



**WILDERNESS AND WATERPOWER:  
HOW BANFF NATIONAL PARK BECAME  
A HYDROELECTRIC STORAGE RESERVOIR**  
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## War Measures

The economic crisis of the 1930s effectively ended debate over the expansion of the hydroelectric generating capacity of the Calgary Power Company. The idea of erecting a new dam at Lake Minnewanka, even as an unemployment relief project, evaporated once it became clear that there was no market for the power. Throughout the 1930s, Calgary Power had excess capacity; it produced more than enough electricity from its three Bow River plants to meet the needs of Calgary at the city's much reduced rate of growth for the foreseeable future.

In 1940, however, the situation changed dramatically as the Canadian economy geared up for war. That summer, the company renewed its application to raise the dam at Lake Minnewanka, claiming that this was the cheapest and speediest means of producing additional power needed for the war effort. Although the bureaucrats responsible for the national park system fought against this proposal, they waged an uphill struggle. The urgent needs of war subdued the public pressure from wilderness preservationists, which had helped to protect Lake Minnewanka in the 1920s. Moreover, the power company had acquired a potent ally within the federal government in the minister of munitions and supply, C. D. Howe. He and his advisors were convinced that in this emergency, Calgary Power should be granted permission for development inside Banff National Park. In the end, those officials who opposed the plan could do little more than try to compel the company to design and landscape its new construction so as to make it as unobtrusive as possible.

Despite the economic collapse of the 1930s, it was clear that the issue of power development in the national parks would arise once again when recovery was well underway. In early 1939, G. A. Gaherty of Calgary Power, in communication with the Engineering Institute of Canada, predicted that the issue of reservoirs inside the park would recur and expressed his hope that this time the debate would be conducted on different terms: "The situation will be further complicated if the National Park officials continue their uncompromising opposition on sentimental grounds to any further storage development within the parks.... It is to be hoped that by the time this question becomes acute machinery will have been set up to deal with it on broad national lines."<sup>1</sup> But the matter did not actually come to a head until the summer of 1940, when Canada and Great Britain faced the most acute crisis of the war against Germany.

In late August, the Department of Munitions asked Calgary Power to supply up to 26,000 hp of electricity per year to a new plant established in Calgary. The Alberta Nitrogen Company needed this additional power to produce anhydrous ammonia from natural gas for the munitions industry.<sup>2</sup> The power company seized the opportunity to immediately revive its long-standing request for permission to build a sixty-foot dam at the outlet of Lake Minnewanka, inside Banff National Park, to store the additional water required to produce this electricity. The long-suspended debate over waterpower development within national parks swiftly resumed.

During the 1930s, the bureaucracy responsible for administering the park system had undergone changes. In 1936, the Department of the Interior had been abolished and replaced by the Ministry of Mines and Resources.<sup>3</sup> R. A. Gibson was now director of the Lands, Parks, and Forests Branch in place of Parks Commissioner J. B. Harkin, while J. M. Wardle held the post once occupied by J. T. Johnston as head of the Surveys and Engineering Branch, under which fell the Water Power Bureau. Both Gibson and Wardle, of course, were long-serving departmental veterans who had been through all the battles of the 1920s over Lake Minnewanka and the Spray Lakes. W. W. Cory had retired as deputy minister to be replaced by Charles Camsell; the minister of mines and resources since

the Liberals had returned to power in 1935 was Manitoban T. A. Crerar, who would hold the portfolio until 1945.

Gibson and Wardle were, therefore, thoroughly familiar with the background of this issue when it surfaced again, but it was clear from the outset that the wartime emergency had greatly altered the situation. The first approach to the Department of Mines and Resources in August 1940 came not from company officials but from the power controller of C. D. Howe's Department of Munitions and Supply, who had been appointed under the War Measures Act to allocate energy supplies among strategically important consumers. And the power controller was Montreal lawyer H. J. Symington, a dollar-a-year man who was also a member of the board of directors of Calgary Power. Obviously, the company now had friends in very high places, and the battle to preserve the scenery around Lake Minnewanka would be an uphill one.

Discussions between company and departmental officials, hastily convened in September 1940, made it clear that Calgary Power had firmly set its sights upon obtaining approval to raise the dam at Lake Minnewanka by sixty feet, which would flood nineteen hundred additional acres around its shores. Not only could the 150,000 acre-feet of water from this reservoir be used at the three existing plants lower down on the Bow River, but the company intended to commence construction of a 23,000 hp plant at Cascade to utilize the three-hundred-foot drop from the canal out of Lake Minnewanka to the bed of the Bow. It was believed that this new project could be completed in as little as eight to twelve months, in time to cover an anticipated shortfall in power supplies of 5,000 hp during the winter of 1941-42, when the Alberta Nitrogen Company plant would reached full production. Asked by a departmental engineer

... whether or not the company were using the war as a lever to obtain increased pondage at Lake Minnewanka, the rights for which they were not able to obtain on previous application, Mr. Gaherty acknowledged that, in a sense they were using such leverage.<sup>4</sup>

And it quickly became clear that Calgary Power proposed to exploit this leverage for all it was worth. The Parks Branch asked why the company did not develop the storage capacity of the Spray Lakes, which it had fought so hard to secure in the 1920s and which had lain outside the national parks since 1930. The company replied that it would require three years and many thousands of dollars to drill the two-mile tunnel to conduct the water to the rim of the Bow valley above Canmore. Moreover, once the dam site at the head of the Spray River was unwatered, unanticipated problems might be encountered that would set the whole project back further.<sup>5</sup>

What about a development on the upper Kananaskis River, which flowed into the Bow further east near the company's original power plant? That, officials of the Lands, Parks, and Forests Branch (hereafter Parks Branch) were told, would require the construction of up to twenty-five miles of access roads to reach the site and would take at least two years to bring into production.<sup>6</sup>

Well, then, what about a thermal station, asked the Parks Branch people? Natural gas supplies from Turner Valley were too uncertain to be depended upon, replied Gaherty. Then why not a coal-fired plant either near the mines at Drumheller or in Calgary itself? Construction could begin on the foundations at once, and power could be ready sooner than from any hydroelectric project. Perhaps in normal circumstances that was true, answered company officials, but in wartime, it would be difficult to secure the necessary steam equipment from British manufacturers, and they preferred not to buy in the United States.<sup>7</sup>

Although Parks Branch staff remained as opposed as ever to the company's plans, from the first, this opposition was mixed with an uneasy sense that the battle for Lake Minnewanka might already be lost. P. J. Jennings, the superintendent of Banff National Park, noted that the height of the proposed dam meant that the natural shoreline of Lake Minnewanka would be completely drowned and the artificiality of the water levels plainly evident. In summer, large, unsightly mudflats would always be visible. "A great deal of public criticism will inevitably result, should the company be granted the right to increase the storage at this point," the superintendent continued glumly, "and it is therefore as well to prepare to meet this type

of opposition and present arguments in rebuttal.” The national emergency could not, after all, be ignored, and there were examples in countries like Switzerland of joint recreational and commercial use of reservoirs.<sup>8</sup>

Another official, J. H. Byrne, observed that asking to dam Lake Minnewanka rather than the Spray Lakes seemed particularly offensive in light of the alteration of the park boundary in 1930 despite the “strong opposition” of preservationist groups. That boundary revision represented “a great concession to those seeking the power rights in that area” but had appeared necessary in the “general public interest and in the opinion of recognized power authorities.” Now Calgary Power wanted to build a new plant and store more water at Lake Minnewanka, leaving the company, when the war ended, with “a gilt-edged bargain” in the form of its increased generating capacity. “Under ordinary circumstance and normal conditions the above drastic action could hardly be accepted by the Parks Bureau without vigorous protests and opposition,” wrote Byrne, adding pessimistically, “but as matters stand at present this might be futile and unavailing.”<sup>9</sup>

The Engineering Branch, while considering the project technically feasible, was initially sympathetic to the objections raised by their bureaucratic counterparts in Parks. Although the Spray Lakes project might take longer to build, the Minnewanka reservoir was unlikely to be filled in less than two years, and the most significant constraint on increased power production was likely to be the acquisition and installation of new generating equipment. Branch chief J. M. Wardle admitted that “once the Lake Minnewanka project is well under way the scenic value of that area is irretrievably lost.”<sup>10</sup>

Calgary Power’s proposal seemed to acquire almost irresistible momentum. When the acting deputy minister and his aides met with Gaherty and other company officials in early October, the latter were told that alternative schemes would have to be considered and proven less satisfactory. But almost at once, noted the director of the Parks Branch gloomily, discussion then turned to the practical requirements of dam construction at Lake Minnewanka such as housing for the workers and realignment of roads, as though the decision to go ahead was a foregone conclusion.<sup>11</sup>

Still, the bureaucrats did their best to compel Calgary Power to give serious consideration to a thermal power plant. Gaherty insisted that neither American nor British suppliers could supply the steam-generating equipment needed in the required time. Yet enquiries at the British High Commission in Ottawa revealed that the current delivery time guaranteed by British engineering firms was running around sixty-six weeks, and that this might be reduced for war orders. The company, however, was adamant that it could secure no promise of deliveries before the spring of 1942 and that, in any event, the submarine warfare in the North Atlantic made this too risky. American factories were working flat out to supply propulsion systems for the US Navy. Furthermore, while any foreign purchases would consume scarce foreign exchange reserves, hydroelectric turbines and generators were being manufactured in Canada and could be delivered by July 1941.<sup>12</sup>

Meanwhile, the Division of Fuels of the Department of Mines and Resources received the idea of a coal-fired plant enthusiastically. A 26,000 hp station near an efficient mine would entail a capital cost of only \$125 per hp versus \$200 per hp for hydroelectricity. Not only that, but the consumption of 150,000 tons of coal per year would be an important boost to the depressed mining industry in western Canada. The deputy minister advised Gaherty that he should seriously consider this, since only a “very strong case” could justify the alienation of resources inside a national park for commercial purposes, and a thermal plant could be brought into production in about the same period of time as a hydraulic development.<sup>13</sup>

In truth, however, the company had little interest in considering such a plan. Gaherty, a hydro engineer by training, was unwilling to give serious consideration to a thermal development. “[L]ooking to the future,” he wrote to the head of the Parks Branch, “the Power Company would hesitate to invest its money in a steam plant on account of the higher cost of generation as compared with water power.” Provided that the British government would give some assistance in meeting the borrowing costs on the capital in the event of a postwar depression, Calgary Power was prepared to arrange the financing of the hydroelectric project itself. Gaherty was convinced that if the dam were completed in time to catch the spring

runoff in 1941, the new plant could be in production by the autumn when the nitrogen plant would require the power: “[I]n this emergency every minute counts and it is unsound to run unnecessary risks. The Cascade project is simple and quick to construct and involves the minimum hazards. It alone offers reasonable assurance of being completed in time.”<sup>14</sup>

Faced with the company’s implacable determination, the Parks Branch insisted that the power controller from Munitions and Supply examine all other options and make a finding that it was “absolutely necessary to invade the National Parks.”<sup>15</sup> This placed H. J. Symington, a director of Calgary Power, in an embarrassing position as the power controller of Munitions and Supply, and he referred the matter to R.A.C. Henry in that department. After consultations with Henry, Charles Camsell, the deputy minister of mines and resources, wrote to Gaherty to tell him that the government was not convinced of the superiority of the hydroelectric option over a thermal station.<sup>16</sup>

The company quickly exerted its influence. Less than two weeks later, Gaherty attended a meeting with the deputy minister to explain his refusal to consider other alternatives. To avoid the conflict of interest in having Symington certify that the Minnewanka project was necessary for the war effort, Calgary Power had persuaded the minister himself, C. D. Howe, to write directly to T. A. Crerar, the minister of mines and resources. Howe put the matter as though the decision to dam Lake Minnewanka was a foregone conclusion. He simply explained the power requirements of the new munitions plant and concluded, “Having in mind the urgency of the situation I would appreciate the favour if you would expedite the granting of the licence to the Calgary Power Company to the fullest possible extent.”<sup>17</sup>

Dissatisfied with the tenor of their meeting with Gaherty, the officials of the Department of Mines and Resources refused to give way. R. A. Gibson, the director of the Parks Branch, particularly resented the fact that Howe had written his letter without seeing any studies on the economics of a thermal station. “It is quite evident that the Calgary Power Company is endeavouring to force the government into an immediate decision,” wrote Gibson.<sup>18</sup>

In a firm reply to Howe, Crerar set forth the reasons for opposing Calgary Power's plans. Despite being asked, that company had made no serious effort to investigate a steam plant as an alternative. The company had in hand enough power for the initial needs of the Alberta Nitrogen Company, and the additional power was required only as reserve in case of emergencies. Although little water would be available until 1942, Calgary Power had made no serious attempt to see if steam equipment could be put into operation before that. Crerar bluntly observed,

It would seem that the conclusions the company have reached have been influenced by the fact that the Lake Minnewanka storage will be of very great value in the postwar years to their existing hydro plants, which now need more storage, and when once secured would avoid or at least postpone the more costly development at Spray Lakes.<sup>19</sup>

Sensing, however, that Calgary Power was gaining the upper hand, Gibson and his Parks Branch staff mounted another round of internal lobbying in which they rehearsed the kind of arguments that, in 1922, had led to the refusal to permit a dam at Lake Minnewanka:

Its unique beauty lies in the wonderful blue of its waters, surrounded by mountains clad on the lower slopes with Douglas fir, Lodgepole pine, spruce and poplar. It is one of the most popular places for fishing in the National Parks.

Located just six miles from the town of Banff, the drive to the lake had become a popular attraction for sightseers. Since 1930, when the commissioner of parks had estimated its capital value to the tourist trade at \$10 million, the number of visitors to Minnewanka had increased by 40 per cent. Hydrographic records indicated that the basin behind the new dam could not possibly be filled during the summer months:

The result would be the exposure of a large acreage of unsightly mudflats and banks, in spite of every attention that could possibly be given during construction for the clearing up of brush and debris in the area to be flooded. These areas would not only be a breeding ground for increasing hordes of insect pests, but would undoubtedly give off the offensive odour of decaying vegetation during the hot weather.

Failure to adhere to long-standing parks policy of prohibiting commercial development, the Minnewanka scheme would place at risk the \$14 million already invested in the development of the national parks in Alberta as a tourist attraction:

In this connection it should not be overlooked that American parks, which are our main competitors for travellers, have resisted hydroelectric developments, mining operations and lumbering and pulpwood operations in National Parks. These American parks have hard-surfaced, wide, highways and are favoured by American booking agents.... Against all these complications and difficult features, we urge as our first drawing card “unspoiled scenery.”

What Calgary Power was really attempting to do, Parks Branch officials argued, was to improve its efficiency and profitability:

The application of the company, while specifically based on a war requirement, is primarily designed to strengthen the power structure of the company for its ordinary business. The company admits that its practice has been to draw down the present Lake Minnewanka storage as quickly as possible in order to increase the water available for its plants on the Bow River.<sup>20</sup>

Moreover, the National Parks Act of 1930 was quite clear: any area that was to be used for commercial development should be excluded from the park system.

If Lake Minnewanka is to be looked upon as a commercial asset it really belongs to the province, and the province should be left free to deal with the company so that maximum benefits may accrue to power users and that other provincial interests may be served.

If the dam were to be built, the whole area around the lake probably ought to be withdrawn from Banff National Park, and the authority to approve the development left in the hands of the Alberta government.<sup>21</sup> Even in a wartime emergency, the Parks Branch people drew their line in the sand.

The defenders of Lake Minnewanka against power development plans were hampered, however, by the lack of a strongly organized preservationist lobby in 1940. Unlike the 1920s, when the fight over Lake Minnewanka had created a big public outcry and the proposal to dam the Spray Lakes had brought the Canadian National Parks Association (CNPA) into being, there was little public protest this time around. W. J. Selby Walker of Calgary, a long-time campaigner for wilderness preservation, did write with characteristic brio to the Parks Branch on behalf of the CNPA as soon as the plan was aired:

This has all the earmarks of another attempt by the U.S. Power Trust to open all park water for power, to be followed by the miners and the lumbermen and the complete destruction of our National Park system, as was attempted some years ago at the Spray Lakes, which were essential to the welfare of the world to be developed immediately but when taken out of the Park and made available for the last 12 years seem to have lost all their vaunted utility.<sup>22</sup>

But the decade of the Depression had evidently taken its toll upon the vigour of the CNPA and its members. Although Walker still claimed to be executive secretary of the association, he did not orchestrate a lobbying



1941 DAM AT LAKE MINNEWANKA (AUTHOR PHOTO).

campaign of the sort that had succeeded in the past. Obviously, the fact that the development of additional power was justified as part of the war effort would have made any such campaign more difficult. In this emergency, many people were willing to give the company the benefit of the doubt. Walker complained that there was plenty of energy from natural gas simply going to waste in Turner Valley: “Suicidal exploitation of our natural resources will not help the next generation to retire our bond issues.” But, he added, “the possibility of having the project constructed as a war measure at public expense and becoming available as salvage after the war is less patriotic than alluring to St. James St. [the financial centre of Montreal].” All he could suggest was that the lands around Lake Minnewanka, including the Banff townsite, be removed from the national park if they were to be developed commercially, as had been done with the Spray Lakes. This idea had already been carefully considered and rejected. The superintendent of Banff National Park advised that there was no suitable natural boundary line. He was particularly opposed to cutting the town of Banff out of the park, since it was “a pathetic little hamlet” that

could not even afford to fund its school system without a sizable annual subvention from the CPR.<sup>23</sup>

The only other public opposition seems to have come from the Alberta Fish and Game Association, whose vice president complained that Calgary Power had deliberately taken on the contract with the Alberta Nitrogen Company as a means of justifying the new development: "It is, however, a cleverly contrived scheme to wangle something that the Power Company knows that they would otherwise never get." But the director of the Parks Branch could only reply that if the application was justified by a genuine war emergency, then it would be up to Parliament to decide whether or not to grant it.<sup>24</sup>

Balanced against these feeble pressures was the support of the Town of Banff's Advisory Council, which in the past, had often taken an ambivalent position on power development in the park, the dependence on tourism being balanced by the desire for more industrial and commercial growth. The superintendent of Banff National Park reported that many local residents now favoured the plan: "The local working men are, of course, in favour of the project chiefly because of the possibility of work and wages for another year at least – a very short-sighted and extremely selfish view." The council advised all Alberta MPs to support the damming of Lake Minnewanka since the availability of low-cost power would be a strong inducement to industry to locate in the region once the war was over.<sup>25</sup>

With that kind of support, Calgary Power began to act as though a decision in its favour was a foregone conclusion. The director of the Parks Branch complained about the company's attitude:

The actions of Calgary Power Company's field organization since the negotiations were commenced a few weeks ago no doubt indicate the degree of consideration that the National Parks administration may expect from the company. Even with the knowledge that the chief officials of the company are at Ottawa lobbying for a concession, which, if granted, will be extremely valuable to the company, the field staff ignore the Park

Superintendent, notwithstanding the fact that they are well aware that the Superintendent is in full charge of the park and must answer for whatever goes on inside the park boundaries.

This attitude was made plain when the company simply added to its application a proposal to divert Carrot Creek into Lake Minnewanka to increase its storage capacity without even consulting the Parks Branch.<sup>26</sup>

The redoubtable C. D. Howe remained unwavering in his support of the project. When Alberta MPs complained that not enough new industries had been located in the province, the minister told them that war factories could not be located in Calgary at present owing to the shortage of electrical energy. “We want all the power that Alberta can produce now, and we can use the whole lot and more, if we can get it,” said the minister. Faced with this implacable resolve, Crerar gave way and advised Howe on November 30 that in view of the ammonia plant’s power needs, Calgary Power’s application would be granted.<sup>27</sup> The long struggle to prevent Lake Minnewanka from becoming a much larger hydroelectric reservoir ended in the flux of wartime.

Up popped a new obstacle. How could such works be constructed inside a national park from a legal perspective? The Justice Department believed that the National Parks Act would have to be amended because the cabinet’s powers under the War Measures Act were not broad enough to permit activities specifically forbidden by an act of Parliament. For Howe, this was not good enough. There was no time to lay the matter before Parliament. The power company wanted work on the dam to be far enough advanced in the spring of 1941 to capture the runoff, which required an immediate start.<sup>28</sup>

Eventually, the Justice Department was persuaded to agree that since the work was required for war purposes, the cabinet could issue an order-in-council granting temporary approval for the project. However, both the federal and provincial legislative bodies would have to approve the project with the necessary legislation at a later date. Premier William Aberhart quickly announced his support. He made no reference to the province’s previous efforts to gain control of any water storage in the Bow

watershed, noting, "This province is anxious for development of power to aid industrializing our province and to do our utmost in contributing to the war effort." Within a fortnight, the necessary order-in-council was passed.<sup>29</sup>

Only the granting of an interim licence to the company remained before the work could begin at Lake Minnewanka. This proved more time consuming and contentious than anticipated because the Parks Branch insisted that an independent landscape architect should supervise design work to ensure that the installations inside the park should be as unobtrusive as possible. Initially, Calgary Power authorities seemed quite agreeable to the idea, but they soon began to resist, arguing that because the power produced at Cascade was to be sold to Alberta Nitrogen at less than cost, the utmost economy would have to be practiced in construction. The company wanted its consulting engineer, T. H. Hogg from Ontario Hydro, to have the final say on all design questions.<sup>30</sup>

Hogg, however, made it clear that he would resist any substantial spending on landscaping. Eventually, the company reluctantly agreed to retain landscape gardener Stanley Thompson and to carry out any design changes that he considered necessary. With that question settled, the job of clearing the brush and timber from the hillside around the lake finally got under way in February 1941, the contract having been awarded to members of the Nakoda Indian band who lived nearby.<sup>31</sup>

With construction under way and the process of drawing up formal agreements between the two levels of governments slowly proceeding, Mines and Resources Minister Crerar finally made a public announcement of the plan to amend the National Parks Act to legalize the power development within Banff National Park in April 1941. Anticipating criticism, he admitted that the development represented "a drastic departure from the policy established for many years." He pointed out, however, that Calgary Power had been using Lake Minnewanka to store water since 1912 and that there appeared to be no other means of procuring the power required for the war effort.<sup>32</sup>

That argument, needless to say, did not placate Selby Walker of the Canadian National Parks Association. He had already complained to



J. SELBY WALKER ON A HIKE IN THE MOUNTAINS (GLENBOW ARCHIVES, NA-5566-4).

the minister about this short-sighted policy, contending that American park administration was far more enlightened. In correspondence with another Parks Branch official, Walker claimed that the association was drawing growing support

from an increasing number of influential people ... who are ... beginning to realize that your department has too long been deprived of that influence, to which its importance both as a producer of revenue and development of high standard of national health entitle it.<sup>33</sup>

Walker continued to fuss and fume. After listening to an engineer from Calgary Power describe the planned project to the Calgary Canadian

Club, he complained that the company seemed intent upon actually drawing attention to their works:

Their power plant will not only be plainly visible from the road, but the motoring public will be encouraged to take a good look at the project because a road is to be constructed leaving the highway near the power plant and running beside their hydro pipe and across the top of the dam to connect with the one-time Minnewanka highway.... [I]n fact, the whole project is to be a joy forever to the Park visitors, and a blessing to the shareholders of the Calgary Power Company and built by about three million of the ten million appropriation.... How long must this suicidal exploitation of the natural resources of western Canada for the benefit of the eastern capitalist and the votes of the eastern majority be carried on?<sup>34</sup>

But the fact that Walker alone bothered to register a formal protest suggests that public opinion was little aroused about this issue in 1941.

Near the end of the parliamentary session in June 1941, Crerar introduced the legislation necessary to amend the agreement to transfer the natural resources of Alberta so as to permit the Minnewanka development. Crerar set forth the background and argued that the government would not have agreed to the application except for the national emergency:

We are in a desperate war. We do not know how many dreary, heavy months lie ahead. We do know this, if we are to succeed the ... munitions must be supplied. The government felt that under the circumstances this plant should be brought into operation at the earliest possible day, and the importance ... is the justification for a departure from what has been the policy of all governments in this country for the last twenty years. It does not establish any precedent, because it is definitely tied up to war needs.<sup>35</sup>

Parliamentarians were quite prepared to let the bill go through with no serious challenge, with the exception of Toronto Conservative T. L. Church, who launched into a ringing tirade against I. W. Killam and his financial associates for using the wartime emergency for personal gain:

We know these people in Ontario; we have learned about their methods and how they go about getting things through this parliament, as they have for nearly thirty years in the past. Some of the millionaires who are at the head of the super power trust centred in Montreal know no politics; ... they are millionaires first, last and all the time, grabbing the public domain.<sup>36</sup>

But no MPs supported Church, and the measure was speedily passed into law.<sup>37</sup>

All that now remained was for the Parks Branch to see that Calgary Power carried out its commitment to landscape the development as agreed upon to minimize its visibility. That did not prove easy. In the fall of 1941, Parks Branch employee James Smart, in correspondence with his superior, Roy Gibson, predicted: "I believe we are bound to have a lot of trouble in connection with getting the Calgary Power Company to undertake the landscape work they have promised, and it is liable to drag along for a number of years." At a meeting in the deputy minister's office with Gaherty and Hogg, the consulting engineer claimed that no equipment could be spared from the construction project for landscaping, and Gaherty tried to retreat from an earlier promise to build a loop road around Lake Minnewanka.<sup>38</sup>

Despite the efforts of departmental officials, the company continued to evade their obligations. In the spring of 1942, with the Cascade power plant almost ready to come into production, the Parks Branch stepped up the pressure, but in spite of another meeting with Gaherty, the work was left undone, reportedly because I. W. Killam considered it too expensive.<sup>39</sup> At a further meeting that autumn, Gaherty finally offered to pay \$35,000 toward the cost of landscaping but failed to produce a final agreement.<sup>40</sup>



CASCADE POWER PLANT (AUTHOR PHOTO).

Smart's prediction proved correct and the matter remained unsettled for years.

What particularly irritated these officials was that Calgary Power installed a powerful pump behind the dam at Lake Minnewanka so that even while the reservoir was filling, they were drawing it down below the levels previously permitted in order to supply water to their other Bow River plants. At the same time, Gaherty tried to persuade Ottawa to replace the interim development licence with a final one, which would make it all the more difficult to exert control over the company. The new Cascade plant even operated during the summer of 1943, leaving mudflats twenty feet wide around the lakeshore, although it had always been assumed that the reservoir would be left to fill up during the tourist season.<sup>41</sup>

In the spring of 1944, the company asked permission to draw down the level in Lake Minnewanka even farther than usual, claiming that it had faced an unprecedented demand for power in the fall of 1943 owing to a coal shortage in Edmonton, which had forced the company to ship

power north. In addition, the ammonia plant was operating at full blast and the lateness of the spring breakup was diminishing the flow out of the mountains into the Bow. When the Department of Mines and Resources investigated these claims, it discovered that a special allotment of coal had been granted to the company to produce power for Edmonton. Finding, however, that it was cheaper to produce hydroelectricity, Calgary Power had simply used more water than usual. Eventually, the department was forced to agree to allow the exceptional drawdown, although the onset of the spring thaw rendered this unnecessary in the end.<sup>42</sup>

Faced with the intransigence and aggressiveness of the Calgary Power Company, the Parks Branch retreated to trying to reduce the visual impact of the Cascade power plant and, in particular, of the tall, watertower-like surge tank – a shock absorber against water hammer effects in the penstocks – standing on the rim of the Bow valley where the feeder pipes plunged down the hill. The result was an unintentional comic interlude.

Canadian officials approached the British High Commission in the spring of 1942. Was it correct, asked Parks Branch employee James Smart, that a camouflage expert named Professor Webster was visiting Canada? Would he have time to consult about some camouflage? This was, he clarified,

... not in connection with war purposes, but more or less to blend in a piece of construction which has been imposed on the landscape of our mountain country in Banff National Park, and it has been considered that through the means of camouflage we may be able to render this piece of construction less conspicuous.<sup>43</sup>

After some confusion, it turned out that the expert was not Professor Webster but a landscape artist named Mr. Ironside. After looking at photographs of the site, Ironside suggested that the plan to paint the surge tank grey was probably a mistake. England was full of gasometers and water towers painted grey, which only made them ugly and conspicuous. The artist suggested that it would be better to paint the tank white.

Admittedly, this would not make it inconspicuous, but it would be more pleasant to look at.<sup>44</sup>

Rejecting this rather implausible advice, the Parks Branch continued to worry about how to improve the appearance of the surge tank. By the fall of 1942, Smart was wondering if it would be a good idea to coat it in “haze” or “mist” paint, which the National Research Council had developed for camouflaging ships at sea, on the grounds that the tank was seen from the highway silhouetted against the sky like a ship’s superstructure. When the National Research Council was unable to make a supply of the new paint available, it was decided to use “invisible grey” paint, perhaps with a little blue added to help blend into the mountain sky.<sup>45</sup>

As it turned out, woodpeckers had the last ironic word in the long-running anxiety about shielding hydroelectric installations from visitors to Banff National Park. The penstocks at the Cascade plant had been surrounded in wood cladding. Not only did this protect them from frost damage on the exterior, but the wood blended well into the landscape. When new penstocks were constructed in the postwar era, they too were framed in wood, along with the towering surge tank, which loomed on the banks of the Bow just inside the eastern gate of the park. Not only did this cladding soothe the bureaucrats, but, unexpectedly, it especially pleased the birds. Woodpeckers eventually discovered these wood-clad structures, and for whatever reason – insect infestations, or perhaps the resounding noise they gave off when hammered – they tore the wooden siding to shreds. When the dilapidated cladding had to be removed, parks bureaucrats resigned themselves to the naked aluminum-painted metallic structures that remain to this day.<sup>46</sup>

These cosmetic efforts on the surge tank could not conceal the fact that raising the dam at Lake Minnewanka produced all of the unfortunate results that the Parks Branch had long predicted. As forecast, Calgary Power continued to drag its feet about paying the cost of landscaping; it took until 1947 to extract the final \$35,000 owing.<sup>47</sup> The major problem, though, was the extent of the mudflats around the shores of the lake during tourist season. Calgary Power’s interim licence did not contain any precise commitments about summertime water levels at Lake Minnewanka. When

the dam was raised, the company had promised to allow the lake to fill up quickly in the spring except in emergencies, but in 1946, the bureaucrats were still complaining that for the past two years, the water had been as much as fifteen feet below the promised level on July 1.<sup>48</sup>

The only lever that the Parks Branch possessed was that no final licence for the dam had been issued. By 1947, Calgary Power was eager to have this settled since they were planning a new issue of debentures and feared that lack of the licence would reduce their price. Eventually, they persuaded Minister of Mines and Resources J. A. Mackinnon to intervene and order the bureaucrats to issue the licence.<sup>49</sup> Still, company negotiators refused to commit themselves firmly to ensuring that the water at Lake Minnewanka was at any particular level in the summer months, pleading the growing demand for electric power. In the end, the minister was given the formal authority to regulate water levels at the lake although no levels were specified. However, the company was given an incentive – a sliding scale of rental payments – to keep them high in the summer. That settled, the final licence converting Lake Minnewanka into a power reservoir was issued in May 1947.<sup>50</sup>

The experience of the Department of Mines and Resources in dealing with Calgary Power, once the dam at Lake Minnewanka had been raised and the Cascade power plant built, only seemed to confirm what national parks administrators had been arguing since the 1920s: hydroelectric reservoirs had no place inside the park system. Had it been practically possible, the lake would have been cut out of Banff National Park as the Spray Lakes had been in 1930, but that did not seem easy to do.

So that is how, as a war measure, an elegant rectangular building housing hydroelectric-generating equipment came to be planted prominently beside the highway and still greets visitors today on the eastern approaches to Banff National Park. So too, as a war measure, a huge earthen berm and regulating headworks raised the level of Lake Minnewanka sixty feet, drowning the former dam and the park's own hydroelectric facility in the process.<sup>51</sup> The wartime emergency made it impossible to resist the company's demands for additional capacity to supply power to the ammonia plant, particularly in view of Calgary Power's strong political connections

to C. D. Howe's Department of Munitions and Supply. The public outcry that had stopped the Minnewanka dam in the 1920s was muted in 1940 by the experience of depression and war. The company emerged victorious. And as a signal of triumph, a solitary surge tank rose like a gleaming technological obelisk in plain view on a bench beside the highway.