

**MIGHT
BE
FASTER
TO WALK**



OLD LADY OF THE LAKE

BY
STAN
SAUERWEIN



Katie wasn't sure she'd make it as she braced herself for another contraction.

Damn that ferry. Damn that line-up. Breathe. Breathe.

Her husband, Adrian, leaned on the horn and swerved. He muscled their Chevy down the hill towards the terminal, ignoring angry honks from the cars he was passing.

All the windows were rolled down on Old Thomas, but the hot July sun already made it stifling inside. Katie glanced to the south.

Damn that lake. Breathe. Breathe.

She could see workmen doing something on the bridge but what hardly registered through the pain. Rubbing circles on her distended belly, she tried to relax.

Adrian finally eased Old Thomas through the end of line at the ferry terminal with frantic waves of his arm. The Chevy's deep blaring horn drew the attention of the ferry crew just as a safety chain was being drawn across the stern deck.

He leaped from the car and ran towards the water, waving his arms frantically.

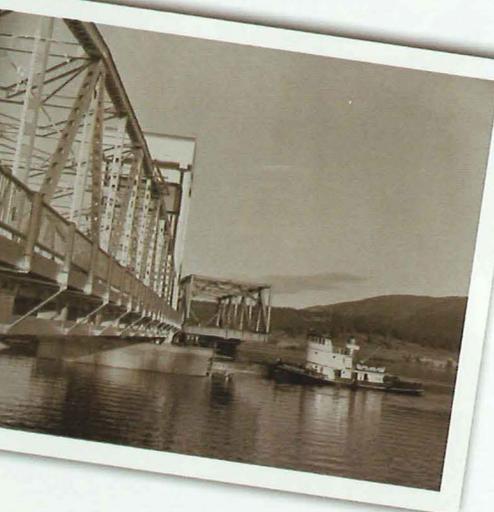
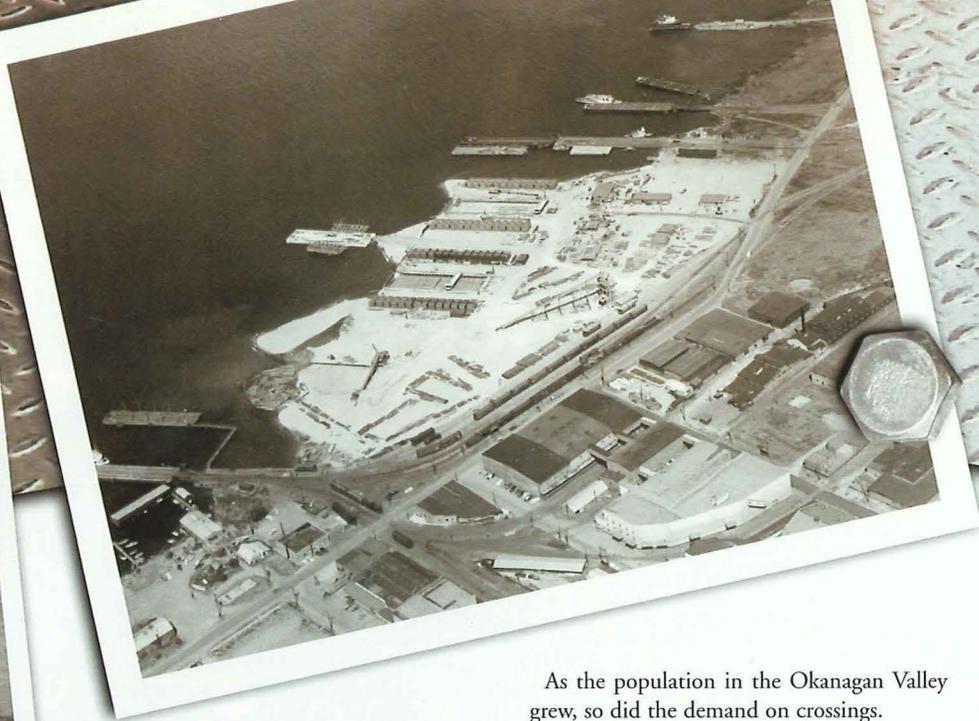
The conversation with the ferryman was a brief, excited blend of Dutch and English, pointing gestures and nods, but he quickly made himself understood. In just moments, he was back in the car and edging Old Thomas into a space vacated by another Westside traveller.

Katie managed to hold on through the 15-minute journey, the mad rush weaving in traffic along Lakeshore, and the hurried admission process at the hospital. With smiles of relief, Adrian was introduced to his first child – John Byland - only minutes after they finally arrived.

The return journey to the Westside a week later was far less hectic. That day, with flags fluttering in the lake breeze above the bridge's concrete railing, Old Thomas joined a long line of cars and trucks rumbling westward across the water.

Baby John was undoubtedly the youngest commuter to use the spanking new engineering marvel – the Okanagan Lake Floating Bridge.

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The 7/8th of a mile between the Westside and the sandy beach at Kelowna has always been a traveller's headache. Since the days when the first Europeans settled in the Okanagan, "getting across" has required patience, perseverance and ingenuity.

In 1885, Eneas and David McDougall became the first entrepreneurs to make some coin from commuter frustration. After several weeks of heavy labor, the brothers cobbled together a 16-ft. scow from hand-sawn planks of pine and went into business. Their ferry, kept floating with the help of rags as caulking, was just wide enough to take on three heavy horses or five pack horses in one go.

The crossing they effected was hardly safe or simple. If you wanted to reach Kelowna you had to plan your day. It began by making your way to the lakeshore and finding the trail that led to Eneas' house. Then you had a four-mile hike to order the ferry. If you were in a hurry, you could opt for the alternative but it took two people and a rowboat. One traveller manned the oars while the other gripped the reins on the horses as they defied gravity and swam across the lake.

Innovation and improved service was the natural outcome of that choice. When H.B.D. Lysons noted Westside travellers were regularly lining up to wait their turn to cross, he inaugurated a "modern" alternative. With a 30-ft launch christened the "Tut Tut", Lysons began to haul passengers and animals in style. The crossing cost his customers two-bits. The toll for horses was four times that.

As the population in the Okanagan Valley grew, so did the demand on crossings.

The "Tut Tut" was soon replaced by a steamboat called the SS Clovelly, launched by Captain J.B. Weeks. That vessel soon got a companion, the SS Aricia. By 1921, the boats were pulling a scow that could handle an amazing eight cars on a single trip.

There were still line-ups though.

By 1927, the provincial government realized it needed to help and built the motor ship the MS Kelowna-Westbank. With a huge 94-ft. length and 32-ft beam it was able to double the capacity to 15 cars on a crossing.

There were still line-ups.

Businessmen from the Kelowna Board of Trade were so fed up with the traffic pinch, they campaigned for, and even starting building their own highway between Kelowna and Penticton on the east side of the lake. The Westbank Public Works, not to be out done, proposed fixing Westside Road to Vernon as another way around. With the ever-present hassle crossing the lake, traveling the long way to Kelowna, through Vernon, was considered a compromise. Both ideas failed to win support in Victoria.

The line-ups continued to grow.

Within a decade the government was running 22 ferries across the mile-wide stretch of water every day and finally, bending to taxpayer grumbles, in 1939, Victoria okayed the building of a steel ferry named the MS Pendozi, doubling the ferry's car capacity one more time. The effort was an expensive drop in the ocean, because when the Hope-Princeton highway opened five years after the end of WWII, ferry traffic jumped by 300 per cent. So did the ferry service deficit at about \$250,000 a year.

Previous page from top: Dredging lake for graving dock; cement plant built for bridge project; dry dock before pontoons; view of pontoon cells; transporting lifting span; last CPR barge passes under unfinished bridge.

This page from top: Aerial view showing reclaimed lake front and dry docks; award-winning Westbank bridge float; joining pieces of main structure.



The two-lane road that scratched its way down the Westside hill, often turned into a parking lot. It was worst on the weekends and unbearable in the summer when tourists arrived. Even so, the government in Victoria turned a blind eye to the 'crossing nightmare in Kelowna'. Despite the fact that single mile of water was the only bottleneck on a 4,800 mile highway stretching from California to the Yukon, the politicians refused to act or even attempt a solution. Growth in both Kelowna and Westbank suffered because of the crossing dilemma. Limits on the weight of vehicles allowed on the ferry pinched the shipment of goods. The gap in Okanagan Lake effectively isolated the north and south ends of the valley.

Desperately seeking some way to justify an expensive bridge to provincial bureaucrats, businessmen in Kelowna played the boogiemer card. What if we have another war, they asked?

It was an outlandish reason for a bridge, but even the Kelowna Daily Courier picked-up the cudgel on that idea and began pounding.

"Many observers believe a bridge is a necessary defense measure," the Courier editorialized. "In the event of another war, troops and supplies could be funneled through the inland route to Alaska. The Central Okanagan would also become the main evacuation center if the West Coast was attacked by enemy bombers."

But the bridge idea was a call to war of another kind. Everyone in the Okanagan was talking about it. The Westbank Board of Trade was so taken with the idea, they used a model for their float in the Kelowna Regatta and won first prize hands-down. Automobiles were still a luxury for many in Kelowna, but those residents who owned one began carrying plaques or pictures of a bridge in their back windows in a quaint, 50s style of bumper-sticker mania.

Kelowna hardware store owner W.A.C. Bennett carried the bridge war chant to Victoria when he was elected premier in 1952. There was still no action taken two years later although 'the Bridge', he told voters, 'would be a priority.' On Jan 4, 1954 he faced down Kelowna businessmen at a Board of Trade luncheon. "It is up to the Okanagan people to press for a span if that is what they want," he said.

Why do you think we elected you, they shouted?

Bennett set up a toll authority immediately and provincial engineers were finally directed to investigate the feasibility of the much-needed structure.

Swan, Wooster and Partners, a Vancouver consulting engineer firm, came up with plans for a suspension bridge, but that was quickly

rejected as unsuitable because of the sub-surface geology.

W. Pegusch Jr., the engineer in charge, reported that if it were built and if the Okanagan should ever suffer an earthquake, the bridge would get sucked into the earth because the foundation material was 'very compressible and highly susceptible to liquefaction.' A causeway was then contemplated and that idea was also dropped because of the soft, muddy lakebed. The only workable solution would have to be something that floated and only two other examples of pontoon bridges existed.

During the war, British engineers had successfully designed pontoons that were used to carry supplies across the English Channel. American engineers had employed the same concept to build a bridge across Lake Washington in Seattle.

Designs for an Okanagan version were created. The Okanagan Lake Floating Bridge would be the longest pontoon bridge in the world and the first lifting span version to be constructed. It was an engineering marvel. A blessing to travellers.

The design called for a short causeway on the western end of the bridge. Gravel for the spit at what was known locally as Siwash Point, was trucked from the Heinz Zdraleck property near what is now Casa Loma. To get to the gravel pit, a haul road was required. Landowners along the way, Jim Blackman and Fred and Betty Waterman, were given an option to have the road cut straight through their property or jog up and around. They chose privacy, which is why the road to Casa Grande now takes its uphill run. The need for fill was enormous. So much blasting was required naturalists claimed it put a permanent dent in the reptile population, destroying most of the rattlesnake dens in that area.

The gravel haulers quickly realized Pegusch was right. When they dumped at Siwash Point, the lake became a cloudy mess. Muck was reported to ooze up as far from the dumping site as the Westside ferry docks.

The bridge design called for another smaller causeway on the Kelowna side and needed to incorporate a mechanical lift span to accommodate the CPR tugboats that hauled barges of supplies from Penticton to Kelowna and Vernon. Between the two, in the center, a floating section of pontoons would be bolted together and form one continuous floating span. This 'boat' of pontoons would be anchored permanently to the lake bottom and traffic would be able to pass swiftly across the lake on top. Right.

LIFT SPAN DINOSAUR

On Feb 15, 1973 the last barge to make a run down the lake was taken out of service. As a navigable waterway, Okanagan Lake became a record-book dinosaur. Aside from use by private pleasure craft, there was no reason for the lift span to operate any longer.

The span became an anachronism. An albatross. During the summer, Westside commuters were sentenced to line-ups, often fuming impatiently for several minutes as a single sailboat floated beneath the span, its skipper blithely waving to the hundreds of motorists who often signified the pleasure of his passing with a single-digit wave of their own.

Petitions to have the lift span turned off, one even led by the bridge-building politician W.A.C. Bennett himself, have met no support from the federal government controlling the waterway. Though scheduling helped matters some, it didn't put an end to the delays. In fact, it may have created more.

Increasing Westside traffic was resulting in line-ups again. When the antiquated lift span went to work, motorists could be seen praying. Twice in 1978, electrical problems put the span out of commission in the lifted position for hours, backing up traffic for miles in either direction.

To cure the problem the span was rewired that year.

BRIDGE FACTS

Cost – \$7,311,000 plus or minus a few \$100,000

Length – 4,585 feet

Original width – 50 feet

Length of Westside causeway – 1,400 feet

Length of pontoon section – 2,100 feet

Number of pontoons – 12

Regular pontoon size – 200x50x15 feet

Anchor cables – 90 wires around a single center wire

Anchors – 24

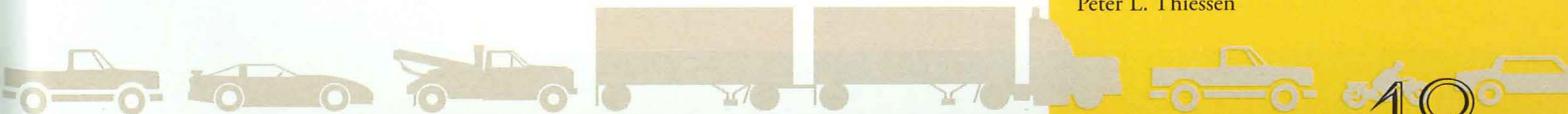
Anchor weight – 70 tons

Number of old anchors replaced – 8

Lift Span weight – 600 tons

Original labor force – 300 men over 4 contracts

Sources: *The Okanagan Lake Bridge* by J. Evans, 1993; *Okanagan Lake Bridge* by Peter L. Thiessen





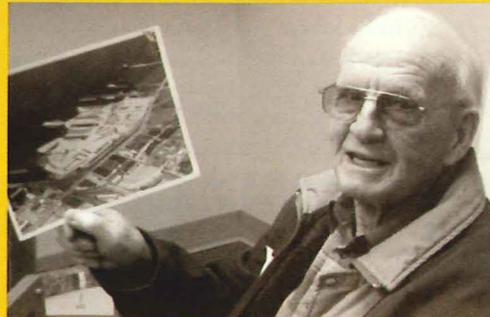
Premier W.A.C. Bennet greets H.R.H. Princess Margaret prior to bridge ceremony; plaques commemorating bridge construction; H.R.H. Princess Margaret cuts ribbon with Highways Minister Phil Gagliardi looking on.



WHAT DO YOU GIVE A PRINCESS?

To provide a memento of the opening of the Okanagan Lake Floating Bridge, the B.C. Social Credit honchos showed their practical side. To a slice of pontoon cable, they affixed a small, engraved plaque.

TUNNEL THINKING



In his 80s now, Gordon Jennens had some good ideas over the years.

He holds patents on components of a design for submersible watercraft that the U.S. Navy kept secret for years. He missed out by only weeks from gaining patent authority on an electric toothbrush, and a collapsible form mechanism that made possible the building of the Okanagan Floating Bridge's pontoons.

These days he works at refining a patent application for a "secret" process he says would have made it possible to build a floating tunnel across the lake without the need of a dry dock.

His idea to replace the bridge with concrete tubes would have given motorists a safe one minute crossing at highway speeds. The submerged floating tunnel (SFT) he proposed would, by his estimates, have a price tag one-third the price of a new bridge.

The SFT concept was met with guarded interest by the government. Engineers were sent to review the idea with him. They were followed by academics assigned to study the scheme.

In an attempt to boost the project, Jennens built a model and had it on display in various locations in Kelowna. At the same time, he gathered names of locals who supported the idea. By the time he finished his publicity strategy, Jennens had collected 24,000 signatures.

It would have seemed to be enough support to warrant serious review, but the government was reeling from a Fast Ferry debacle. More high tech transportation solutions stood as much chance as the Coddling Moth in the Okanagan.

Jennens still has the model and copies of the estimates that were independently prepared by various contractors that supported his idea.

For now though, it seems his is the dream of a tunnel to nowhere.

Six standard pontoons would form the bridge, and at each end of them a superstructure pontoon would be attached. These would be followed by a smaller pontoon with extra draught to help the bridge float. For most, the complexity of how the bridge would be built was staggering but the design was welcomed just the same. It was a bridge. No more ferries. No more line-ups.

Through the B.C. Thompson/Okanagan Toll Highways and Bridge Authority, work on the \$7,311,000 bridge began in January 1956.

The edifice was to be made by a team of contractors that included General Construction Ltd., Dominion Bridge Ltd., Narod Construction Co. Ltd. and the Kelowna Bridge Company (KBC).

The KBC was created by the American company that had built the Golden Gate Bridge in San Francisco as a means to secure the B.C. contract to build the pontoons. Emerson Hail was named the manager for the complex component of the project.

The KBC was forced to build most of its own equipment for the job or ship in special tools like the pile driver and the tug boat to be used, in parts, by rail from Vancouver. Two graving docks were erected on the east shore of the lake, on an 8-acre site about three blocks north of the bridge location. It would be here that the massive pontoons would be created. To supply concrete for them, KBC had to build a cement plant as well.

A pontoon, built like an egg crate, took six weeks to build. Weighing 2,500 tons or so and made from 1,100 - 1,200 yards of cement, it was divided into 56 cells, four along the 50-foot side.

The tug "Seamule" was used to pull the pontoons from the basin and each was floated into position as it was finished. Using 146 bolts to tie the pontoons together, each was held in place with specially made monster-size anchors weighing 70 tons. Also made of concrete, the anchors were buried 20 feet in the mud of the lakebed. The anchors hung from the pontoons by means of 90 zinc-coated cables. The transition span that connected the bridge to the rock causeway on the Westbank side of the lake was fitted with a huge hinge designed to permit the span to twist and roll with the pontoons during storms.

To accommodate lake traffic, steel lift spans were welded at the old seaplane base (located on the current site of the Grand Okanagan Lakefront Resort) and then floated into place. Raising the span took major muscle. Four 125-horsepower engines were linked to lift the open grid deck to 45-feet above the water in 90 seconds.

Construction went smoothly except for some minor mishaps and one fatal accident in which a man was electrocuted while working on a pontoon.

On May 20, 1958, the last pontoon was fitted and the bridge was ready for opening. The planning process for that took exactly two months, and what a party that was!

Set for the ribbon cutting on July 19, 1958, the civic, provincial and federal governments all got into the act with businessmen, athletes, school children and tourists. Two parades were scheduled, an aquacade, several dances, a long distance swim from Penticton to Kelowna. Stores held sales. Residents bought Kodak Brownie cameras just for the occasion.

When the day arrived, life in the Okanagan came to a veritable standstill. A crowd of 25,000 - 30,000 milled paying witness to Kelowna's transition from small town to city. Special viewing stands were built and 4,000 of the best seats were reserved for an excited mob of school children transported from across the valley for the event.

The list of official dignitaries was the like of which the Okanagan had never seen. It included the Lieutenant Governor of Canada, the Governor of Washington State, a beaming B.C. Premier, W.A.C. Bennett, and a very special guest.

H.R.H. Princess Margaret, in Canada on tour, made Kelowna one of her stops.

It was an honour that a monarchy-adoring population was proud to mark with pomp. Boat owners organized a sail past in the Royal's honor. A reception for the Princess had to be set in Ogoopogo Stadium to accommodate the crowd. Two parades were organized with the City happily dishing out treats.

Everyone, it seemed, got into a fever of celebration, including Kelowna's fledgling television station, CHBC.

Making a decision to broadcast the opening live (which was curious considering the very good likelihood that anyone with a television set in Kelowna was already on site), CHBC dismantled its studio and rebuilt it at City Park.

On the sunny Saturday morning of the opening, Princess Margaret politely accepted the chore of opening the bridge.

"I have great pleasure in officially declaring open this magnificent new Okanagan Lake Bridge," she said with faultless grammar. She snipped the scarlet ribbon and the old lady of the lake entered the history books officially. W.A.C. Bennett happily joined the raucous crowd in cheering and then tried to lead the Royal towards a waiting sedan that was to drive



WANNA BUY A BRIDGE?

In the mid-1980s, in support of Rick Hansen's Man in Motion World Tour, a mock sale of the Okanagan Lake Floating Bridge was undertaken to raise funds.

Renamed the Rick Hansen Floating Bridge, share certificates were sold by participating Kelowna businesses at \$10 each to raise an impressive \$41,000.

CONCRETE SOLUTIONS

What do you do with tons of cement that have anchored the Floating Bridge for decades? Sink them permanently where they are or use them more productively.

Gordon Jennens, always ready with an idea or two, has suggested a means of floating the heavy behemoths and placing them strategically as a breakwater for a new marina.

At the moment, the government has not stipulated what is to be done.

WHAT IS THAT THING?

All 24 anchors on the bridge were replaced in 1983/84, but two of the new monsters showed stress fractures under testing and had to be repaired.

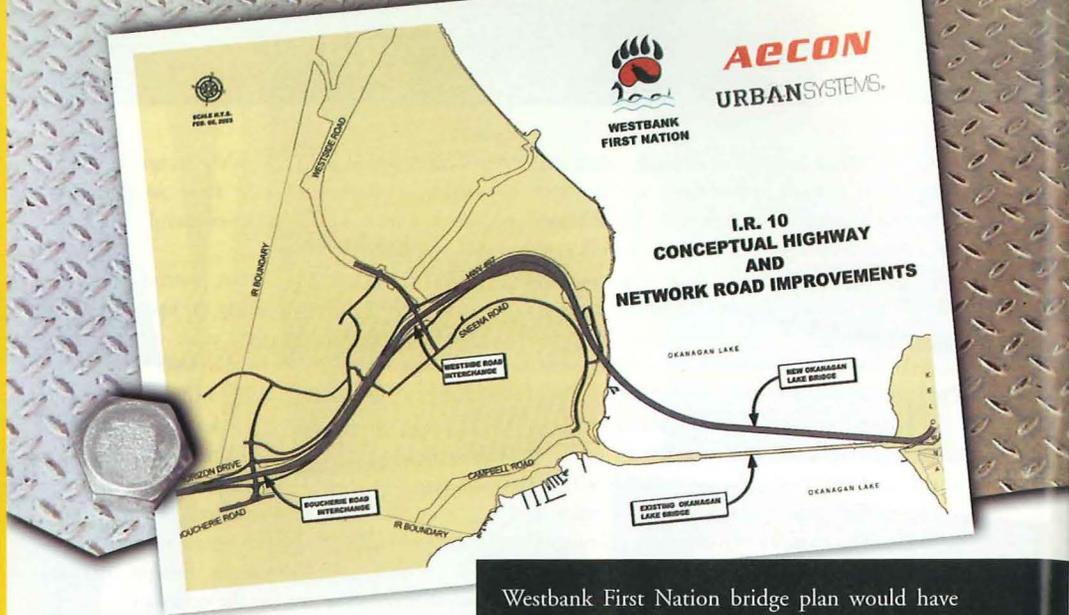
Destruction of the old anchors was much easier. Only one was saved for posterity as a centerpiece at Anchor Park, the small corner space next door to the Kelowna Chamber of Commerce office on Harvey Avenue.

WHO STOLE THE BRIDGE?

In May 1983, the proudly displayed commemorative record of the Okanagan Lake Floating Bridge disappeared.

Strangely, though the bronze plaque that had been securely affixed to a pillar and weighed 125 pounds, no one witnessed the theft.

For two weeks, the theft had Kelowna abuzz. Was it a prank or a malicious act of vandalism? No one came forward with tips for the police until 15 days later when the plaque just as mysteriously reappeared at the police station.



Westbank First Nation bridge plan would have put the new bridge north of its current location.

them across the lake to the other side. There two plaques were waiting for the Princess to unveil. One recorded the opening and the other listed those responsible for the construction.

Princess Margaret only smiled at the Premier's urging. "Let's walk, shall we?" she asked, more as a command than an inquiry. The look on Bennett's face may have telegraphed his dismay, but it made no difference to her. She swiveled and began to pace slowly towards the other ceremony. Portly Bennett reluctantly joined her on her private 'walk about'.

Whereas today's taxpayer loudly criticizes the government for proposing a toll on any future replacement for the Okanagan Lake Floating Bridge, when it went into service residents were only to happy to foot the toll. Motorcycles (without side-cars) had to fork over a dime. Cars cost .50 cents, and commercial vehicles were charged between .75 cents and \$2.00 a trip. It only took five years for the toll to be removed.

The bridge performed its service well for decades. In 1971 it was estimated that it handled 24,000 vehicles a day and only required a major electrical repair in 1978. In 1983 and 1984 however, the old lady of the lake was showing her age. Traffic necessitated a widening to three lanes and re-anchoring had to be performed.

The re-anchoring proved to be easier said than done. Getting the necessary equipment was difficult. After all, all the old barges used no longer existed in Kelowna. A new barge, large enough to support the massive crane that could lift the anchors and replace them, had to be built. A unique jetting device was created and a milling machine fabricated to make the

steel "saddles" which fastened the zinc-coated cables to the pontoons.

The old gal got her first face-lift in 1991, and like old working girls of other kinds, the maintenance went on thereafter. Annually, the Okanagan Lake Floating Bridge sucked \$300,000-\$400,000 from taxpayer revenues to keep her operational.

In 2002, the metal bridge deck was replaced for the first time, at a cost of \$560,000. A year later, a \$798,000 contract was let to Cortez Construction of Kamloops to renovate three of the pontoons on either end of the bridge and replace 7,300 kilograms of reinforcing steel and replacement of structural supports for the deck above the pontoons.

And history was obviously repeating itself.

The Westside hill had again become a parking lot as commuters from the exploding population in Westbank clogged the lanes in the morning into Kelowna and in the afternoon escaping it.

Again, it took a sweep of the government, and promises made during the election, to have the thorny bridge issue in Kelowna seriously discussed by the government in Victoria. Their engineers claimed a bridge with five-lanes could be built for \$100-million and the Okanagan cheered. Then Gordon Campbell and the ruling Liberals checked the provincial piggy bank and realized the money was not there. With some accounting creativity they said no problem, we can 'sell' the Coquihalla Highway and pay for it that way.

To a vociferous tumult from angered voters however, Campbell backed away from his financial shell game and went silent. It was perfect timing for the economically progressive and politically astute Westbank First Nation leadership.





Artist's rendering of the new Okanagan Lake Bridge design that was announced by Judith Reid, Minister of Transportation.

Courtesy the Government of British Columbia

THAT 7/8TH OF A MILE MAY JUST AS WELL BE THE PACIFIC OCEAN.

Pulling from experience by Aecon Construction building the Commonwealth Bridge linking Prince Edward Island to the mainland in the Maritimes, Chief Robert Louie formed a working partnership with the international bridge builder. Together they offered an alternative to the Campbell government's bridge idea. It was double in price but represented a safer, more easily built and reliable traffic design.

The WFN was fast approaching the legal position of self-government. It had a federally approved Land Board in place and soon expected to heft the same regulatory power as the City of Kelowna council. Louie, who held a previous agreement with the province to upgrade two intersections on the Highway 97 right-of-way, erred on the side of caution as he waited for the nabobs in Victoria to reply. He filed with the Supreme Court, preparing for a possible legal battle with the province over the intersection agreement amounting to \$25-million.

Kelowna waited patiently for the government assessments of the WFN proposal and details their own engineers could muster on their initial bridge plan. In October, a queue of politicians smiled at the press as provincial Transportation Minister, Judith Reid announced Victoria's decision from under a

plastic tarp and within view of the infamous lift span.

The government was willing to spend \$100-million on a new five-lane bridge and \$20-million to build two interchanges on Bridge Hill. She claimed Victoria was willing to entertain participation by the WFN, conveniently omitting the fact that the call for expressions of interest in the construction would be restricted private interests only, contracting firms with proven expertise willing to put up equity for the job.

Chief Louie wasted no time in reacting. After a closed meeting with Band members he faced the press, Aecon vice-president Kevin Pytyck at his side.

"The government didn't even consider our proposal," he softly told the media. "By the time it came up, the deadline had passed."

Louie shook his head and with the aid of computer-modeling of the traffic patterns over the bridge a decade into the future, showed the new crossing could aptly be named the 'Kelowna Line-up Bridge' within a year of two of its completion.

"The membership felt that the WFN should not be involved in the construction of the province's proposed bridge and interchange design that WFN considers to be substan-

dard," he said.

"They have lowered the performance standards," he said emphatically. The budget proposed by Victoria simply was not enough to ensure safety.

"One of the accesses...was cut off and, notwithstanding objections, the ministry breached its agreement," with the WFN over intersections, he claimed. Access to the native cemetery on Bridge Hill would allow access only for motorists heading uphill in the Victoria plan. If a native died in Westbank, the funeral entourage would have to travel into Kelowna to reach the gravesite.

He hinted that the band would look to the courts to enforce their land rights and the fulfillment of previous contracts.

The bridge, despite the razzle-dazzle Victoria layed on, looked to be dead in the water. Without negotiations on access, without the fulfillment of previous promises, and without the benefit of their government-to-government partnership in the construction, Louie hinted the bridge would remain only an idea on paper for the years to come.

Meanwhile, the commuters crawl down Bridge Hill and inch along Harvey Avenue.

That 7/8th of a mile may just as well be the Pacific Ocean. ■

