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ISLANDER

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Jordan River's electric monster

Ghosts of the old silently coexist with throbbing of the new at power station

Richard K. Bier

VISITORS TO Jordan River will notice a sign at the approach to the bridge over the river, warning of dangerous currents from upstream powerhouses. It has an interesting history behind the power developments in the region.

Increased power demands from Victoria triggered surveys in the Jordan River valley in 1907. This task was undertaken by G.M. Fryer, then superintendent of the Vancouver Island Power Co. At that time, Victoria power came from the Brentwood Bay steam generator and a hydro station at Goldstream.

In the summer of 1909, W. Mandelin, a San Francisco engineer, was awarded the construction contract. The rugged terrain of the river valley posed quite a challenge to the workers. Tracks were blasted, roads put in, land was cleared, and a narrow-gauge rail line constructed. The railway was used to transport men and equipment to various work and tent sites.

All the time there was no road link from Jordan River to Victoria, a dirt track connected the two with the B.C. Capital. Supplies and men had to be brought in from the coast by the tug, *Midge*, which was hired to do the job. Travel was often hampered by contrary tides, shifting winds and the common icy adverse winter conditions in June and July.

An artificial lake for storing water, called the foehy, was built, along with a road link to Jordan River. This was a few kilometers north of the river's mouth. The first power generator in the project started in September, 1911, and was located on the east side of Jordan River, just up from the spot where the bridge is now.

Two dams were then erected. The first, on Bear Creek, was made of earth and completed in 1912. This provided the system with its first major storage reservoir. The second dam, Inverness, named after the reservoir it formed, was further west. It was finished in 1913. Diversion Dam became the largest reinforced concrete dam in Canada, standing a towering 94 metres.

Water from Diversion Dam was carried down the river valley via a wooden flume, which made it way 82 km to the foehy. From this tiny storage lake, the water travelled through four penstocks to the sea level powerhouse. Forebay water could hold about the hours worth of generated power in reserve.

Between 400 and 800 men worked on the project at various times — at one point, more than 1,000 were employed. Work crews consisted of hardy frontiersmen battling the severe nature of the elements.

The powerhouse was knocked out of service temporarily in late 1912 by a washout. Then a fierce storm hit Jordan River knocking down the tents, uprooting trees and sending down a host of lightning that struck the generator. Victoria was without power for about half an hour, until backup facilities at Brentwood and Goldstream were switched on. Repairs to the power plant took more than a month to complete.

Soon after, the supply tug, *Midge*, ran into a sea-breeze gale and was wrecked off Massey Point. Within a month, a replacement tug, the *Proteus*, was in service.

Just after New Year in 1914, a fire of flames washed away at its base of Diversion Dam, due to flooding and landslides. Alligator Creek, a nearby tributary stream, was high enough to supply necessary water for the power station.

Other natural occurrences have caused power interruptions over the years. Heavy snow in February of 1916 choked the road to Jordan River. In October of 1921 a record high water seal a wave over two metres high through the Diversion Dam, spilling the flume below. However, this meant that Alligator Creek was again high enough to provide the required water flow.

Incidents that same month tormented the flume south of Alligator Creek. Victoria was sometimes flooded into periods of power conservation during water shortages or excessively dry weather. But sometimes Victoria had an electric light while other areas suffered.

A severe drought hit the Pacific Northwest in 1928, affecting large areas of Canada and the United States. Power restrictions were in force almost everywhere, except the region served by Jordan River power. A freak storm provided the needed water levels and Victoria was the only community never at a loss for electricity during the dry spell.

In January of 1930, a winter storm dumped heavy snow in the mountains north of Jordan River. This was followed by a quick thaw and heavy rainfall. Water overflowed at Diversion Dam, making two metres plus, a section of the flume was washed away. The level of the flume washed away at its base of Diversion Dam, due to flooding and landslides. Alligator Creek, a nearby tributary stream, was high enough to supply necessary water for the power station.

In 1937 snow and ice the damming of a man's arm caused power lines, causing them to snap. Power service was severed for two or three days.

One stoppage in 1942 was attributed by many Victorians to a wartime blackout, even though it had been caused by mechanical failure at the power plant. Heavy rains in late 1948, caused a rockslide, which ripped out a large section of the wooden flume. Victoria was forced into a two-day rationing period, while repairs were made.

The years following the power development's first surveying, saw improved improvement and system upgrading. Buildings and roads were maintained and enlarged. The original home-drawn cable cars that used the narrow-gauge railway were replaced by a steam locomotive.

A sawmill, gravel pit, and logging operation got up near the foehy, along with the Shelkote Mill. The flume was enlarged and strengthened in 1905. Timber from the area was used in the modifications. The foehy's water capacity was doubled in 1928. By 1931, the Jordan River powerhouses had four operating generators.

The foehy's construction, mayors and the public have attended various opening ceremonies at the powerhouse. Company parties were held in the summer of 1931.

In 1968, construction of a third reservoir began at the Elliot site, a few kilometers downstream from Diversion Dam. Improvements were made to the Bear Creek and Diversion dams as well.



Water released from Diversion Dam makes for a spectacular show.

The old powerhouse has been dismantled. The ruins can still be found on the east bank of the Jordan River.

Today, Jordan River supplies peak power demands for Victoria along with today's power needs. The powerhouse is a part of the integrated power grid of the B.C. Hydro system. Transmission lines run from Jordan River, across Vancouver Island and Finlayson Arm, to the Henry Station.

The main island power supply is brought in via underground cables from mainland power stations.

Water is released regularly from Diversion Dam and flows into the foehy as it cascades from the dam into the riverbed below. Water is released when there is a demand for power through the grid network or during times of heavy rain.

There are several routes into the dam area. If there are restrictions on logging roads and may be closed to the public even after working hours and on weekends.

At the top of the hill, once you drive through Jordan River, one road follows the east side of the river valley to pass the Elliot Dam, and then goes up to Diversion Dam. From the top of the hill right before you head down to the river, you drive across the Elliot Dam, to Diversion and goes by the forebay, the water's main reservoir.

You can also travel in to the area via River Mainline near Sooke. You'll drive by Bear Creek reservoir, then out down between that body of water and the Diversion Reservoir. The road follows the south side of Diversion Dam. It then goes south along the east side of the Jordan River valley down to the West Coast Rd.

Active logging has kept the gate near Alligator Creek locked for the time being. A secondary access road, via Muir Creek, has also been kept closed for a number of years now.

If you walk along the narrow gauge railway bed used to divert water from the dam, you can see a concrete reinforced bridge over the river. In 1928, the largest single piece of machinery ever moved in the Jordan River valley was loaded across this span.

Weighting 15 tonnes, a mammoth generator was brought up from sea level to the 600 metres high of the dam. The flume, then over the rail line — to cross the bridge to the dam, was built on the west side of Diversion Dam.

Parts of the old flume still stand, although shales and washouts have continued to take their toll on the structure. Several attempts have been made to salvage some of the wood from the flume, the most recent by a Sooke resident who began the work near the foehy and moved north.

The flume and supports are in a degrading state and pose an extreme hazard to any road reconstruction attempts. B.C. Hydro experimented with burning a section. This proved to be slow going and dangerous. The company may use a fire to dismantle the remaining sections but the removal of the log-timbers would be costly.

There was some talk a few years back of making the flume a National site. For sure, what remains of the structure stands as a testament to the pioneering spirit of those that worked on Victoria's first major hydroelectric station.

Arthur Mayse

THESE RELAXED days of the early year give us an excellent opportunity to review the gifts the holiday brought us.

One of mine was an old friend, in the shape of a book, reviewed below. I don't like the most in my child but I don't like the least in my child either. I prefer to read to my child rather than to be read to by my child. I prefer to read to my child rather than to be read to by my child. I prefer to read to my child rather than to be read to by my child.

Like every other child, I have pronounced views on this subject. I don't like the most in my child but I don't like the least in my child either. I prefer to read to my child rather than to be read to by my child. I prefer to read to my child rather than to be read to by my child.

Frank Tolbert, possibly our No. 1 authority on the esoteric, called level of red, was red. I don't like the most in my child but I don't like the least in my child either. I prefer to read to my child rather than to be read to by my child. I prefer to read to my child rather than to be read to by my child.

On other points, I go along with what Frank Tolbert says. I don't like the most in my child but I don't like the least in my child either. I prefer to read to my child rather than to be read to by my child. I prefer to read to my child rather than to be read to by my child.

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Putting a human face on a body of facts

By Bob Taylor

MARY ITALIC SAYS hello to the world working at the next desk, sits down, scans the list off a cup of coffee and opens her notes.

Mary has the makings of an interesting news story.

"How should she tell it? First, she must decide on the theme or focus. Once she has that clear in her mind, she can outline for supporting information and discard the rest."

"Twenty five per cent of the overweight patients diagnosed last year had high blood pressure. A new study indicates..."

Now the big question is, where should she place it in the story? Really, she has two choices.

One was put it right at the beginning. Overweight patients are sometimes wrongly diagnosed as suffering from high blood pressure, a new study indicates...

My word
On the one hand about a specific patient first, to hook the reader — many readers would rather read about people than issues and ideas — then slip the theme in later, like this:

"The 19 years, Edith Trishborn thought she had high blood pressure. So she conscientiously took her medicine, endured the side effects of medication, dry mouth, constipation and lethargy."

"I was puzzled about missing one pill," says the 56-year-old woman. "I was afraid something terrible would happen."

"But Trishborn never had high blood pressure."

"At this point, Mary takes a sip of coffee and inserts her pen."

"To build an inverted pyramid, the reporter begins the story with the most important information. This summarizes the event of interest and concludes with the least important information. This gives the reader the gist of the news right away, in case he decides not to continue reading. A big disadvantage is that it can sometimes be dry and the way of starting a story if it lacks colorful details."

That's why most journalists prefer the Wall Street Journal format, so called because that paper often uses it to give up such unimpressive topics as anyman fetters, treasury bills and Hungarian purpura reports.

It puts a face on a story the reader might otherwise skip. Then the reader reads it and becomes informed.

The device works like this: The reporter begins by whetting the reader's interest with a colorful example, a specific person or a lively anecdote.

Then, just as the reader is starting to think, "this is all very interesting, but what's the point of it?" the writer introduces the so-called nut or the paragraph presenting her theme.

It's a useful way of keeping the reader hooked. Especially if the topic is a potentially boring way, problems that reporters have writing stories.

In that instance, the writer might begin with a specific reporter — let's call her Mary Hall — sitting down with her notes over a cup of coffee to plan her approach.

Then go on from there.

Bob Taylor welcomes letters about copyright but cannot promise to answer them individually. Write to the Canadian Press, 25 King St. E., Toronto, Ont. M5C 1J8.