

SUMMARY OF PUBLIC PARTICIPATION

ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSAL BY NB DEPARTMENT OF SUPPLY AND SERVICES

REMOVAL OF THE EEL RIVER DAM

April 2007

Prepared by the NB Department of Environment (DENV)



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INTRODUCTION

This document is the Summary of Public Participation for the Removal of the Eel River Dam Project (the undertaking) proposed by the New Brunswick Department of Supply and Services (the proponent). As required by the *Environmental Impact Assessment Regulation*, it summarizes the input of the public as expressed in comments put forward during a public meeting and in written comments. As a summary, this document does not include every individual comment made at the public meeting or submitted in writing; however, a concerted effort has been made to reference each area of concern.

The sub-headings of this summary highlight the issues raised by those who actively participated in the meeting and/or through written submissions. Issues are generally presented in the order they were raised by participants. For an account of the full public meeting, refer to the Verbatim Transcript, which is available by request through the NB Department of Environment.

BACKGROUND

On March 28, 2003, the NB Department of Supply and Services (DSS) registered a proposal to decommission (i.e., remove) the existing Eel River Dam, located south of the Town of Dalhousie, NB, as required under *Schedule A* of the NB *Environmental Impact Assessment Regulation*. Specifically, the existing dam is located 600 m upstream of NB Highway 134 at Eel River Bar, and extends from the Eel River Bar First Nation (ERBFN) on the north to the Blue Heron Campground/Park on the South (Restigouche County).

The proposed project consists of the removal of the Eel River Dam, including the earthen dyke, concrete water control structure, and ancillary infrastructure (e.g., fish passage facilities), and the installation of erosion and scour protection, as necessary. An adaptive management approach to dam removal consisting of three phases or stages will be implemented to ensure that significant negative environmental effects are avoided.

An Agreement (dated December 10, 2002) was signed with the Province of NB, the Federal Government and the Council of the Eel River Band, requiring that a full environmental impact assessment (EIA) be conducted for the proposed decommissioning project.

Initial public consultation on the Project began on December 30, 2003 with the release of the *Draft EIA Guidelines* and a 30-day period for public comment. This period allowed members of the public to provide comment on what should be included in the EIA study. *Final EIA Guidelines* with the public's input considered were issued to DSS on February 27, 2004.

DSS prepared *Terms of Reference* which were reviewed and accepted by the Technical Review Committee (TRC) and then proceeded to conduct the EIA study.

An EIA report, entitled *Environmental Impact Assessment for the Removal of the Eel River Dam* was prepared pursuant to the *Environmental Impact Assessment Regulation* (87-83) of the Clean Environment Act and to meet the requirements of a Screening-level of assessment under the Canadian Environmental Assessment Act (CEAA). A Draft EIA Report was received on February 1, 2006 for review by the TRC. As a result of deficiencies noted, clarifications sought and additional work identified by the TRC, the report was revised, and a Final EIA Report satisfying the *Final EIA Guidelines* was accepted by the Minister, Environment on July 14, 2006.

Copies of the *Final EIA Report*, a summary of the EIA report and the TRC's *General Review Statement* were distributed and made available to the public at various locations in the region and at the NB Department of Environment (DENV) Branch office. Information was also made available on the DENV Internet site. Concurrently, a news release was issued and advertisements were taken out to inform citizens that this information was available, of the upcoming public meeting, and where they could view and/or pick up information in advance of the public meeting. Interested parties were encouraged to contact the Department if they intended to make a formal presentation at the meeting.

The release of the *Final EIA Report* (and EIA summary), *General Review Statement* and media release, announcing the upcoming public meeting on August 23, 2006, marked the beginning of the second phase of the formal public consultation process. The Minister then proceeded with the selection of a chairperson to facilitate the public meeting held on October 23, 2006 at the Eel River Bar First Nation Community Building.

Representatives from DENV, as well as representatives from DSS heard and recorded public comments on the *Final EIA Report* during the October 23, 2006 public meeting.

Attendees at the meeting were reminded that the *EIA Regulation* required an additional 15-day comment period following the public meeting for submission of written comments to the Minister of Environment. Attendees were also invited to provide their contact information if they wished to subsequently receive a copy of this Summary of Public Participation and/or the verbatim transcript of the meeting. Comment sheets were also made available at the meeting so participants could provide their comments in writing to the Department.

The final stage of public consultation was completed on November 7, 2006 following the end of the 15-day public comment period, subsequent to the October 23 public meeting.

SUMMARY OF ISSUES AND COMMENTS

This summary includes public comments received at the October 23, 2006 public meeting, as well as four written submissions received by the Department during the 15-day public comment period.

The formal public consultation meeting began at 7:15 PM on October 23, following a detailed presentation on the EIA study itself by the project proponent (DSS). A variety of information, including poster-board displays and handouts prepared by DSS were also available in the meeting room, and adjacent facilities within the Community Building.

Approximately twenty people attended the event, including seven local residents who actively participated in the formal public meeting segment of the evening, asking questions, commenting on the *Final EIA Report*, or raising specific issues of interest.

The comments made by participants both at the public meeting and in writing have been summarized and divided into the following categories:

- Eel River Water Pollution;
- Erosion/Sedimentation;
- Cooling Water Supply for NB Power;
- Impacts of the Dam on Area Residents;
- EIA Process/Final Report; and
- Project Future.

Eel River Water Pollution

Concerns about long-standing water pollution in the Eel River watershed were voiced by several local residents, with a particular focus on domestic sewage and waste water discharges, as well as agricultural run-off from areas above the dam.

Although it was acknowledged that some positive steps have recently been taken to control domestic sewage discharges in the area, the extent of water pollution tolerated in the river, over the four decades since the dam was built, was strongly criticized by one participant. The fact that untreated sewage continues to be discharged from some communities upstream of the dam was cited as a major outstanding issue.

Another speaker expressed concern about the potential for negative health impacts of such water pollution on children swimming in the Eel River, after the dam removal project is completed.

The specific question focused on what kind of water quality monitoring system would be established in the future, so that local people could be assured the river would again be safe in terms of public health, as well as the environment.

Representatives from the EIA Study Team confirmed that water quality tests conducted during its investigations had identified problems with fecal coliform bacteria in the river upstream from the dam, as well as the estuary farther downstream where clams are found. It was noted that the presence of such bacteria is typically caused by human, warm-blooded animal and bird waste.

The EIA study also concluded, however, that the return of natural tidal flushing patterns within the system, which would follow the dam's removal, is expected to have a long term positive impact in this regard.

Follow-up monitoring on water quality (i.e., fecal coliform) was also specifically recommended, as part of the EIA Report, to examine this particular issue, as well as monitoring of other environmental components such as clam beds, wetlands, and migratory birds, in order to track changes which occur in the years after the dam is removed.

The Chairman of the Technical Review Committee on the Eel River EIA study, which includes provincial and federal agency representatives, noted that such recommendations for follow-up environmental monitoring programs often form part of the final EIA documentation. He explained that such recommendations typically become part of the formal legal conditions which govern such projects, if the project concerned ultimately receives an EIA approval from the NB Minister of Environment.

Erosion/Sedimentation

Another issue raised by residents of the Eel River Bar First Nation highlighted the build-up of sediments in the river, above and below the existing dam, since its construction in the early 1960's.

One participant felt that the EIA study had not examined this subject area in sufficient detail, and estimated there are now more than 400,000 cubic yards of sediment material spread over the bottom of the river and its estuary, as a direct result of river bank erosion and tidal flow changes caused by the dam.

Concerns were voiced about the negative impact of these accumulated sediments moving quickly downstream after its removal. One key question was whether such material would spread further into the local marine environment, with additional negative effects on clam harvesting and lobster fishing in the area.

A representative of the Study Team initially noted that the amount of scientific information Team members were able to locate on the nature of the river bed, before the dam was constructed in the early 1960's, was rather limited.

Based on the data which had been found, however, it was estimated that roughly 80 centimetres of additional sediments have been deposited near the Highway 134 bridge

crossing since then, while 50 extra centimetres have accumulated farther upstream near the location of an old pipeline route built in 1929.

By analyzing and comparing aerial photographic records for the area, the Team was able to establish that the width of the tidal inlet opening has narrowed to roughly 30 metres today, compared to 80-90 metres prior to the building of the dam.

It was explained that the environmental protection aspects of the dam removal project have been specifically designed to moderate the release of accumulated sediments built up behind the dam over the decades.

The proposed decommissioning project would go forward in separate stages, with a 150 metre section of the dam being removed first, and a temporary rock filled barrier placed downstream of this area. The goal of this procedure would be to reduce the pace of the resulting new water flow patterns and the mobilization and movement of sediment. Sediment trapped by the temporary barrier would be excavated and removed at a later stage in the project, when the entire barrier itself is taken out.

Active removal work at the dam site would also be timed for later periods of the summer, when natural flows in the river are at seasonally low levels. Once the entire structure is removed, the EIA does estimate that between 8 and 10 years of natural tidal flushing will be required in order to achieve a sediment distribution pattern in the local environment, which would be similar to 'pre-dam' conditions.

It was noted as well that the Eel River represents less than 1% of the fresh water flow into Chaleur Bay as a whole. As such, the *Final EIA Report* does not predict that sedimentation changes following removal of the dam would result in long term, significant impacts on the marine environment.

Cooling Water Supply for NB Power

Another local resident began by stating his support for removal of the Eel River Dam and the steps being proposed to protect the environment during the process.

Nevertheless, the fact that NB Power's Dalhousie thermal generating station continues to depend on freshwater from the Eel River impoundment area as a cooling water source, was identified by this participant as a critical unresolved issue. Unless this problem is rectified, it was predicted that the need for electricity in the area would outweigh the conclusions of the EIA, and effectively prevent the dam removal project from ever proceeding.

The Chairman of the EIA Technical Review Committee, representing DENV, agreed that this is a central issue and noted that it has been clearly identified in the *Final EIA Report*.

He also noted that NB Power is already actively searching for alternative cooling water supply sources, although a concrete solution has yet to be found. It was explained that the legal conditions attached to any final EIA approval for the project would likely include a provision to allow NB Power enough time to find an alternative cooling water source, before the actual dam removal work could begin.

On October 31, 2006, a written response to the *Final EIA Report* was received from NB Power providing more detailed information related to NB Power's use of water from the impoundment. The company noted in its submission that water quality had been deteriorating for several years in the reservoir created by the Eel River Dam. As a result, it was decided to invest in a 'reverse osmosis' water treatment system for the Dalhousie Generating Station in 2004-05, at a cost of \$350,000, to ensure that the river water from the reservoir would remain suitable as a cooling source over the long term.

The company confirmed that, should a decision be made to remove the dam, NB Power would need to secure a new freshwater source in order to continue operating the station.

It was noted that some options for water replacement have been investigated, but all of these come at a significantly increased cost. Securing a new fresh water source will take time and involve a construction period, as well as operational changes at the generating station itself. NB Power formally requested that sufficient time be provided, if a decision is made to remove the dam, so that the change to a new source can be made, without jeopardizing operation of the station.

Impacts of the Dam on Area Residents

Virtually all attendees at the public meeting spoke strongly in favour of the dam removal project, and several speakers emphasized its long-standing negative impacts on the community in social, cultural and economic terms.

One speaker expressed deep concern about the fact many younger members of the Eel River Bar First Nation today aren't able to understand or appreciate what the river meant to their own community, in a cultural sense, before the dam was built.

He stressed that traditional harvesting of natural resources represents the historical basis of the community's presence in the local area, going back to time immemorial. The loss of those resources, after the dam was constructed, caused not only economic damage, but significant cultural and psychological harm as well, which continues to impact individuals and the community at large today.

Another participant talked about the loss of abundant clam beds in the community as a result of the dam, which had always provided important opportunities for elders to pass down valuable traditions, skills and knowledge to younger generations.

One speaker explained how he had gained his first valuable lessons in business practice as a young child, by observing how his grandmother had managed sales of locally harvested clams to passers-by.

The consistent message delivered by such speakers during the public meeting stressed the need to fully restore the river, its estuary, and all aspects of the local environment, to their 'pre-dam' natural state.

One participant emphasized that the Minister's final decision on the EIA should recognize that the Eel River Dam represents a serious injustice to the community, which has caused cultural trauma among local people for more than forty years.

As such, he recommended values related to the 'public good' should definitely outweigh financial factors, when the decision is being considered by the Minister of Environment.

On November 2, 2006, a written submission was received from a resident of Eel River Crossing, farther upstream from the existing dam, expressing sadness about the loss of the freshwater eco-system which has developed in this area over the years, should the dam ultimately be removed.

In addition to boating, canoeing and fishing in the summer months, it was noted that a walking trail has been developed along the shore, which provides good opportunities for bird watching, etc. During the winter, skating on the frozen surface was mentioned as well.

The submission also acknowledged, however, that the present fresh water environment in the area above the dam is not a naturally-occurring condition. The writer states that he is personally prepared to accept whatever decision is ultimately made in response to the EIA Report, while indicating an individual preference for retaining the status quo.

EIA Process/Final Report

One participant in the public discussion expressed concern about the complex technical language used in the *Final EIA Report*, and the difficulty he had personally experienced in attempting to fully understand its contents. He also felt that not enough consultation with local residents had been carried out during the study process itself.

As an example, he pointed to a lack of interaction with hunters in the community, such as himself, who are knowledgeable on issues such as migratory bird patterns.

While stressing that the dam had totally destroyed the river, he also stated that more work needs to be completed on the EIA study, and that local people should now be given the opportunity to do such work themselves. In his view, at least another year should be dedicated to such an effort.

Other residents of the Eel River Bar First Nation who spoke at the meeting clearly disagreed with these statements, however. They voiced strong support instead for accepting the EIA study now, and moving quickly toward a decision by the Minister of Environment to proceed with the dam removal. One speaker also noted that she had found the *Final EIA Report* to be both detailed and understandable by members of the community, while acknowledging that it is a very technical document.

On the issue of public consultation, representatives from the Study Team reviewed the public information and consultation aspects of the EIA process since 2004, which has included five separate public meetings and several additional meetings with the Eel River First Nation Council itself. DENV representatives also referred to the original public distribution of draft guidelines encouraging input on the EIA study before it actually began, and the continuing emphasis on involving stakeholders throughout the subsequent process.

On a separate issue covered in the report, one participant asked whether the invasive species of freshwater plants, which have appeared in the area above the dam over the years, would be affected by its removal and the return of salt water to the area in question. A representative of the Study Team confirmed that not just the so-called 'invasive species', but all species in the affected area which have adapted over the years to a fresh water environment, would be unable to tolerate a return to natural 'pre-dam' water chemistry conditions.

In response to other questions about when salmon and other fish would return to the river after the dam is removed, representatives of the Study Team explained that it is difficult to predict specific timing at this stage, but stressed that post project monitoring would prove important in this regard.

In a November 7, 2006 written response to the *Final EIA Report*, the Eel River Bar First Nation Council noted that the total project cost for removal of the dam and the eventual restoration of the watercourse is identified as \$2,035,000.

The Council stated in its letter, however, that the final report does not accurately quantify the extent of socio-economic and cultural values, which were lost as a result of the construction of the dam in 1963. It also noted that several recent Supreme Court decisions clearly identify the right to natural resources by First Nations, but very little, if any, acknowledgements of such rights were incorporated in the report.

As a result, the Council stated that the loss of those intrinsic rights by members of the Eel River Bar Band were not quantified and given the emphasis they deserved. In addition, the letter notes that the *Final EIA Report* does not go into enough detail regarding sediment dispersion modelling after the dam is removed.

In another written response to the *Final EIA Report* received on November 7, 2006 a participant at the October 23 public meeting reinforced and re-stated a variety of comments he had previously made on that occasion.

These included criticism of the fact that a number of individuals with valuable local knowledge in the area had not been personally interviewed during the EIA study, and that the extent of water pollution in the Eel River caused by domestic sewage discharge, run-off water from livestock operations, and industrial land use over the years, had not been fully explored or documented in the report.

Reference was also made to an existing 'pump house' structure in the Eel River Bar community, where asbestos used during its original construction represents a potential health hazard and was not documented in the report.

The fact that the *Final EIA Report* was prepared on behalf of one provincial agency (DSS) for submission to another provincial agency (DENV) was also sharply criticized in this submission. It was stated that such a report should have been addressed instead to the 'Eel River Indian Reserve', in order to be consistent with precedents established federally under the Indian Act.

It was further stated that a number of additional questions must be studied before removal of the existing dam should be considered. Such a review process should take at least a year and involve experts in various technical areas, as well as local residents who hunt, fish, trap, etc. It was also recommended that such residents should receive payment for interviews conducted as part of this process, as well as expenses to support preparation of a locally-generated report on existing environmental quality in the Eel River.

Project Future

The vast majority of questions, statements and comments made by attendees, including residents of the Eel River Bar First Nation at the October 23, 2006 public meeting demonstrated strong support for the conclusions of the EIA study, and timely action by the Province to commence the dam removal project.

One participant asked whether contractors had already been hired to conduct the work and, if so, on what basis the contracts had been awarded. The representative from DSS explained that no contracts related to the proposed project could possibly be awarded until after the EIA process concludes, and a decision is made at the Ministerial level.

Should a decision ultimately be made to proceed with the project, it was confirmed that public tenders would then be issued by DSS, and contractors ultimately hired to proceed in two separate stages; the first to remove the initial 150 metre section, followed by a second contract to remove the remainder of the dam.

In response to further questions on this topic near the end of the discussion, it was confirmed that the estimated capital cost of the dam removal project is roughly \$2 million. The public meeting concluded at 9:35 PM

FINAL STEPS IN EIA PROCESS

This Summary of Public Participation and completes the public participation component of the Environmental Impact Assessment process. The Minister of Environment will take into account the public input received, as well as information provided by the Technical Review Committee, including the *General Review Statement*, and will make recommendations to the provincial Cabinet. The federal government will also complete any requirements under the Canadian Environment Assessment Act (CEAA).