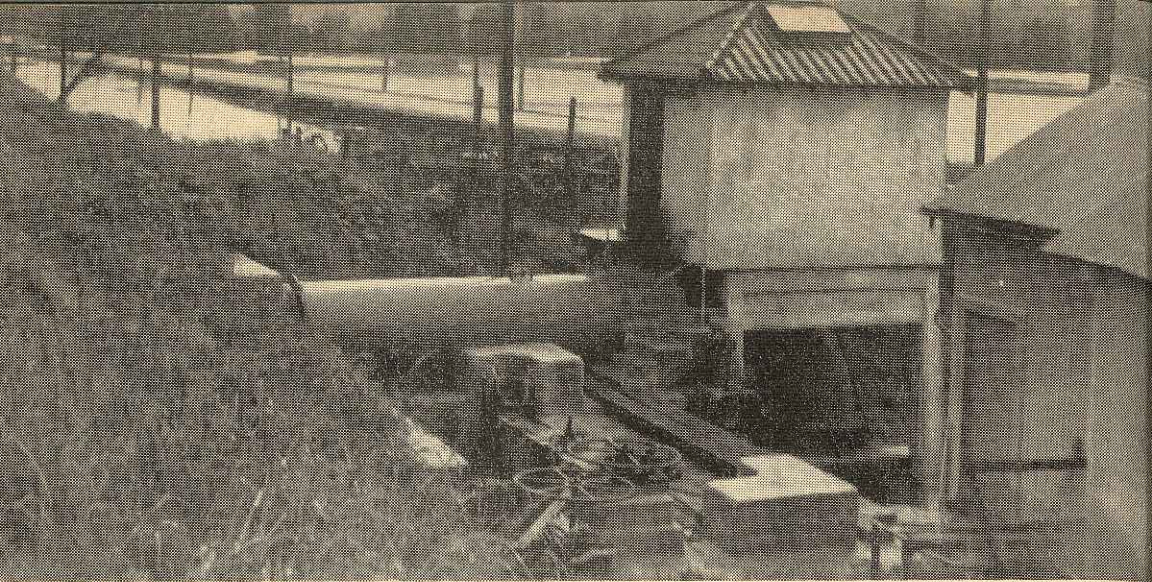
And through the next fearful 48 hours, while the Army and Navy busily evacuated the hundreds of persons and families stranded on Nicomen Island, the residents of Hatzic began moving their belongings, cattle and families.

Time dragged. Matsqui broke. Glen Valley was inundated, Greendale was flooded. And still the dykes held at Hatzic.

People became optimistic. Despite repeated warnings, some moved their cattle back—some reoccupied their homes. This was on June 2.

And the next morning it happened. Two sailors, assigned to dyke patrol, strolled lazily on a small bridge near the pump house. All was calm and quiet. Danger seemed a million miles away.

Suddenly a faint tremor ran through the ground and the bridge began to vibrate. The pump house blew into the air as though hit by a bomb. Telephone poles snapped. The railroad tracks creaked and groaned under the strain, and then crumbled. And the mad waters of a rampaging river poured through a 100-foot gap.



These were the Dewdney pump houses, where the break occurred that flooded Hatzic. They were situated between the highway and the railroad tracks. The pump houses were smashed and washed away with the torrent.—Clifford Photo.

The sailors spread the alarm. The siren sounded in nearby Mission. The Army and Navy rushed emergency crews to strategic points to begin evacuation.

This was at 9:30. By 10:30 the water had covered more than 1,000 acres and was still roaring through the gap. Roads were clogged with cattle, trucks, army vehicles and people on foot, fleeing before the onrushing torrent.

The army moved in. They chose the small school house as headquarters. By the time they reached it the school house was gone. And still the water rose—uprooting trees and pushing houses from their foundations. Its speed trapped cars on the roads and panicked occupants barely had time to escape with their lives.

Families, caught off guard were stranded on roof tops. Some were not located for hours.

Somehow no lives were lost. Although many lost everything but the clothes on their back, all escaped.

But the cattle and poultry were not so lucky.

Hundreds of chickens, unable to escape from chicken houses, were drowned. Cattle were stranded on small knolls, and some were eaten up in the raging whirlpool.

By dusk, the water had settled to the level of the river.

The gap in the dyke had widened to 555 feet, and water there was 65 feet deep. The Trans-Canada Highway was washed out for miles. Communications were severed, and electricity was cut off.

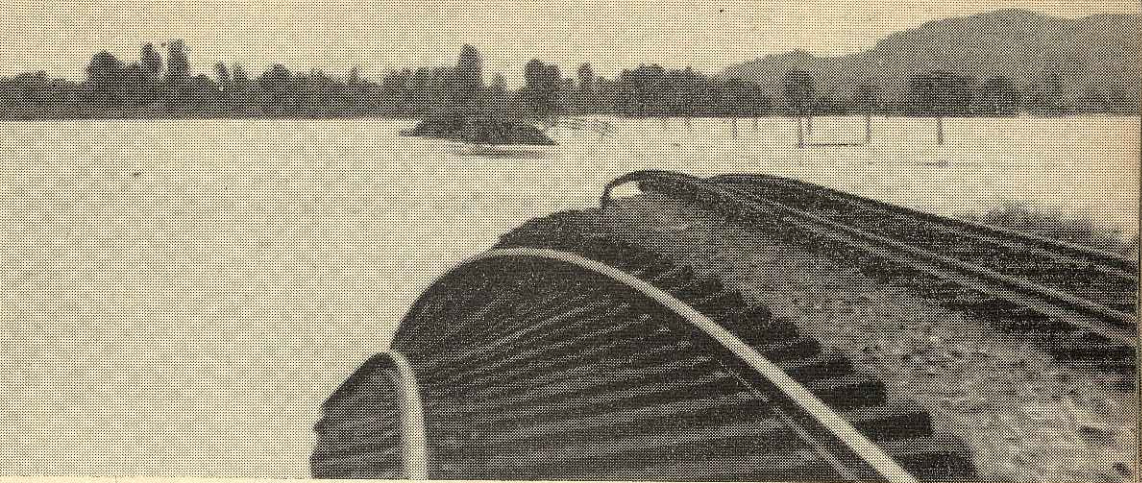
The C.P. R. rushed work crews to the scene, and by nightfall pile drivers were building a trestle to reconnect the lifeline. Hundred foot piles were driven from either end of the gap.

Exactly two weeks later—June 17—the temporary trestle was completed and the first train passed over the Hatzic break.

But the story of Hatzic did not end there. The dyke has been repaired, but there was still 12 square miles of water to be pumped back into the Fraser River.

It can not end until once again you can see the cattle grazing and the fruit trees in bloom . . . until those cool, comfortable homes have been rebuilt.

But it wont be restored in the same swift fashion that it was swept away. The scars will remain until long after and only nature, who put them there, will be able to erase them entirely.



This is what was left of the Dewdney pump houses after the Hatzic break. The railroad tracks dangled into the stagnant water like twisted spaghetti. The breach was 100 feet wide when the dyke first gave way, later widening to 555 feet.—Clifford Photo.

THANKS

Mennonite settlers from Russia seldom show friendliness to Canada's armed forces but they thanked and praised Canadian soldiers for the part they played in the Fraser Flood disaster.

"The soldiers assisted us like brothers," said A. A. Remple, of the Emergency Flood Control Committee in the Mennonite area of Greendale.

Mr. Remple is a descendant of the Mennonites who settled in the district between Hope and Vancouver early in 1870.

Because of centuries of military oppression, they held to religious beliefs and became conscientious objectors.

But after the flood aid given by soldiers, Mr. Remple declared:

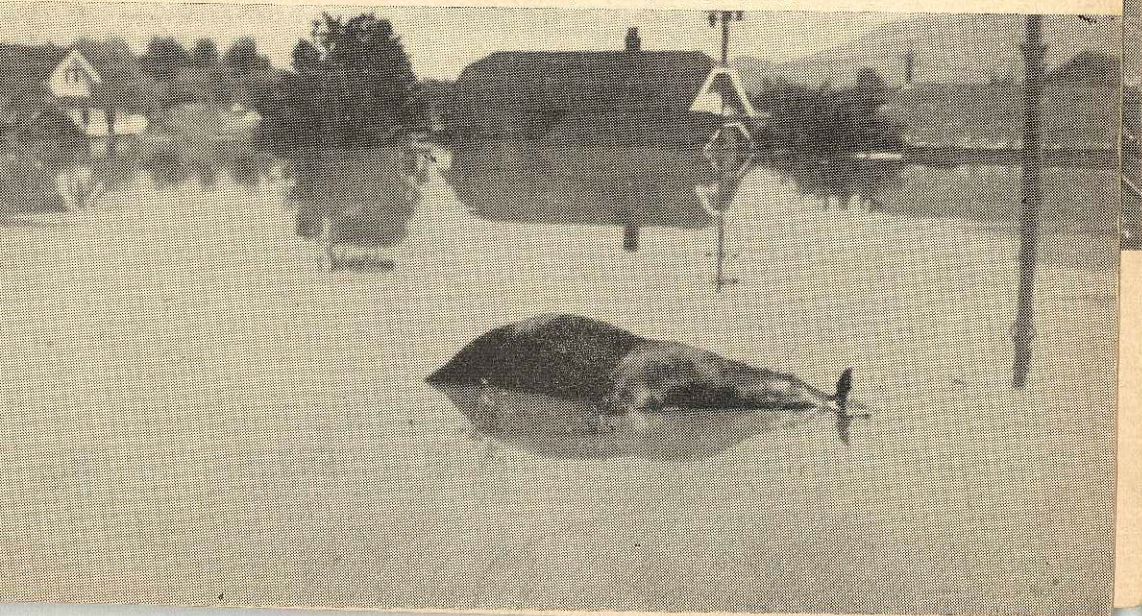
"We never knew the army before. We were glad to have them. On and off duty, they assisted us like brothers."

Another Mennonite community leader, J. F. Janzen, said: "We think our younger generation will be real Caadians" because of the help shown by outsiders during the flood disaster.

There was equal praise for the Mennonites from both army and citizens throughout the valley. The Mennonites provided food 24 hours a day for the tired and wet soldiers working on the disintegrating dykes.

Opinion was that the Mennonites' kind of co-operation was "unbeatable."

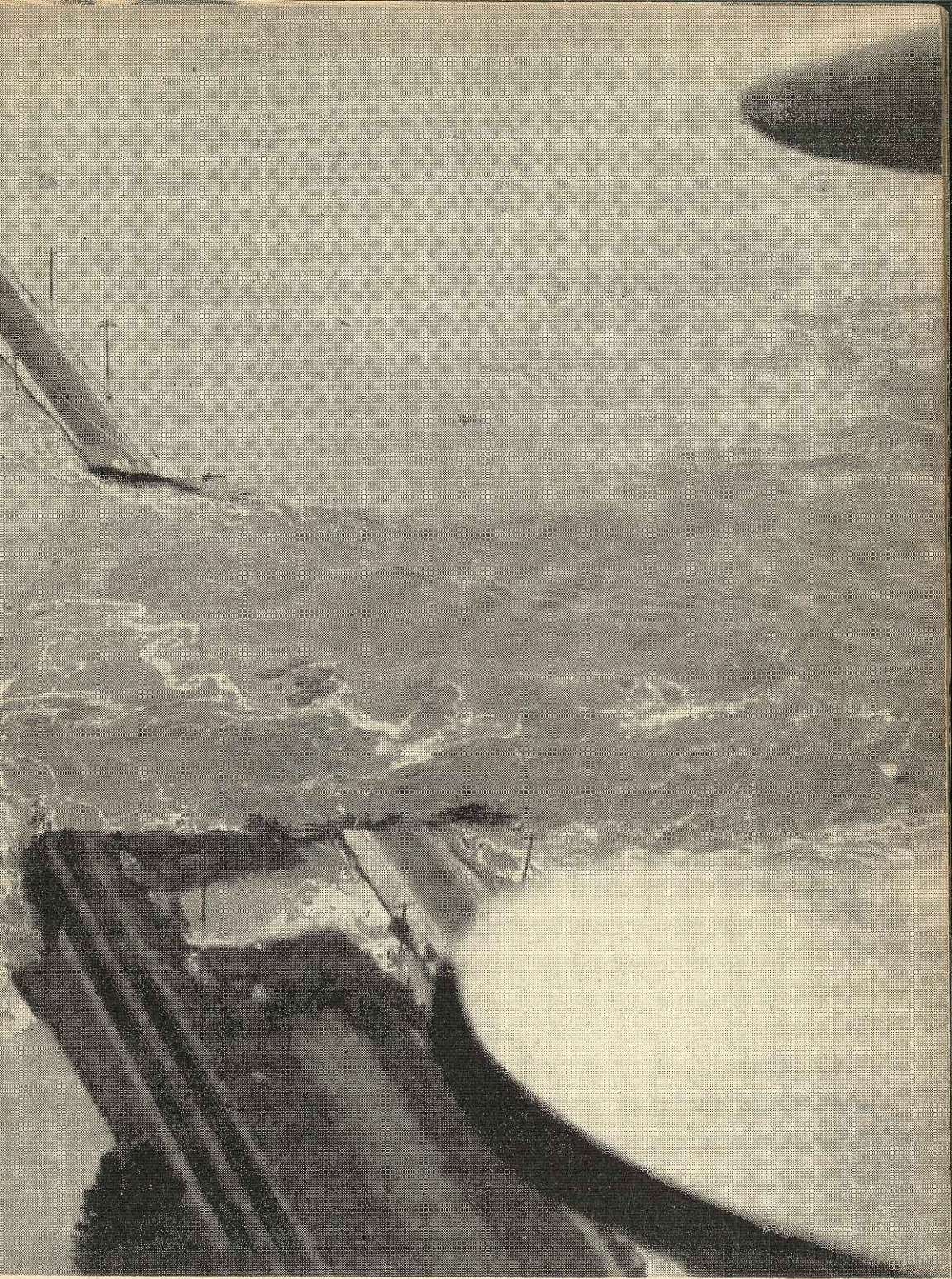
Dead cattle were a common sight in flooded areas.





The Hatz

This startling aerial photograph taken by Sun Photographer Dave Buchan, minutes after the Hatzic break, clearly shows the fury with which the water swept away everything in its path. The dykes crumbled at 9:30 a.m., June 3. By nightfall it had settled over 12 square miles, more than 15 feet deep. Resi-



Break

ts unable to escape when the warning sounded were trapped on their roofs. *tle and chickens were drowned, although most were rescued by army and* *lian evacuation crews. After the break, the gauge at Mission—5 miles down-* *am — dropped only four inches and then began to climb again, finally* *hing a peak of 24.78 feet, on June 8.*

Matsqui

By PAUL ST. PIERRE
(Vancouver Sun)

In the month of June, 1948, there was no Matsqui Prairie.
Instead there was Matsqui Lake.

It lay in the triangle bounded by Mount Lehman, Abbotsford Mountain and a thin broken line of dyke along the Fraser River—16½ square miles of water.

Telephone poles dotted off long lines to show where the roads were located. Much of the surface was marked off in squares by hedges of tree tops where farmers had cultivated rows at the edges of their properties.

Other things spotted the surface of this new, strange body of water next the city of Abbotsford.

There were homes, showing from the foundation up, from the first story up, or just the roof.

Great barns stood like rocky islands in this lake; chicken coops and pig pens tilted a sharp corner to the sky like the hulls of capsized ships.

In the village men rowed boats into the arches of service stations where gas tanks of automobiles had been filled a few weeks before. Water lapped the shelves of the stores.

Between the close-packed homes of Matsqui village ran a canal. That was the main street. A floating white bridge broke the straight line of the canal.

And in the water everywhere floated cedar logs, roots, fence posts, cut firewood, outhouses, tins, bottles, doors, new cut lumber, dead chickens, a number of carcasses of pigs, branches, boxes and decaying vegetation.

This was the price of losing the "battle of the dykes."

Three hundred and fifty families—about 1500 people—paid it at Matsqui Prairie. Hundreds of homes and farm buildings, five large stores, four garages, two big modern schools were grabbed by the water.

Cattle in the area numbered more than 8,000, including mature and young stock. Most of them were saved.

Unofficial estimates placed losses in Matsqui alone at more than \$4,000,000. The cost in altered lives can never be gauged. No man can tell each of the hundreds of stories in the lives of these men and women who lived, worked, fought and feared in those days when the Fraser ran wild.

The battle of Matsqui is the story of a siege. The army which fought the invader was made of ordinary Canadian citizens. As always with peace-loving men, they were for a time a little bewildered and disorganized in the face of aggression.

They were beaten not by lack of endeavor of their own, but by unthinking strategy of the great river which turned the flank of their line of battle.

Matsqui Prairie is linked with Mission by the Canadian Pacific Railway bridge. Beside that bridge is the gauge which showed day by day the strength of the river.

On May 15 the water covered the gauge to 11.84 feet. It rose six feet in 15 days.

The gauge read 18.82 feet on May 25—the day the farmers began a 24-hour patrol of their dykes, watching for the soapsud-like foam which told of seepage, for the bubbling of dirty brown water which meant softening of the dyke wall.

By May 27 the gauge read 21.58 feet. That day, a weak section appeared where the Canadian National Railway line intersects the Ridgedale dyke at the eastern tip of Matsqui. A hundred men plugged holes with sandbags.

Another soft section appeared half a mile away at Frank Bassani's farm. Two hundred men went to work there.

At Gifford on the western end of the Matsqui dyke system pumps were throwing millions of gallons back to the river from the ditches—keeping easily abreast of the rise.

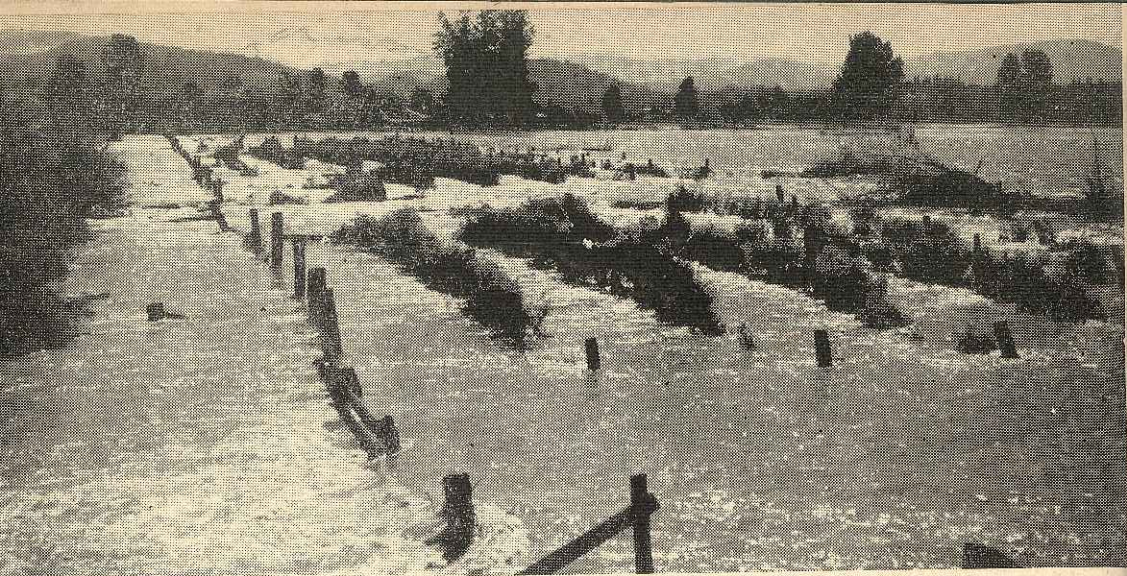
But the next day, after Reeve L. T. Beharrell met Provincial Dyking Commissioner Bruce Dixon, Matsqui residents were told to move their cattle to higher ground, stack their furniture and move out.



Matsqui

1—Houses were submerged to the eaves; 2—Cattle from Matsqui were taken to the Abbotsford Airport; 3—Army kept constant vigil on dykes; 4—Stranded cattle were rescued by boat; 5—The break at Gifford; 6—R.C.N. communications centre at Matsqui was ruined; a million dollars in equipment was lost; 7—Accident caused 10,000 sandbags to go up in flames; 8—Devastation everywhere; 9—Army ducks were used in rescue operations; 10—Everything was lost; 11—Makeshift rafts were used to clear dairy stock.

PICTURE CREDITS—1, 2, 3, 8—Kipnes; 4—M. Jones; 5—Artray; 6, 7, 10, 11—McLeod; 9—Warner.



Berry crops worth thousands of dollars were swept away in the path of NATURE'S FURY. At Matsqui, the forecast bumper crop was buried beneath 15 feet of water. Scenes like this one, taken by Don McLeod, were only too common.

The battle of the dyke was suddenly an intense and crucial thing.

A cold rain began falling that night.

The highway which cuts the prairie from Abbotsford, makes the main street of Matsqui and ends at the right-angled approach to Mission bridge, roared with life.

The exodus had begun.

Heavy trucks, filled with silent, frightened cattle rumbled up side roads from the farms. They trundled over the Mission Bridge, or up the hill to high ground on Mount Lehman, Abbotsford, Abbotsford Mountain and the airport.

And down from Abbotsford came heavily-loaded gravel trucks.

At Ridgedale the mud-spattered weary army of farmers of Matsqui, store-keepers, clerks and salesmen of Abbotsford and Mission, truck drivers, farm hands, laborers, janitors, school teachers, worked ceaselessly to prevent a break.

Trucks upended their loads. Men filled burlap bags from the piles. Farm tractors dragged flat bed trailers of the loaded bags to workers, who dragged them to the dyke.

They never walked with their load. They ran a stumbling, staggering drunkard's course with the sack slithering a wavy line behind them.

They were weary men, but they kept working—many for 50 hours without sleep.

Meanwhile a patrol watched Gifford dyke as the exodus of women and children continued.

The Royal Canadian Air Force prepared its abandoned officers' quarters at Abbotsford for refugees.

Fifty Royal Canadian Military Engineers and Royal Canadian Electrical Military Engineers moved in from the shattered Glen Valley dykes. They were under command of Capt. Sam Potts.

Reeve Beharrell called for a civilian emergency group to handle the evacuation and Lions Club President, Pat Douglas, was chosen chairman of an Emergency Flood Control. He chose for deputies Bank Manager Ed. McDougall, and Librarian Peter Grossman.

Harry Beetlestone continued as head of the M.S.A. Red Cross.

Jack Ellis and George Heppner took over control of the trucks that moved the earth to the dyke and the people and property from it.

On May 30 the army took command, sending in some 200 members of the Irish Fusiliers from Vancouver. Under command of Lieut.-Col. Herbert Fullerton headquarters were set up in the Ridgedale Community Hall.

Most of the weary engineers stayed on the job.

Fields next the two soft spots in Ridgedale became wet with seepage and awash with mud. Tractors were miring as they dragged their loads. One or two broken trailers lay in the ditches.

The force at the dykes numbered more than 500 men.

The Red Cross and army fed them stew at night as they worked under the blue glare of a searchlight supplied by the R.C.E.M.E.

The rest of the dyke was reported firm, but on May 31 the gauge read 24.27.

That day the Fraser won with its flank attack.

It had eaten under the firm Gifford dyke.

At 8 a.m. 35 feet of the dyke, whose top reached two feet above river level, toppled and fell.

Coffee-colored water roared over the fields.

Within five minutes its fingers had reached 200 yards across the field to the spot where the man who knew it well had met unexpected death.

Ole "Big Swede" Sorensen, dykes overseer for Matsqui for 37 years, died there in a traffic accident when the Fraser threatened flood in 1936.

It was deemed hopeless to try to fill the gap.

The battle of Matsqui was lost.

All 10,542 acres of prairie filled from this one breach.

Property and personal losses ran into millions. Damage to homes and farm buildings—617 of them—was estimated at \$1,300,000. Berry crop losses were estimated at \$800,000; 3,500 acres of hay and grain, \$850,000; pasture \$900,000; corn and beans, \$250,000.

Destruction of roads and bridges also would cost thousands of dollars to repair and replace.

The 50 per cent of the people still in the area had time to move safely from their doomed homes.

The water filled first along the sloughs and banks of the streams and ditches. It didn't roar in, it edged in.

Trucks, school buses and transport vans held for emergency evacuation orders, roared into action. People and cattle moved out of the prairie all morning as the silver sheet from Gifford edged nearer the village.

By noon the streams that cut under Matsqui's main street had brimmed over its banks and severed connection to the Mission bridge approach.

Men laid boards along the ties of the Canadian Pacific tracks and bumped their trucks to the homes near the bridge.

C.P.R. men cleared debris from the trestle that spanned the stream and allowed the water free passage on its course to the Ridgedale region.

By mid-afternoon citizens were launching boats in Matsqui's streets.

During those "moving days" cowboys rode horses waist deep in water, roped cattle and shooed them to the railway tracks, then led them to waiting trucks for transport to higher ground. Sometimes they swam their horses to rescue stock, swam cattle for miles behind rowboats while they held their heads above water.

Army ducks and navy boats became familiar sights along what once were Matsqui's main streets. They plied Matsqui Lake for days, taking food to those who wouldn't move, aided public health nurses in their typhoid inoculation trips and transported officials and police through the area.

Ridgedale became isolated on June 1. Surrounding properties sank farther below the surface.

A skeleton crew stayed in the isolated school to direct salvage work. The Red Cross sent them food.

And the battle of Ridgedale dyke went on.

A dozen farmers, about 20 Irish Fusiliers and Engineers stayed until two days after the Gifford break.

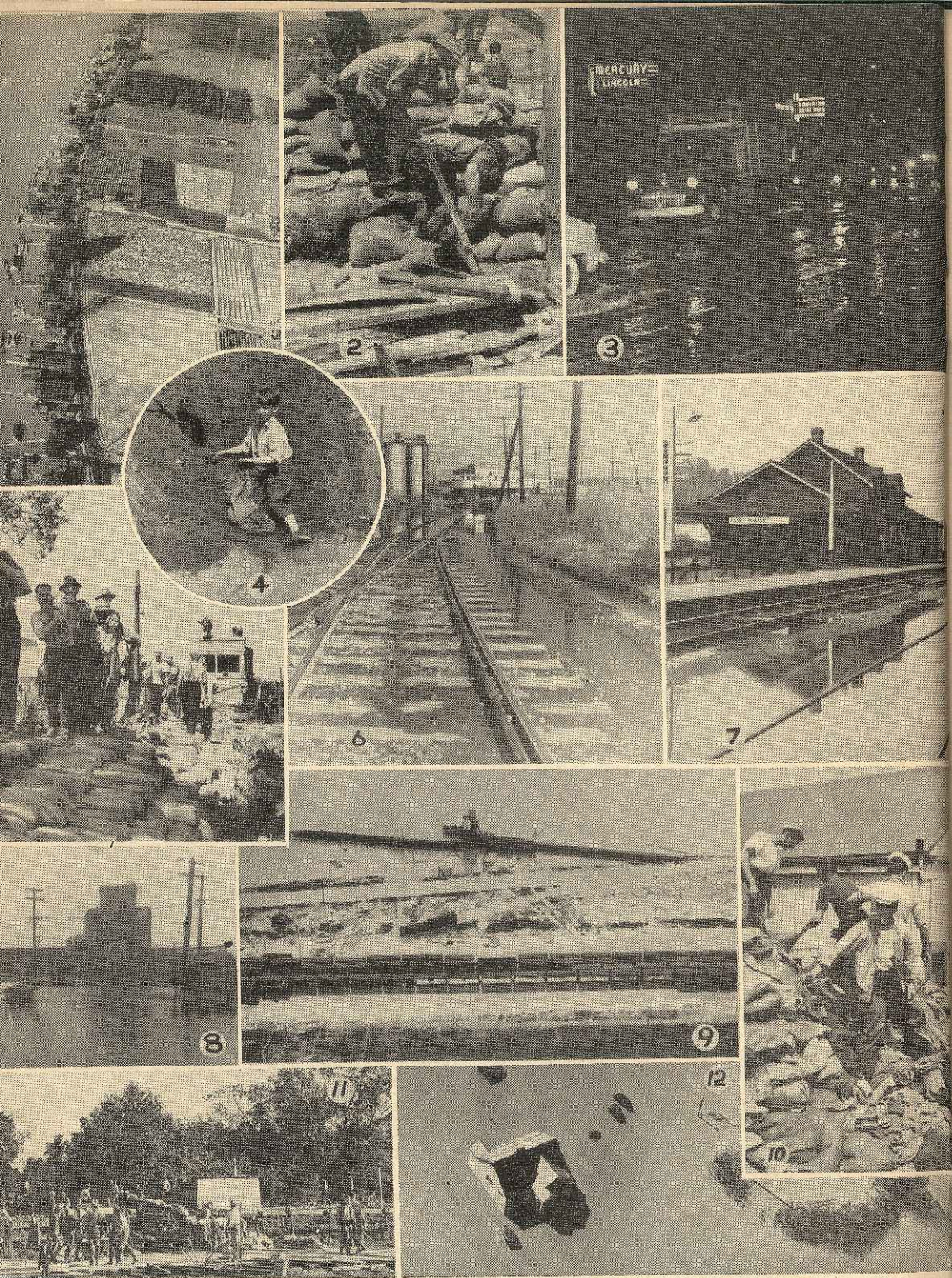
Their rearguard action was vital. If Ridgedale had collapsed the river would have had a free flow through the village. Instead it was obliged to come in by the back door, slowly.

That army stayed till all the prairie roads were filled. Then they retreated over Abbotsford Mountain. Some farmers stayed and kept their own watch on the dyke.

Ridgedale never fell.

Only one more break came in the Matsqui dyke. When a span of the Mission Bridge dropped it drew the macadam-topped dyke section into the Fraser with it. But the prairie already was filled.

When June 2 dawned Matsqui Prairie had become Matsqui Lake.



The Lower Mainland

1—Queensborough battle front; 2—"Scotty" of the dykes; 3—New Westminster streets flooded at high tide; 4—Small children pitched in and helped; 5—Hundreds of volunteers helped sandbag dykes; 6—B.C. Electric tracks went under; 7—Port Mann station was idle for weeks; 8—Cars ploughed through a foot of water; 9—Port Mann was among the first to be flooded; 10—The Navy kept sandbags on the move; 11—Army and civilians worked together; 12—Barnston Island was caught.

PICTURE CREDITS—1, 9, 12—Artray; 2, 4, 6, 8—Kipnes; 3, 5, 11—Le Blanc; 7—McLeod; 10—R.C.N.

Queensborough

By **STAN J. MONCRIEFF**

(Vancouver Daily Province)

As the destructive waters of the swollen Fraser River unmercifully smashed dykes and homes and forced thousands to flee its uncharted path, a little one-legged dyke dweller was busy directing "operation sandbag" at Queensborough—vulnerable point in the New Westminster district.

It appeared inevitable that the dykes would crumble under the terrific pressure of the swirling waters but "Scotty" McKenzie knew the answer and the job was done well.

The entire area was gripped in an ominous tension as the 5,000 residents of Queensborough saw the dykes slowly grow in stature under the willing hands of thousands of volunteer workers.

It was a race against time, a battle against mother nature and for days it was touch and go as to who would emerge victorious. In the end the man-made bulwark proved invincible.

To many, the sleepless days and nights at the dykes now remain only a nightmare. Sweating men slugged it out shoulder to shoulder in the boiling sun, waded through waist-deep water and slithered in muck as they toiled to defeat fury of a maddened river. Never once did they say die.

No one knows exactly how long "Scotty of the Dykes" has made his home along the Queensborough levee but his knowledge of dyking is inexhaustible.

First people heard of him was when it became known that an elderly man with one leg was working day and night patching soggy dykes. "Scotty" was seen to wade waist-deep in the cold water to lay a key bag properly and to kick his wooden leg into rat holes which threatened to undermine the structures.

It turned out that the 73-year-old dyke dweller had learned about dykes along the Mississippi during the floods of 1926. He also helped build dykes in Nova Scotia and fought floods around the Gulf of Mexico.

His knowledge was accepted and his word became law which was backed up by Mayor W. M. Mott of New Westminster as well as by military authorities. He became, in a sense, a field marshal but continued to work with a fervor that served as an inspiration to others.

Bases of weakened dykes were bolstered with sandbags and gravel and height was added until they were five to ten sandbags above the normal level.

Civilian volunteers rallied to the emergency from surrounding districts; many walking and hitch-hiking from Vancouver. It is impossible to determine the exact number who lent a hand but it totalled thousands.

All adult sporting events in the New Westminster district were curtailed on orders of Doug. Grimston, chairman of the Royal City Park Board, in an effort to alleviate a man-power shortage at the dykes.

It was this move that instilled into the minds of many the vast seriousness of the situation and active members of summer sports rallied to the cause.

When the army took over direction of operations, Lieut.-Col. F. C. B. Cummins of the Westminster Regiment, was made officer commanding. He commanded 300 uniformed men in the area who worked in close co-ordination with civic authorities and civilian volunteers.

Besides military vehicles, hundreds of civilian trucks and autos were voluntarily pushed into action hauling sandbags and gravel and transporting men to and from the dykes. The New Westminster Board of Trade took a lead in marshalling cars and men.

Radio station CKNW put their entire facilities and staff at the disposal of the Army. Untiring news-room men worked 18-hour shifts. Special events men made constant tours of the dykes and inundated areas to keep the public informed as to developments.

Despite the untiring efforts of the totalling thousands, the unruly river broke through sodden levees in some areas in New Westminster and the immediate vicinity.

First break threatened the valuable plant of Canada Rice Mills near Woodwards Landing, where the swift-moving water smashed a 50-yard hole in the outer dyke. Men were sped to the scene and the inner levee was quickly reinforced to withstand the lashing.

The 555-acre Essondale Colony Farm was completely inundated from a minor break and continual seepage. The breach was successfully closed but not before water rolled over rich crops.

The flood, however, did not hamper the farm in its provision of vegetables and dairy products to the Provincial Mental Hospital, although cows and cattle were deprived of grazing grounds for some time.

Five danger points along the river in the Ladner District necessitated constant vigilance. Army and civilians patrolled the area and 3000 filled sandbags stood in readiness for any emergency.

Residents in Gray subdivision—some 50 families of veterans—moved voluntarily on May 27, to stay with friends elsewhere and remained away until the second week of June. Male members of the families spent many sleepless nights working on dykes bordering each side of the subdivision.

The economic structure of New Westminster district was seriously affected when the rising waters forced 16 saw, shingle mills and foundries to cease operations. More than 3,000 were thrown out of work, taxing the staff of the National Employment Service.

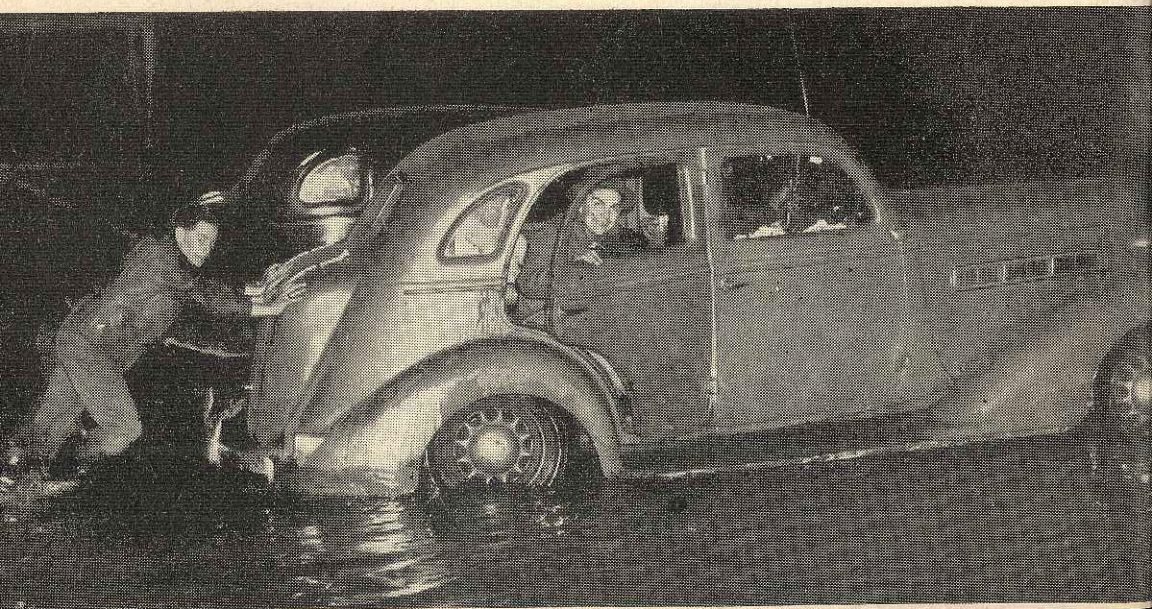
Shipping in the Royal City, Canada's largest fresh water port, was halted due to the heavy silting along the river to the sandheads at the mouth. This turn of events sent another 500 longshoremen to the unemployment ranks and the majority of them were not eligible for out-of-work benefits. Most of them volunteered for dyke work.

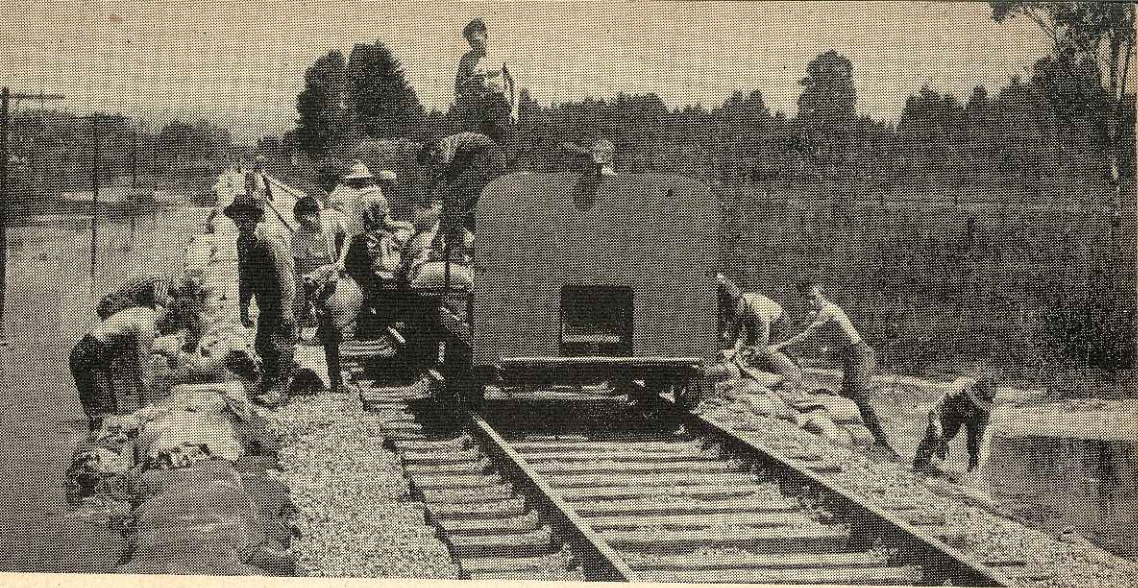
Cost of the Queensborough operation has been estimated at \$26,000, of which \$10,000 went for sandbags alone. Authorities said some 1,000,000 bags were used to strengthen the levees in that area.

The battle of Queensborough was considered won following the peak tide of 14.4 feet June 10, when the bolstered levees spurned the hardest beating the river could muster.

Sweat, strain and sandbags beat Nature's Fury in to submission.

Depth of the water which flooded New Westminster streets at high tide caused many cars to stall in the newly-formed rivers. Tides during the flood period were the highest of the year, adding danger to the weakened dykes.—Roy Le Blanc Photo.





This photo, taken by Roy Le Blanc at South Westminster, shows work crews reinforcing railroad dykes against the rising Fraser. After a three-week vigil, they won their battle against high water and high tides.

As the danger heightened, Col. Cummins issued orders for voluntary evacuation of Queensborough. That was on June 7, when it was feared the lone avenue of escape—Ewen Avenue—would become congested should a break occur. A British Columbia Electric Railway engine and 20 flatcars and boxcars were stationed on the old B.C. Electric tracks on Ewen Avenue, to evacuate the citizens in the event of a sudden break.

Despite a plea from Mayor Mott and the army for residents to leave, few families responded. This caused additional worry and consternation to authorities—especially during high tide danger hours.

Under direction of Col. A. L. Coote, Red Cross headquarters in New Westminster fed and billeted 372 adults and children who voluntarily left their homes. Besides this the Red Cross served thousands of hot meals to work-weary men and women.

In New Westminster itself, water backed up through the Canadian Pacific Railway tracks and lapped at the B.C. Electric Company interurban depot on Front Street—one block from the city's main thoroughfare. At other points, city streets were covered with one to two feet of water. Detours were created to avoid traffic tieups.

During the height of the danger period, in the second week of June when peak tides threatened to destroy the tedious labor of thousands, the main pump in Queensborough became plugged with debris. But R. E. Potter, chief city engineer, proved equal to the emergency and cleared the pump ways after nine dives into the cold, slimy water.

For weeks, logs, uprooted trees and other debris swept down the Fraser to become lost in the spacious Pacific Ocean.

An international touch was added to the picture when Mayor Peter J. Barbeau of Blaine, Wash., and more than 100 Americans joined their Canadian neighbors on the dykes.

The plight of the flooded valley went even further abroad. Mayor Hal Gutteridge of Westminster, England, sister city to New Westminster, wired sympathy to those who had suffered.

Full details of the Queensborough dyke battle may never be known but had it not been for the thousands like "Scotty" McKenzie, the story probably would have taken on a more tragic aspect.

The district is deeply indebted to those who saved the dykes.

Forty-six years ago, Mr. and Mrs. A. C. Gustafson homesteaded at Matsqui Prairie. They were the first couple to take up land.

Mr. Gustafson is 76. His wife is 75. Like 1,500 of their neighbors, they prayed that the floods would spare their farm. But, old man Fraser had no mercy and the Gustafson farm—like all the others—went under water.

The Gustafson's were the last people to leave. They came out aboard a navy amphibious duck, saving only a few clothes and their dog.

Pitt Meadows

By NORMAN MICHIE
(Canadian Press)

Verdant acres in Pitt Meadows loaded with fruit and vegetable growth, drowsed beneath the sun, hushed and peaceful. That was before the floods.

For years, Pitt Meadows, a fertile farm district with a tiny town beside the C.P.R.—about 37 miles east of Vancouver, suffers some flooding each spring. The people expect it, and the people who live on the edge of the Fraser, Alouette and Pitt Rivers are prepared. Their houses are either on stilts or constructed boat-fashion so that they rise with water.

Earthen, brush-lined dykes in most places surmounted by a road, hold back the rivers but seepage and small breaks are dangers that have to be met.

The dyking system is about 25 miles long, running in a vast U-shaped sweep from the Alouette River to the north, down the Pitt River to the west, and back along the Fraser to Port Hammond, on the east.

It is an inoffensive-looking rampart, but that dyke is the story of Pitt Meadows. On May 28 the north sector of the dyke, along the Alouette, gave way. In a short time 7,000 acres were under water. Speedy action on the part of farmers evacuated all cattle and householders affected moved to higher ground, or left the area for the danger period.

Fortification of other dykes got a tremendous spur from this disaster. It was like the sounding of a general alarm, and in a few hours the whole countryside was readied and helped save the rest of the valuable acreage from the same fate.

The Community Hall was taken over, and Constable Kelly Irvine of the B.C. Police, provided the spark that resulted in establishment of a first rate flood-fighter organization. Nearby Haney contributed all available manpower and until the army came to help, provided many men and trucks for the job.

Women turned out in force to man the Community Hall kitchen. They served lunches and meals 24 hours a day.

A nearby gasoline station provided fuel and oil, the municipality paid the bills. There was no confusion, no overlapping of duties. Everyone had a job, and everyone looked to Constable Irvine as boss-man.

Truck after truck of sand and gravel screamed out along the little country lanes, dumped their burdens and rushed back for more. Men and boys worked side by side, ankle deep in churned-up mud and water.

Up and down the dykes at night, inspectors, their swaying lanterns bobbing in a macabre rhythm as they jolted over bags, slipped in the mush, searched for dreaded holes and leaks.

Tense workers shivered in the early mist, looking like shrouded phantoms, waiting for the worst.

It came—and went. They won the fight.

Feverish work by the army of soldiers, district farmers and volunteers from other centres each day raised the dyke and thickened sloping walls against leakage.

Chief danger was the weakened understructure, punctured by countless muskrat holes and rendered spongy by pounding and heaving waters.

Every night breaks were reported but every night the holes were plugged by sweating, fearless workers, and the dyke is still holding, a tribute to the men who fought ceaselessly 24 to 36 hours at a stretch without rest and with only snatched sandwiches and coffee.

They saved their land and their cattle; their crops and their homes, and they built a new community spirit, impossible to evaluate.

Kootenays

By HAL MALONE

(Vancouver News-Herald)

The story of the devastation wrought at Agassiz, Matsqui, Hatzic and every other inundated area was only a carbon copy of that repeated at Keremeos, Penticton and Kamloops.

Penticton, however, was one of the more fortunate centres where angry waters of the Okanagan Lake failed to make any substantial headway into the city.

Water three to four feet deep infiltrated basements of homes in the low-lying section north of the city, but unceasing efforts of civilian and armed service dyke workers held the lake in check.

Most optimistic person in the city during the early days of the impending crisis was Mayor Bob Lyon. "There is nothing to worry about," was his stock answer to questions regarding the severity of the situation.

They shared his hope, but not his optimism in those early days. But Mayor Lyon wasn't asleep. When pioneer residents warily eyed Ellis Creek and said: "that creek is just sleeping—if it wakes up watch out," he heeded them and ordered the Ellis Street Bridge removed to prevent possible log jams.

As neighboring townships became isolated through road and rail washouts Penticton became the transportation hub of the interior.

Its runways untouched by the flood, Penticton airport served as the lone passenger and express link between the Pacific and Atlantic.

Kamloops fared not so well as Penticton, a state of affairs for which the North Thompson was responsible.

It hungrily lapped farmlands, over-ran railway tracks and slowly surrounded farmhouses.

Board of Trade and Chamber of Commerce members traded mashies for shovels when the golf course became a duck's playground.

Kamloops' last transportation link was cut when water spilled over the cement runways of Fulton Field. Aircraft were flown to higher points and Kamloops was isolated.

Red Cross personnel, working 18 hours a day, were forced to call on the R.C.A.F. for assistance. Giant Dakotas and Lancasters parachuted regular supplies of blood plasma into isolated Meritt.

Lone death in the area was at Heffley Creek, when a 30-foot wall of water unleashed by the breaking of a Devich Lake dam, claimed the life of 76-year-old Easter Young "Tom" Hicks, a prospector.

Ordinarily a calm, quiet brook about six feet wide and 18 inches deep, Heffley Creek at its peak was a boiling monster 40 feet deep and 600 feet wide.

While Penticton fought Lake Okanagan and Kamloops toiled against the Thompson, Keremeos literally never had a chance against the mad Similkameen River.

There has been no official estimate of damage loss at Keremeos for its people were too busy endeavoring to curb the activity of the Similkameen. Considered one of the finest fruit-growing centres of the district, Keremeos' orchards took the brunt of the river's scathing fury.

While many of the townsfolk "doubled up" when their homes became unliveable, they cheerfully made room for many homeless refugees from nearby Cawston, where as one resident opined: "That river has gone crazy."

Without an airport and with all its other forms of transportation cut off, Keremeos must have felt toward the R.C.A.F. as a blind man feels toward the rich man who throws a \$5 bill in his hat.

Parachuted bundles of sandbags from R.C.A.F. craft were joyously received like manna from heaven.

Attempts to save livestock were in vain and many a farmer today probably doesn't know what became of his animals.

For a short while meat stocks were dangerously low, and sugar was strictly rationed.

Yet, somehow the people managed to hang on. In those terrible days of crisis, there was nothing left to do but fight.



1—C.N.R. tracks at Yale were undermined; 2—Tender's shack on the Mission Bridge was smashed by floating logs; 3—Houses at Hatzic were knocked from foundations; 4—Red Cross and Navy worked hand-in-hand; 5—Evacuee children at the Abbotsford Airport played unaffected; 6—Highway at Dewdney was accessible only to trucks. later only to lumber carriers; 7—Radio hams were patched continuously; 8—At Yarrow a production line for filling bags; 9—Dykes were patched continuously; 10—At Yarrow a production line for filling bags; 11—Houses abandoned at Agassiz.

PICTURE CREDITS—1—Artray; 2, 5—McInnes; 3, 4, 6, 9, 11—Kipnes; 7, 10—McLeod; 8—Le Blanc.



These sensational pictures taken at Kimberley during the height of the flood show the Columbia River driving stones and debris through main thoroughfares, tearing houses from foundations and snapping telephone polls. They were taken by Sun reporter Bill Gill.

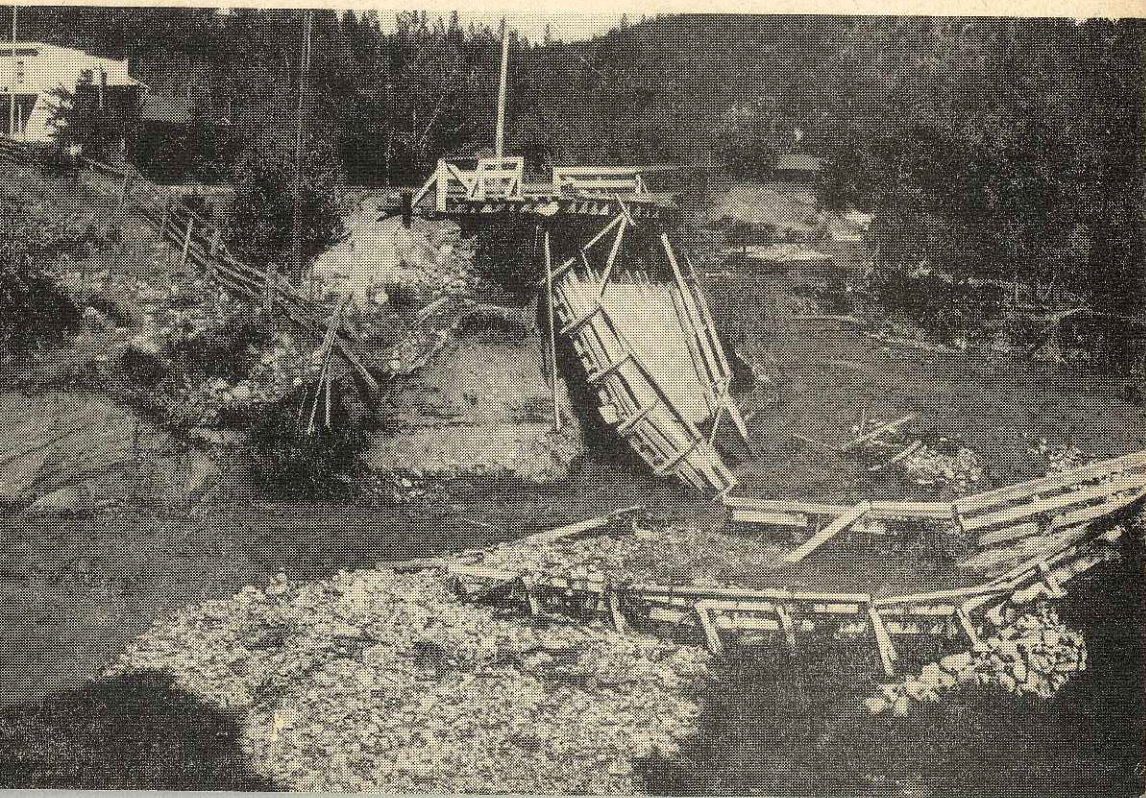
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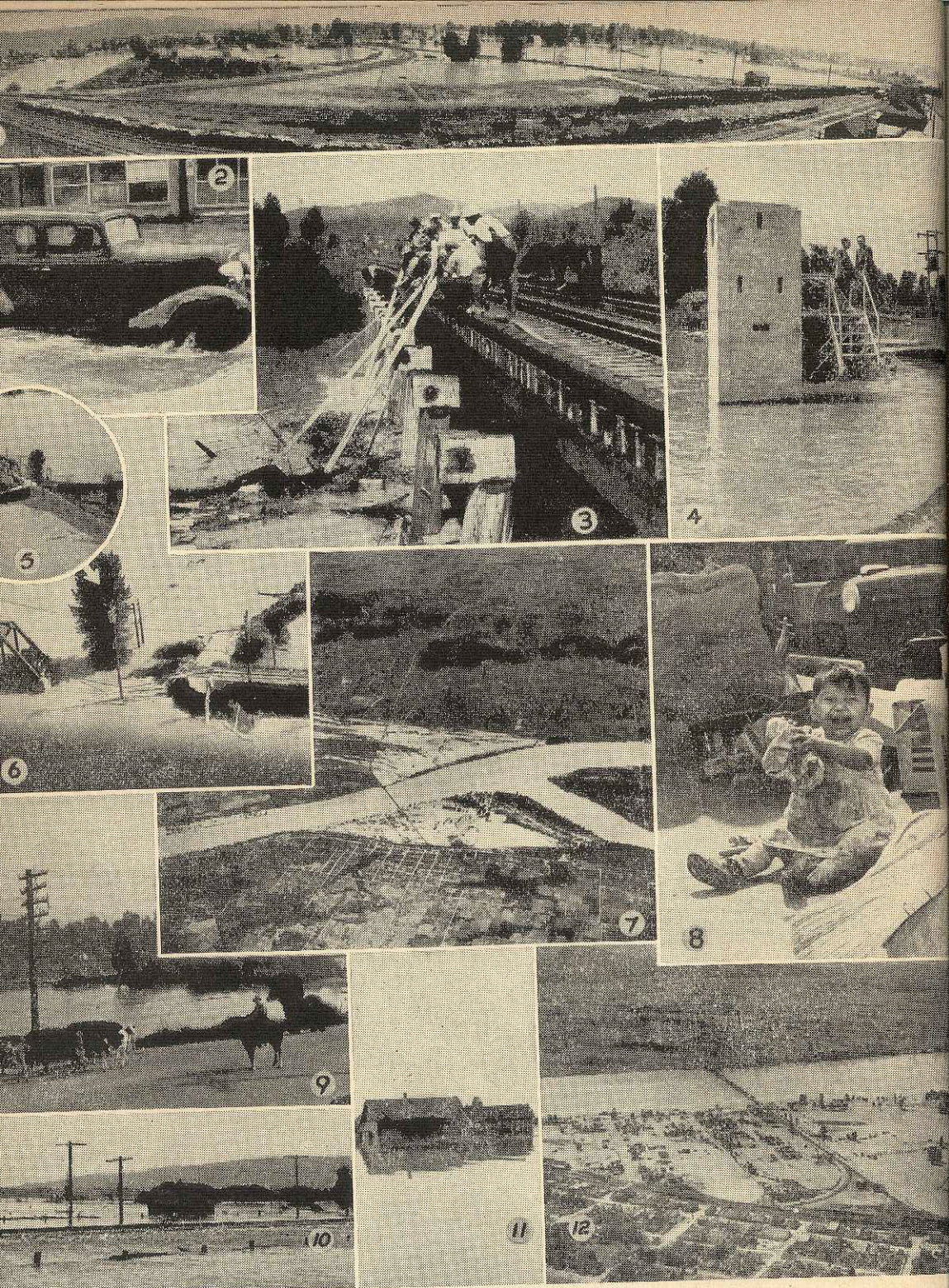
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Normally quiet waters of Heffley Creek took this bridge out when the waters built up to a raging torrent. It is located 15 miles northeast of Kamloops on the proposed new Trans-Canada Highway.—Artray Photo.

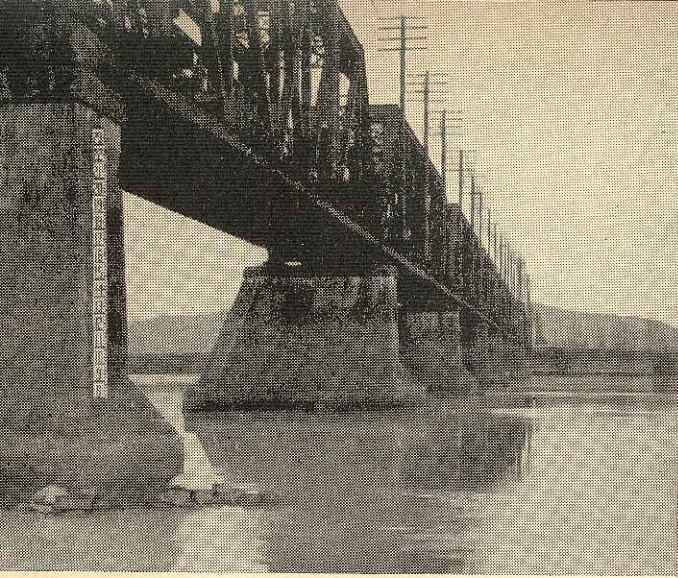




MISSION

1—Mission lowlands inundated; 2—The road to the bridge; 3—Clearing driftwood from bridge footings; 4—The famed Mission gauge; 5—Mission Bridge before the break; 6—After the washout; 7—Mission to Matsqui; 8—Flood victim; 9—Cattle are cleared to higher ground; 10—Abbotsford-Mission tracks are washed out; 11—Partially submerged lowland homes; 12—Before the Matsqui break.

PICTURE CREDITS—1—Clifford; 2, 7, 12—Artray; 3—Warner; 4, 11—Kipnes; 5—Dave's Photos— 6, 8—Buchan; 9—Le Blanc; 10—McLeod.



This was "unofficial" Mission gauge on May 1, when the Fraser River first began its climb. The water was barely 5 feet.—Clifford Photo.

The Mission Gauge

By **BRUCE RAMSEY**
(Vancouver News-Herald)

Each spring, when the Fraser River and its many tributaries start their run-off, the eyes of every person in the Fraser Valley turn to a little concrete blockhouse on the Mission end of the Mission-Matsqui Bridge.

To the general public it is known as the Mission Gauge. In reality it houses the hopes and fears of owners of 87,000 acres of rich farmland stretching from Agassiz to the sea.

It was from within these walls that the daily readings of the river were dispatched to the public during the 1948 floods . . . but few people actually knew what it meant, other than the water was very high.

Mission zero is actually 8.27 feet above zero at the sandheads at the mouth of the river.

Thus, if the reading at Mission was 22.41, the water would actually be 30.68 feet above sea level.

Although little is heard of the Mission Gauge during the year, other than at the time of the freshets, its readings are taken every morning, rain or shine, at 8 a.m.

The gauge tender is a stocky, well-built man of medium height, who doubles as bridge tender. His name is Joe Poirier. He has been reading the Mission gauge for six years.

The present concrete building, which measures four feet square, and perhaps six feet high, was erected in the spring of 1947. On its side is a bronze plaque marking the height of the water in 1894, when the river passed 25 feet.

The blockhouse is one of 300 such structures erected by the Dominion Water and Power Bureau of the Department of Mines and Resources to determine the rise and fall of rivers throughout British Columbia and the Yukon.

Just inside the steel door is The Gauge, accurate to a hundredth of an inch. Attached to The Gauge are two long pipes reaching into the deep, swirling water of the Fraser. This allows the water to seek its own level inside the well on which The Gauge is perched.

Inside the well, is a counterweight which rises and falls with the water. When the river level drops, it moves an inked pen to the left by means of a sprocket wheel and chain attached to the counterweight.

Conversely, when the water level rises, the pen shifts to the right. This pen marks a thin line across a sheet of granite paper turned on a roller by clock mechanism. The paper can keep rolling for two months without a break, leaving a second-by-second record of the rise and fall of the River of Destiny.

This year, when the Fraser went on the rampage for the first time since 1936, bridge tender Poirier made hourly checks as to river conditions. His reports were released to newspapers and radio stations which passed on the results, and warned authorities of impending disaster.

Mission

By **MURIEL EVISON**
(Fraser Valley Record)

The role played by Mission City during emergency flood days was not unlike the advance post on a battlefield.

It was the centre of all emergency supplies for the large area east of the village. And, as district after district succumbed to the flood-maddened overtures of the Fraser River, evacuated people were registered at Red Cross headquarters or at the Armories as they arrived from the stricken areas.

A Flood Emergency Committee led by Rex Cox set up headquarters in the Municipal Hall. A reserve pool for men and trucks was established in the Elks Hall.

Public halls were requisitioned as canteens. Housewives left the privacy of their own homes to work in volunteer canteens.

Cars fitted with loudspeakers patrolled the streets. Trucks full of men and army vehicles, including amphibious craft, rushed to and from scenes of action.

While Mission City fought the flood and its consequences, ordinary business procedure went by the board. Everyone—rich and poor alike—"dug in" to help in the emergency.

In the village itself, only the flats south of the C.P.R. tracks were inundated. The rest of Mission City is on sufficiently high elevation to escape.

The break in the Mandale Dyke, which occurred when the Fraser was at a 22-foot level, caused speedy evacuation of the area. Berry farms in the locality were covered by water four to six feet deep.

From the first, arrangements for evacuees were under the direction of the Red Cross, supervised by Harry Beach, president of the Mission branch.

The first canteen was opened at the Orange Hall. Women and children evacuees were billeted at the Armories. Later the Canadian Legion auditorium was utilized as an evacuation centre for women and children and billets were provided for men in the United Church basement and Anglican Church parish hall. Indian evacuees were taken to the former Japanese Temple.

Volunteer canteen workers arranged four working shifts. Hundreds of meals a day were served. Food was distributed to the canteens from a central distribution office of Red Cross stores.

Early in the emergency the Salvation Army supplied blankets to evacuation centres. Later they opened a clothing depot.

Most of the displaced persons brought into Mission were absorbed in village homes. Few were obliged to stay in evacuation centres indefinitely.

The inundation of Nicomen Island, followed by Dewdney and then Hatzic Prairie resulted in removal of hundreds of cattle to Mission district.

Over 200 milk cows were brought from Deroche. Other hundreds driven to the district were stabled at the Agricultural Grounds and on land belonging to St. Mary's School. Others were herded to Heptonstall's farm which escaped complete inundation.

Heptonstall's served as a link between the water-ridden communities of Durieu and Deroche, and was used by Navy and civilian craft as a shuttle point by landing barges.

Owners of dairy herds moved with their cattle to care for the animals. Milk was shipped daily to other centres, then on to Vancouver. Feed was provided by the Flood Emergency Control Committee and the Provincial Department of Agriculture.

Green fodder was cut by machine from highways and byways surrounding the village. Barns were provided with milking machines.

As the level of the river dropped, Mission City settled into a period of rehabilitation.

After three weeks of providing meals in the canteens, the Red Cross, through arrangements with local stores, issued meal tickets and grocery orders to evacuees.

For the purpose of distributing Mission's share of the B.C. Flood Emergency Fund, a local committee was set up. It was headed by A. D. McRae, village commissioner. The Committee worked in conjunction with Maj.-Gen. F. F. Worthington to help people get re-established.

Despite the many difficulties confronting the people and the necessary adjustment demanded of them by the sudden change of circumstances, everyone pitched in to help the flooded-out families.

Fort Langley and Glen Valley

The old Hudson's Bay store, all that remains of historic Fort Langley, has seen many strange sights since that day in 1858 when Governor James Douglas proclaimed the colony of British Columbia there.

Built high on an embankment overlooking McMillan Island and the Fraser River, it was a silent witness to the disastrous flood of 1894 and that of 1936.

The men who manned the old fort were a hardy lot and last spring their descendants proved themselves equally as hardy.

The old-timers would be proud of the way the men and women manned the dykes to combat Nature's Fury at its worst.

Every able-bodied man in Fort Langley was on the dyke, fighting to hold the heritage left by his forefathers.

At midnight, May 28, the situation improved so much that the holding force was cut in half to allow at least some of the weary men to snatch a few hours sleep.

But it was like an old Indian trick for which the old-timers wouldn't have fallen. At 4 a.m., with most of the dyke workers home in bed, a high wind sprang up and sent the murky waters over the top of the massive J. J. McLellan dyke.

A 30-foot section of the \$10,000 dyke collapsed with a roar and in one swift blow 300 acres of the finest farmland in the province was inundated.

Fort Langley was cut off from all direct land communication.

The story was different up the river at the tiny centre of Glen Valley. Here it was a case of not enough sandbags and not enough people to pile them.

The residents worked in a never-ending shift, but the river rise was too rapid.

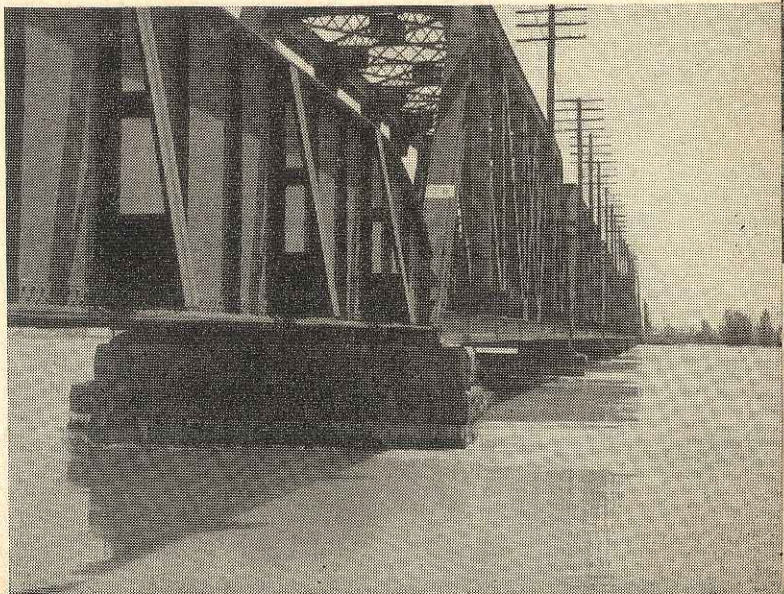
But if they could not hold the river, at least they were prepared for what they knew must follow. McMillan Island, already evacuated, was swallowed up.

Some 4,000 acres—comprising Glen Valley, West Langley, East Langley—were submerged. Another 1,000 acres were partially flooded or seriously damaged by flood waters.

Damage costs zoomed to an estimated \$625,000, including ruined homes and wrecked crops.

It was a hard blow to the small merchants and farmers of the fertile area.

On May 26 the "unofficial" guage had disappeared in'to more than 24 ft. of water. The official guage (Page 46) was almost undermined. — Clif-ford Photo.



Operation Overflow

By **LIEUT. C. T. McNAIR**
(Royal Canadian Navy)

The morning mists lifted uncertainly over the water, shifting and swirling with the cool breeze. In the dawn light the far bank loomed through the fog patches, while the silver girders of the bridge reflected the first rays of the sun. On the quarterdeck of the Frigate, and on the wharf, there was an unusual bustle of activity. Dungaree-clad seamen and officers in battle-dress or old uniforms moved to and fro, as the endless chain of supplies and equipment was loaded into the boats. From the stern of the grey warship the landing craft and motor-cutters swung out, throttling high as they bucked the swift-moving stream . . . the Royal Canadian Navy's "Operation Overflow" was pushing up the Fraser River . . .

It was during the night of May 27 that the call came to Pacific Command Naval Headquarters in Esquimalt that help was needed in the Fraser River valley. The river was in full flood . . . tearing down the dykes and spilling its silt-laden waters over vast acres of farm lands . . . property, livestock and even human life was in danger . . . small boats were needed and seamen to man them.

The Navy went into action. H.M.C.S. Discovery, the Reserve Training Division in Vancouver, had their detachments out that night. Two sturdy harbour craft, the YC 2 and YC 6, under the command of Lieut.-Comdr. Kenneth E. Grant, R.C.N.(R.) and Lieut. D. B. Perrins R.C.N.(R.) sailed from Vancouver in the darkness, and by dawn the next day were up the Fraser River.

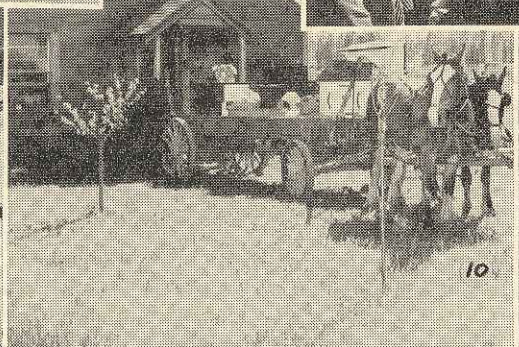
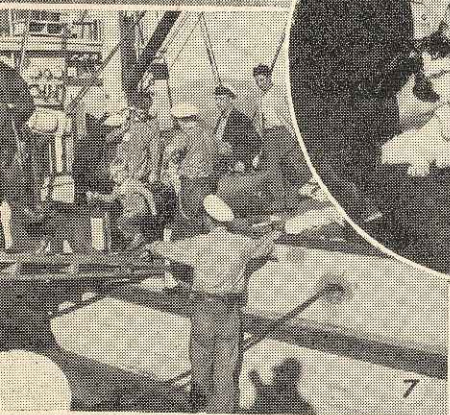
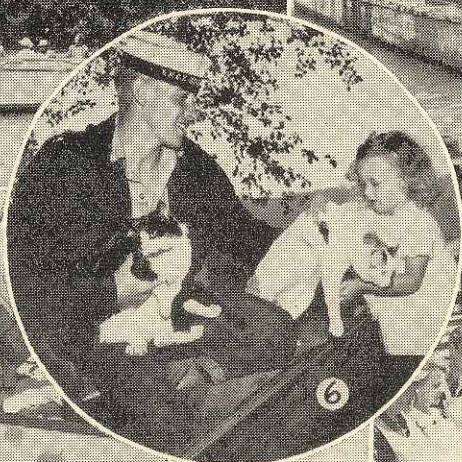
Meanwhile, lights burned in the main office building at the Esquimalt Naval Dockyard. By morning of the 28th, "Operation Overflow" was taking shape.

H.M.C.S. Antigonish, a river class Frigate, commanded by Lieut.-Comdr. C. A. Law, D.S.C., R.C.N., slipped her berth at noon May 28 and proceeded to New Westminster, the deep-sea port on the Fraser. On board Antigonish was Commander Owen C. S. Robertson, G.M., R.D., R.C.N. and a hurriedly assembled group of staff officers, along with the initial equipment and supplies. Commander Robertson, who during the war was awarded the George Medal for taking charge of a blazing ammunition ship in Halifax harbour after the crew had abandoned her, commanded all R.C.N. units engaged in Operation Overflow.

On arrival at New Westminster, Antigonish was immediately set up as headquarters ship for all naval flood operations.

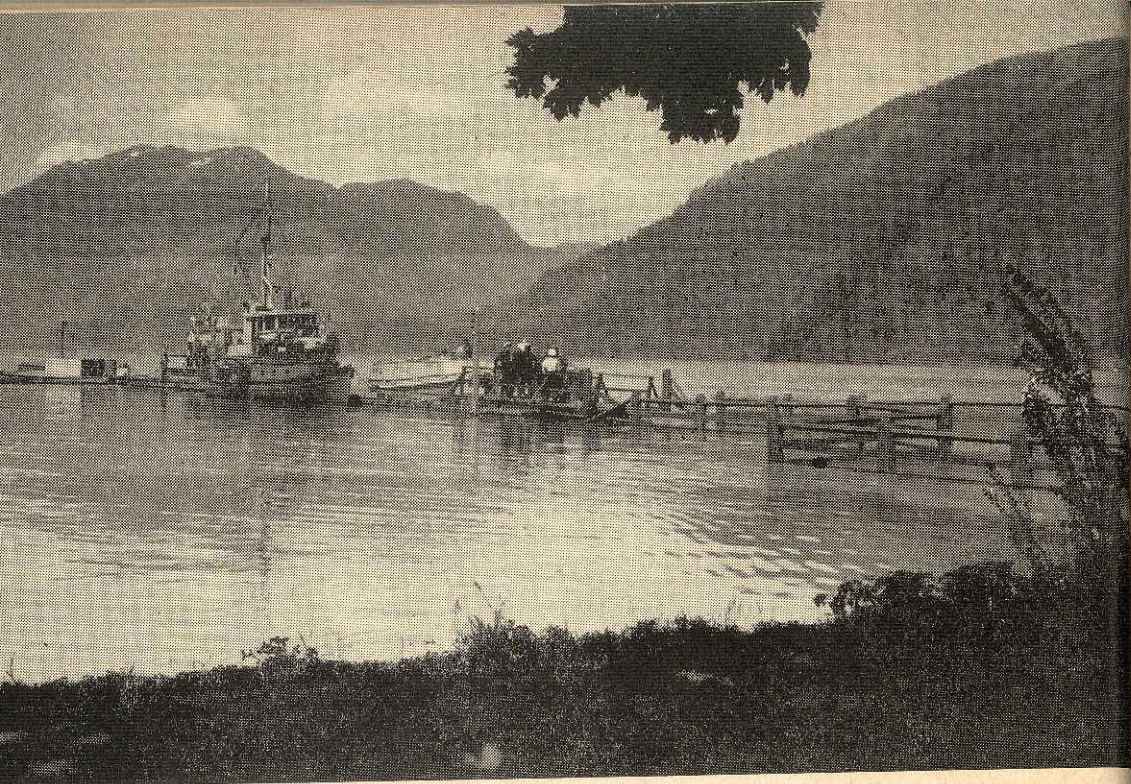
A few hours after the Frigate had secured at the wharf on the flood-swollen river, the Naval Auxiliary Supply Vessel, Laymore, arrived alongside, her decks laden with motor cutters, powered pinnaces and other small craft. She also carried additional reinforcements from the Esquimalt Naval Base. All work went on to a 24-hour basis.

The naval crews preparing to go up-river were an assorted lot. Drawn from the ships in the Pacific Command, their cap tallies bore the names: "H.M.C.S. Naden," H.M.C.S. Ontario," H.M.C.S. Cayuga," H.M.C.S. Crescent." The Naval Reserves played their part also. All branches of the R.C.N. threw themselves into the task . . . the supply ratings, the cooks and stewards, the communications branch, the stokers and engine room artificers, the sick berth attendants and the seamen—working through long, bitter hours without complaint.



1—Milk was handled by a barge when railroad connections failed; 2—Evacuees from Agassiz were taken to Mission by boat; 3—Roads had to be patrolled; 4—Sandbags were transported by barge; 5—Sometimes barges got stuck and had to be pushed off; 6—The Navy looked after the children too; 7—Mission became an evacuee centre for flooded areas; 8—Boat after boat carried homeless persons to safety; 9—Food was served on the scene of action; 10—Houses were evacuated in anticipation, some persons were more optimistic, they lost everything; 11—Small boats were used along main streets.

PICTURE CREDITS—1, 2, 4, 6, 7, 9—R.C.N.; 3, 11—McLeod; 5—Warner; 8—Buchan; 10—Kipnes.



In the shadow of majestic mountains surrounding Harrison Lake, Naval craft stood by to evacuate families living near the famous resort hotel. While this picture was taken a landing craft and motor cutter were en route to Agassiz to evacuate those in need.—R.C.N. Photo.

At dawn of the 29th, Commander Robertson and the first group of small craft went up the river. Piloted by local river men, whose knowledge proved invaluable, the naval power boats proceeded to Mission, about 60 miles from New Westminster. There an advance supply and naval radio headquarters was established and the initial rescue and supply operations of naval craft were speedily put into force.

The heavy naval tugs, Heatherton and Glendon, also arrived, and these sturdy vessels steamed up to Mission, where Heatherton commenced evacuation duties between Mission City and Harrison Mills, many miles further up the river. Yard craft, tenders and small auxiliary tugs sailed from Esquimalt to add their strength on the river.

During the first few days of Operation Overflow, Commander Robertson, assisted by Lieutenant P. S. Booth, R.C.N., directed the rescue units from the advance base at Mission.

Other work went on . . . log jams had to be cleared . . . milk taken out, and feed sent up to cattle stranded on high ground. Sand bagging parties were needed and many a seaman put his back into holding and strengthening the sagging dykes.

At the peak of Operation Overflow, when the Fraser River poured down from the watersheds, strident and untamed, over 700 naval men (R.C.N. (R) and ex-naval volunteers) worked the Fraser from the Vedder to the sea.

Harrison Hot Springs was in the thick of it during the early stages of the operation. Naval landing craft and motor-cutters made their way across the golf course and up the sloughs to Agassiz, carrying bread to isolated communities and bringing out families to be taken to Red Cross evacuation centres at Mission.

Gradually the position began to stabilize, but the danger was not over and the gauge at the Mission railroad bridge crept close to the 25-foot mark. Commander Robertson moved his headquarters back to H.M.C.S. Antigonish, where the overall picture could be watched as reports came in from the different radio posts and vessels deployed on the river.

Slowly the strength of organization caught up with the Fraser River and while the muddy waters gouged at the remaining dykes, the strategic positions were grimly held.

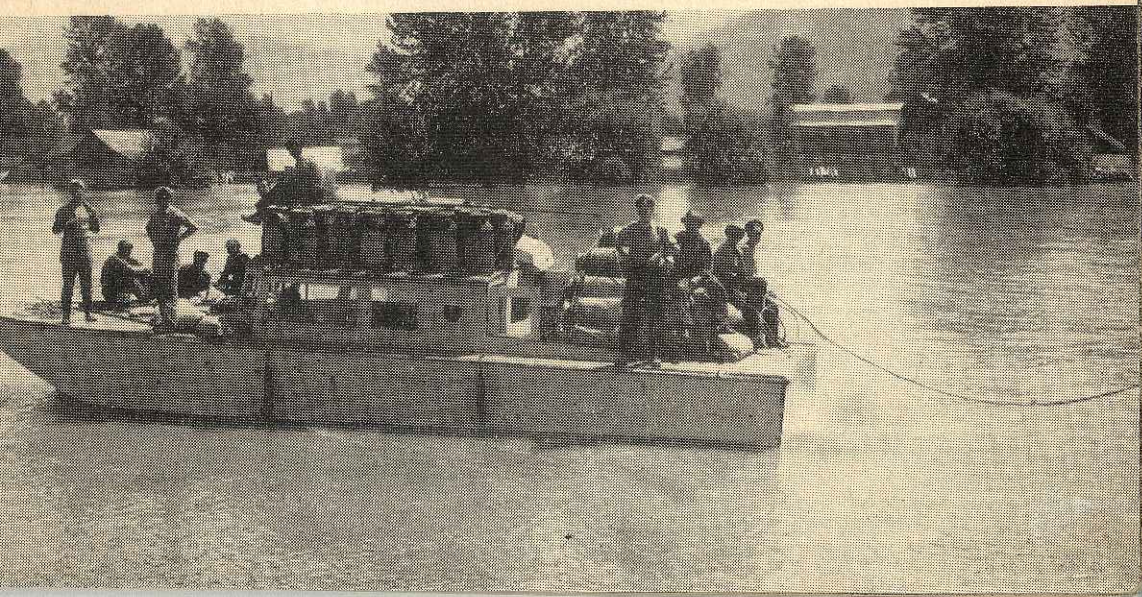
A desperate battle was waged to hold Barnston Island and until the dyke finally succumbed to the force of the river, a naval party directed by Lieut. E. V. Sunderland, R.C.N.—one of the ship's officers from Antigonish—worked side by side with Canadian Army units. When the dyke crumbled and gave way, and the river poured its yellow stream over the land, the work of evacuation went smoothly, and through the night the people were removed from danger.

For days the river stayed at peak level and then slowly the hollow victory appeared on the horizon. On June 14, Commander H. Kingsley, R.C.N., Senior Officer Ships in Reserve, took over as Commander of Operation Overflow. Commander Robertson, who earned the admiration of all who served with him during the 16-day fight with the Fraser, returned to Esquimalt to take command of his ship, H.M.C.S. "Cayuga," and ready her for sea. H.M.C.S. "Rockcliffe," the Reserve Depot Ship, arrived in New Westminster to assume the duties of Headquarters vessel. Early that evening of the 14th, "Antigonish" swung down the Fraser. As she gathered way, pointing her bows to the river mouth, three long blasts from her siren echoed out, and from the "Rockcliffe" the answering call came back. It was the traditional mariners call . . . "good-bye and good luck."

The Royal Canadian Navy will remember the river. From Lulu Island to the Mission Bridge, and beyond, they adapted themselves to the mighty Fraser. The permanent force, the Naval reserves, the ex-naval officers and men, who put on their old wartime caps and pitched in with the team, made Operation Overflow work. They were Operation Overflow, and with countless others who waged the fight they gladly did their share.



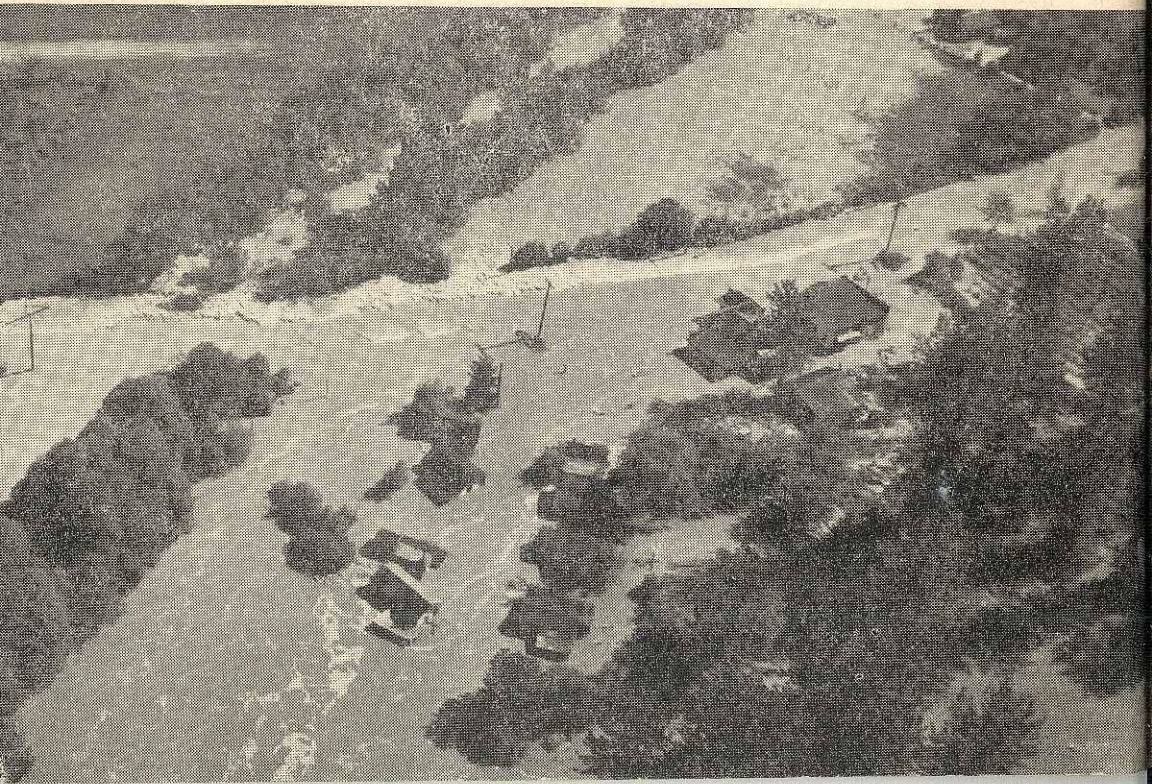
With railroad and highways washed out, the Navy was called on to transport milk from stranded farms to market. Here, a tender from the Royal Vancouver Yacht Club, commandeered by the Navy, is seen as it approached Nicomen Island to trade a load of empties for full milk cans.—R.C.N. Photo.





Above, Phil Baldwin of CKNW, interviews a dyke worker in Queensborough. CKNW put its entire facilities at the disposal of the flood control committee during the emergency.—Le Blanc Photo.

This was the break at Cannor which inundated 10,000 acres from the outskirts of Chilliwack to the Vedder Canal. Nothing could be done to stop the break, because of the heavy undergrowth on the dykes.—Artray Photo.



Trail

The tiny smelter city of Trail, lying like a terraced lawn along the side of the Columbia River Valley, has a different story to tell.

While dozens of other cities and villages throughout the province fell prey to turbulent rivers, Trail won its "battle of the dykes."

But the victory was not absolute.

Apartment buildings, homes, stores and even the old skating rink, home of the famous Trail Smoke Eaters, have waterlines circling their frames like a belt around a fat man.

The cost of repairing water damage will strip many of their life's savings. Others will go into debt to keep a roof over their heads.

But still Trail was fortunate.

True, at one point in the battle parts of the main street were under four feet of water which had seeped through the dyke atop the retaining wall along the banks of the Columbia.

This outstanding aerial photo by Ray Munro of Artray Ltd., shows the plight of Trail when the Columbia River went on the rampage. In the upper right is the Consolidated Mining and Smelting Co. plant, while the town lies on either side of the river.





This startling photograph by Mickie Jones, shows the swirling waters of the Columbia River in the Creston Valley. The river won the battle against thousands of volunteers and permanent army personnel who sweated it out under blistering sunshine to reinforce the dykes.

But there was no mortal terror—No screaming populous running before a wall of water. Here the men and women worked hard and long—and won.

During the first few days the people of Trail lived in fear of a drastic flood.

Each torrential surge of the mighty Columbia sent the foaming crest higher, tossing spume and spray onto the sweat-soaked backs of men and boys straining on the dyke-tops with sodden sandbags.

On June 3, the rampaging Fraser ripped out the railroad at Hatzic, isolating Trail and other interior towns. The sandbag supply dwindled as layer after layer raised the top of the dyke in pace with the river. Storms blew up and R.C.A.F. pilots were unable to land with sandbags for several days.

With no new supplies coming in, gasoline dwindled to a serious low until civic authorities enforced a rigid ration program.

Then, cut off from the rest of the country and with almost no news of its plight leaking out, Trail's fortunes began to change.

A huge R.C.A.F. bomber, still in war camouflage, dived through the overcast and released a vital cargo of sandbags through its gaping bomb bay.

Men who had worked like trojans to keep pace with the rising crest threw new vigor into the battle and the retaining wall rose faster than the foaming river.

Their work held back the river, but they couldn't stop the seepage. More than 100 persons fled from homes on Riverside Street. Basements were flooded, sewers backed up and the ballroom of the main hotel looked like a swimming pool.

Then, at Creston, 60 miles to the east, local workers, bolstered by units of the Lord Strathcona Horse, lost their fight to hold back the Columbia. On June 8 the dyke broke, inundating 7,700 acres and throwing the full fury of the river against Trail.

The soldiers were pulled out to fight the floodwaters at Lulu Island.

As the water crept up at Trail, preparations were made to evacuate the Trail-Tadanac Hospital should a major break occur.

But the R.C.A.F. got through with sandbags and the citizens, with the help of Nelson and Trail army regiments, filled and piled the bags along the dyke top.

Five days after the main battle began, June 9, the sun came out. The river level dropped . . . only a fraction of an inch, but another symbol which lent hope to the people.

The recession continued slowly and the people of Trail gave thanks to God that theirs had not been the fate of other communities.



1—At Rosedale, trucks roared over the dykes in an endless chain; 2—Dogs as well as cattle were evacuated from Nicomen Island; 3—Neighbors helped one another move furniture; 4—At Hatzic, C.P.R. tracks dangled in the water; 5—Army kept radio communication open 24 hours daily; 6—Pumps were put into operation immediately after the Semiault break; 7—At Laidlaw, C.N.R. drove piles to reinforce tracks; 8—Evacuee children from Agassiz were taken to old Hotel Vancouver; 9—Kimberley torrents tore houses from foundations and deposited them miles away; 10—The Matsqui break.

PICTURE CREDITS—1—Artray; 2—Croton; 3, 8—McInnes; 4, 5, 6—Kipnes; 7, 10—McLeod; 9—Bill Gill.

Sumas

By BILL GILL
(Vancouver Sun)

"More things are wrought by prayer than this world dreams of."
—TENNYSON.

Hard-bitten Navy and Army men who worked on the vital Vedder dyke will tell you the dyke is still intact because of mud and Mennonites.

"No, we could only do so much," explain the Mennonites, "it was God's help and our prayers that did the rest."

Few who saw the tremendous precision of the huge organization which kept the Vedder dyke whole and saved all of Sumas Prairie and parts of Washington can doubt any of the statements. The Vedder held against the Fraser, Vedder and Sumas rivers, all of which meet and churn within it's tree-rimmed length.

The Vedder Canal dyke, located eight miles southwest of Chilliwack, was built in the early 1920's at a cost of more than \$5,000,000. By channeling the Vedder River first into the Sumas River and finally into the Fraser, the canal reclaimed with the aid of powerful pumps more than 10,000 acres of fertile alluvial soil which was covered by shallow Lake Sumas. Around the lake another 20,000 swampy acres became lush dairy lands.

Sumas residents knew if the dyke went that not only would Sumas Lake return to existence but with some of the broadest reaches of the Fraser just west of Chilliwack swelled by the full weight of Harrison Lake, the river might easily cut a new way to the sea, right through Sumas.

The town of Yarrow, immediately south of the dyke, became the nerve centre for the fight and by May 26 local authorities had the dyke systematically divided into 35 sections with three men allotted to each section in shifts of eight hours each.

Telephones were installed at key check points along the entire length.

Every able-bodied man over the age of 14 worked on the dyke or at the huge sandpit set up at the south end of the dyke. The men were fined if they failed to report for duty.

Along the top of the dyke in a never-ending stream, small tractors towed trailers full of bulging sandbags to waiting lines of men. Three of these tractors plunged into the waters of the Vedder but were eventually hauled to safety.

Suddenly, on June 1st, a break at Cannor, just east of the Vedder, near the Trans-Canada highway, deluged tons of Fraser water and there unleashed might over Greendale and cascaded against the up-stream side of the soggy Vedder dyke.

The Royal Canadian Navy put four landing craft, a pinnace and a cutter at the disposal of the Sumas workers. Back and forth the landing craft hauled load after load of sandbags up the length of the canal. One brave cox'n loaded 17 tons of sand-filled bags into his craft at one precarious moment when the need was desperate.

American volunteers from the U.S. towns of Sumas, Lyndon, Everson and Nooksack came to work on the dyke and evaded immigration officials at the Canadian border by claiming they were going visiting . . . in evacuated Yarrow!

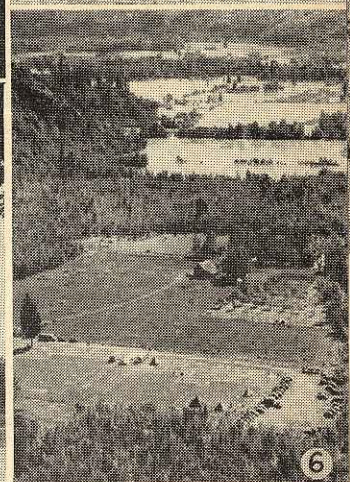
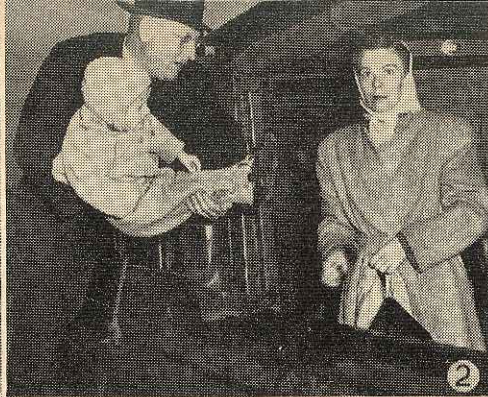
At the peak of the Fraser's second crest on June 10, a sudden warning from U.S. dyke experts in Vancouver summoned all Sumas residents to evacuate because of the "precarious" state of the Vedder dyke.

Reluctantly members of the Yarrow Committee mobilized their waiting trucks and unbelievably started a second evacuation. No sooner was this begun than the water started to recede.

Engineers like Fred Sinclair and Gilbert Moe, responsible for constructing the dyke, became exaltant.

Mennonite women, finally released from the labor of standing over hot brick stoves turning out hundreds of dyke-sized meals in the spotless basement of their church, came shyly to the dyke to see where their men had been working.

The keen eyes of the women-folk shone out over the precious land sandwiched between the great bulk of Sumas and Vedder mountains. The pocket-handkerchief fields, the red-roofed houses and the great barns were still dry. The clear, unlined faces lit up in radiant smiles; their prayers had been answered.



1--The Columbia River roared through main streets at Kimberley; 2--At Agassiz, women and children were first to be evacuated; 3--Service stations "closed" at Matsqui; 4--At Yarrow, constant vigil was kept on the dykes; 5--Mission flats had to be evacuated; 6--Agassiz graveyard became home for evacuees; 7--A hundred trucks hauled gravel 24 hours a day at Rosedale; 8--Stocks in grocery stores were ruined; 9--Sandbags at Ridgedale; 10--Auto camps were submerged; 11--Water almost to the top of dykes at Nicomen Island before the break.

PICTURE CREDITS--1--Bill Gill; 2, 6--Buchan; 3, 5, 8, 10--Clifford; 4, 9--McLeod; 7, 11--Kipnes.

The Army

By WO/1 DICK WOOLARD

The importance of an active and reserve army in peace as well as in war was amply demonstrated during the disastrous 1948 floods which gouged a muddy swath down the Fraser Valley and in the interior.

Early in the fight it became apparent that civil authorities alone could not adequately handle the enormous organizational task of co-ordinating the many groups and agencies fighting the flood menace in their own communities. Also was the problem of dealing with the disaster as one major problem instead of numerous isolated incidents.

With this in view, Premier Byron I. (Boss) Johnson and Attorney-General Gordon S. Wismer called in Brig. T. E. D'O. Snow, O.B.E., Army Commander in British Columbia, to aid in forming an organization to deal with the problem.

That organization was the B.C. Flood Control Committee, under chairmanship of E. Roland Gilley. Working with Mr. Gilley were high officials of the three armed services and representatives from various provincial government departments.

With these men to advise him, Brig. Snow went to work.

The many civilian organizations with the aid of thousands of volunteers had been fighting a grim battle on the dykes.

They were doing a magnificent job, but due to the purely local character of their organizations they were unable to make the best use of available manpower and materials.

With the authority and at the request of Premier Johnson, Brig. Snow undertook this task.

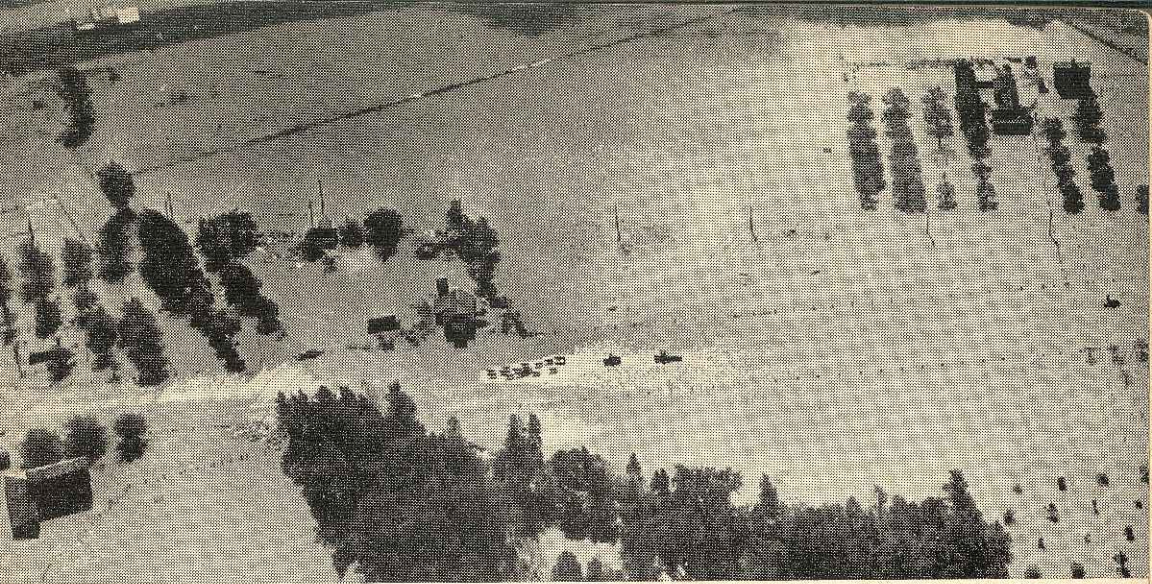
A state of emergency was declared by the B.C. Government and active and reserve units were called out and thrown into the fight.

Among the units called up for flood duty were Headquarters, 22nd Armored Brigade under Brig. William Murphy, C.B.E., D.S.O., E.D.; and Headquarters 15th Infantry Brigade under Brig. J. M. Rockingham, C.B.E., D.S.O., the former to handle co-ordination of manpower and materials, the latter to operate an intelligence section.

The first move was to bring order out of chaos by insisting that all requests for workers on the dykes, sandbags or other material needed in the emergency be channelled through the 22nd Armored Brigade headquarters. With the unselfish aid of thousands of willing volunteers, organized parties were sent to threatened areas to bolster tiring efforts of local residents.

With the immediate check provided by roving liaison officers in every sector, authentic reports were available as to the exact situation at all times.

These reports were the basis of press releases to newspapers and radio stations and instrumental in halting the welter of rumors pouring from the disaster area. As the floods developed, the papers, stations and wire services made a practice of obtaining confirmation of each story from the press relations departments of the service involved.



Ray Munro's lens caught the reflection in the rippling waters as farmers at Laidlaw drove their cattle to higher ground. Laidlaw went under early in the disaster.

Reserve units on Vancouver Island were the next outfits to be thrown into the battle and as the water rose in interior localities, the 108th Anti-Tank Battery, R.C.A., was called out at Kimberley and the 24th Heavy Anti-Aircraft Regiment, R.C.A., at Trail.

In some sectors troops were required to work at building up sagging dykes, working at hours when sufficient civilian volunteers were not available. In others, they provided traffic control and such other tasks as the sector commander decided required their services.

Army signalmen strung hundreds of miles of wire and installed field telephones as well as setting up mobile and fixed radio stations throughout the entire area. This provided immediate warning of any threatened break and enabled reinforcements to be rushed in.

The transport corps augmented by hundreds of civilian trucks, kept supplies and sand moving up to the dykes and army mechanics and breakdown lorries kept roads clear and trucks moving.

Working in conjunction with the army, the R.C.A.F. flew hundreds of soldiers from prairie centres into the dyke areas in time to supplement other units, in some cases providing the extra manpower needed to hold back the river.

The arrival of these reinforcements, together with gradually-receding flood waters, permitted standing down of the reserve army units.

With agreements reached between the federal and provincial governments, civilian contractors began hiring hundreds of paid laborers to take over the tasks of the volunteers.

And the battle was carried to completion. Young reserve and active soldiers of 1948 threw up long lines of sandbags to hold back a river—just as their fathers in 1914 had thrown up long lines of sandbags to hold back an enemy no more insidious and ruthless.

Their job—well done—was an excellent example of the co-operation existing between the armed services and the way in which they worked during the emergency won high praise from even the most bitter—the little man who had lost everything in the swollen brown tide.

* * *

Evacuation is the flood worker's term for tragedy.

It means the sudden withdrawal of everything permanent. It means that half a century of toil and planning have been wasted.

The Red Cross

By RETA MYERS



RETA MYERS—*Provincial publicity director for the Canadian Red Cross, who spent many sleepless nights and uncomfortable days in flooded areas to bring back the inside story of the Red Cross' battle against NATURE'S FURY.*

Every year thousands of persons in British Columbia sign pledge cards and contribute part of their salaries to the Red Cross. And every year it leaves them short until next pay-day. And every year they grumble.

But this year a good percentage of these people will sign their pledge cards willingly and maybe add a few dollars to the donation.

These will be the people who were in the Fraser, Kootenay, Okanagan and Columbia valleys and saw the Red Cross in action.

These will be the people who smoked their free cigarettes and drank the coffee Red Cross workers handed out over counters improvised from kitchen tables.

These will be the people who staggered into Red Cross hostels, their arms aching and hands covered with sores from handling sodden bags of sand.

Because in those hostels they saw their Red Cross dollars at work.

Red Cross girls out on their feet from 11-hour shifts of caring for dead-beat dyke workers and numbed, uncomprehending evacuees were the symbol of those dollars.

Some were stenographers, some filing clerks and one an inspector in the women's division of the Vancouver Police Department.

Carefully-manicured hands were boiled almost raw from washing dishes and ladling steaming beans from huge cauldrons swung, in many cases, in the smoke of open fireplaces in the parade rooms of local barracks.

They drove station wagons, sharpened pencils, blew noses of tots just in from flood-ravaged farms and did every other kind of "Joe job" there was to do.

One girl, a secretary in a large Vancouver exporting office, made a two-day trip into the bush with a guide in search of a family reported stranded without food.

She returned to her base at Mission, her hair snarled into a hopeless tangle and scratched and cut by bushes. But she found the family and took them the first food they had had in 24 hours.

Four other girls took on the gigantic task of running a 350-bed hostel.

For weeks after the May 25 onslaught of the Fraser River they cared for and fed thousands of persons.

For more than a month the Red Cross was on 24-hour call and not one call went unanswered.

In cities far from the flood areas, they packed plasma and food, blankets and cigarettes and three 25-bed hospitals aboard R.C.A.F. planes.

More than two tons of food alone was parachuted to isolated settlements or landed by seaplane at lonely command posts.

Half a million cups of hot coffee and untold numbers of meals were doled out to dyke workers, evacuees and volunteers.

In excess of \$20,000 every week flowed out in aid of people whose homes were under water. For the month of June alone, the bill was \$100,000.

Even after the crisis passed, Red Cross Disaster Aid Committees kept up their work.

Theirs is the job of administering the more than \$2,000,000 contributed to the B.C. Emergency Flood Fund.

The fund promised that each affected household would be assured of food, clothing and basic household furnishings in the emergency period between return to their homes and permanent rehabilitation by provincial and federal governments.

That's why this year it'll probably be a lot different when the pledge cards start going out.

Hope

By TOM HAZLITT

(Vancouver Daily Province)

This is one flood story in which there are no broken dykes, no exhausted men piling sandbags, no rushing torrents.

It is the story of Hope, the little town of 2,200 people which happens to be situated on three railways. It also chanced to become the railway terminal for Vancouver and all the Lower Mainland for 10 mad days when flood conditions made rail traffic impossible for her down the valley.

For those 10 days when the "steel" was washed away, Hope's one-man C.P.R. station operated by Jimmy Vipond, actually carried on the work usually done in the great freight yards of Vancouver. Passengers, mail, express and freight from the Kettle Valley and main lines were unloaded and sent out on the 100-mile trip to Vancouver by bus and truck. But Jimmy Vipond got a special staff of 50 men to help him.

The same situation prevailed at the C.N.R. station down the road.

And Hope residents, who admitted the town hadn't seen so much excitement since the last great flood in 1894, put themselves into the spirit of the thing and talked only occasionally of Hope's grand days when the lure of gold was in the air and great stern-wheelers brought new settlers up river from New Westminster.

In normal times six trains a day call at Hope. During the flood the number of trains remained the same, but the tempo of work was increased until, as one railway maintenance man put it, "you'd think the New York Central had transferred its main terminal here."

Telegrams flashed in and piled up. Passengers heading east thronged the ticket office, truck drivers fumed as baggage workers sorted out vast piles of express which awaited the trip to Vancouver.

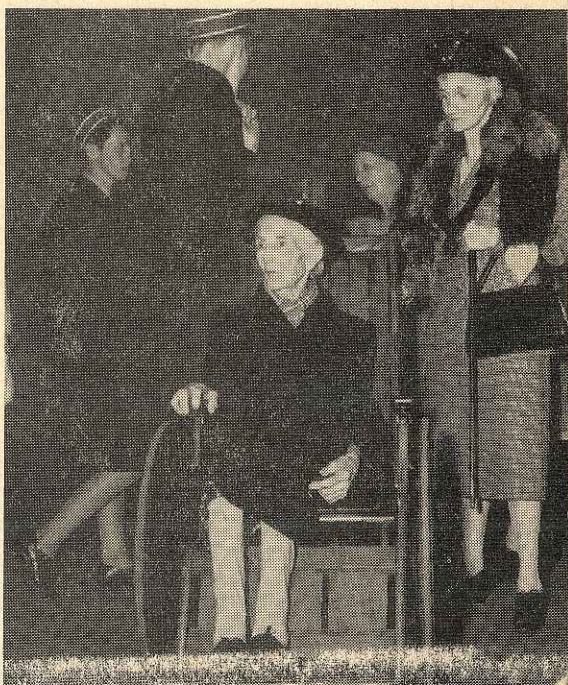
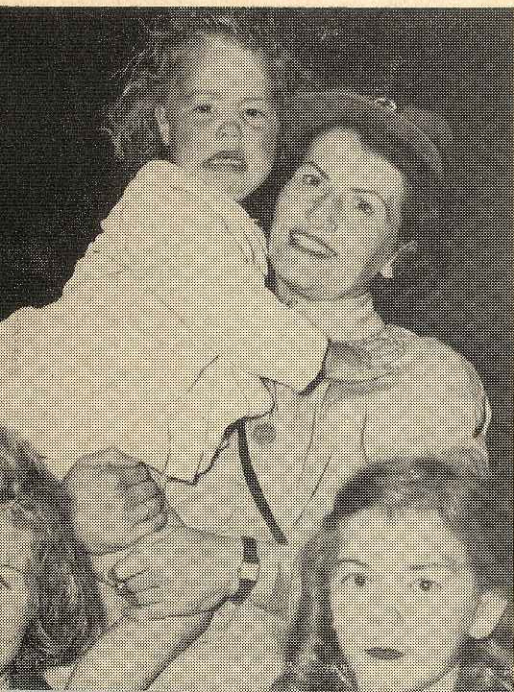
On an average day 25 chartered Pacific Stage Line buses rolled through town with train passengers, and 50 heavy trucks left with freight, baggage and express parcels. Passengers and mail heading east left Vancouver the same way.

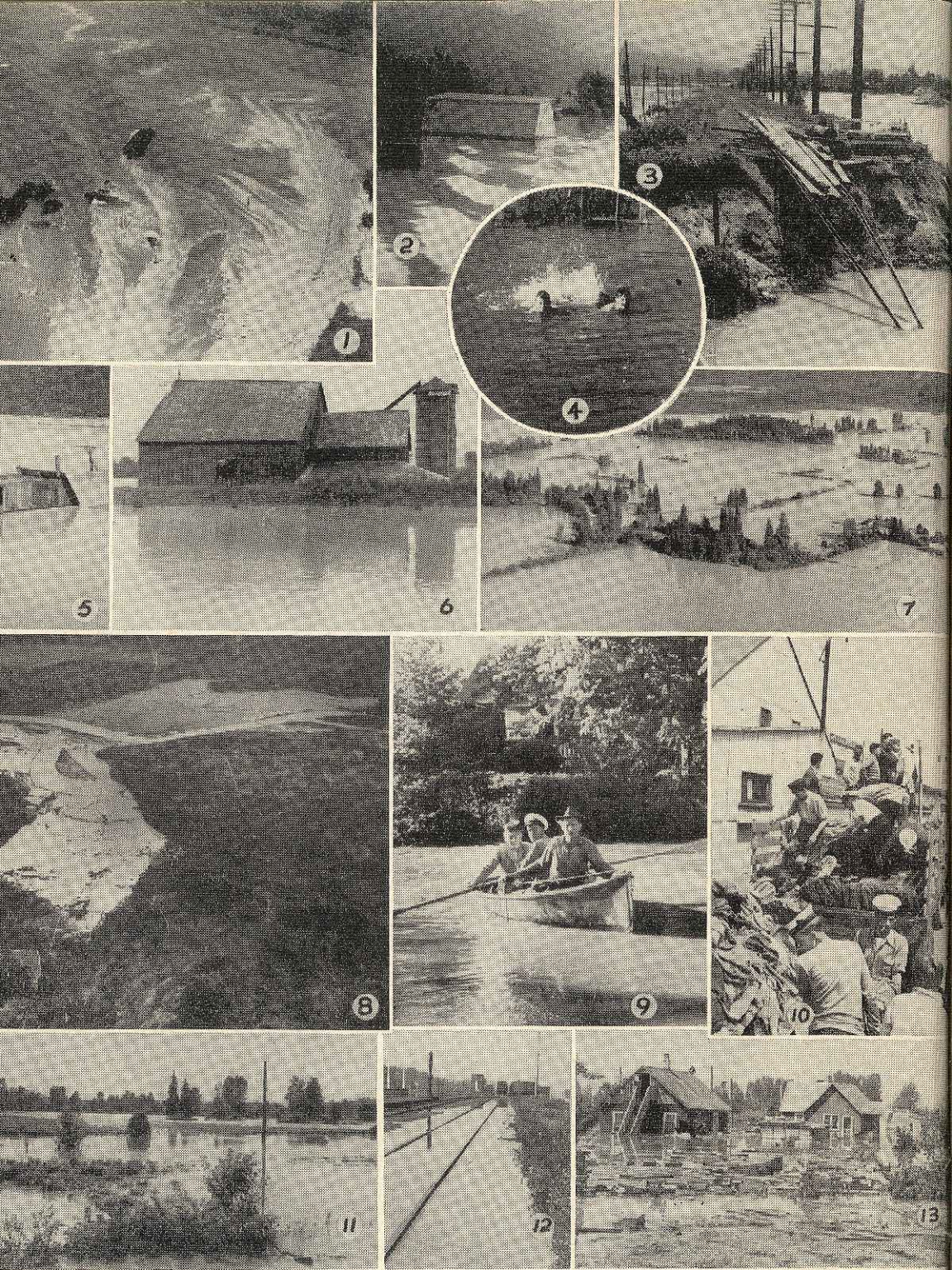
The resulting fuss reminded one old-time resident of the flood of '94, when the same situation prevailed but freight and passengers were picked up at Hope by river ferries sent upstream from New Westminster.

Seventy-five-year-old Andy Lloyd, whose ancestors founded Lloyds of London, came to Hope as a boy in 1892. He surveyed the bustling town with approval, and told cronies that the floods of 1948 proved an old argument.

"Hope always has been an important place," he said. "But people are just beginning to find out about it."

The Red Cross played a most important part in the disastrous floods. Caring for women, children and the aged, feeding dyke workers, and housing thousands of families forced to leave their homes, came as second nature to the men and women who left their jobs to answer the Red Cross' call.—Don McLeod Photos.





1—Matsqui, 4 hours after the break; 2—At Hatzic houses were knocked from foundations; 3—At Mission, one span of the bridge washed out; 4—Children frolicked in shallow water on Nicomen Island; 5—Reason why disease was prevalent; 6—Cattle were stranded at Hatzic; 7—South Sumas was inundated after the break at Cannor; 8—Water was extended from Harrison Lake to Matsqui, more than 50 miles; 9—Evacuation by boat was necessary everywhere; 10—Sandbags were the essential cog in the defence; 11—Berry fields were ruined; 12—Railroads were washed out; 13—Main streets were littered with debris.

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