

Title: How the Canadian Environmental Assessment Act is failing Canadians

Oral presentation

1. Intro:

My name is John Werring. I am a senior science and policy advisor with the David Suzuki Foundation based in Vancouver, B.C.

I am appearing before you to provide recommendations on reforms to Canada's current environmental assessment laws and, in particular, a concrete example (large-scale gravel removals from British Columbia's Fraser River) of how the Canadian Environmental Assessment Act is allowing additional environmental harm AND failing to provide the public with adequate opportunity for input.

My presentation is based on two decades of personal experience reviewing projects proposed and reviewed by regulatory agencies throughout Canada. I will also touch on input from thousands of David Suzuki Foundation supporters throughout the country who feel passionately about their ability to provide meaningful input through the environmental assessment process.

The current environmental assessment review process is an opportunity to go beyond replicating what we've done in the past, introduce improvements that will usher in the next generation of environmental assessment in Canada, and ensure a healthy environment for our children and grandchildren.

2. Recommendations:

Repair the parts of the act lost in 2012

- a. Reinstating triggers from other acts (such as the Fisheries Act) and mandatory assessments
- b. Ensure that public consultation is free and unfettered
- c. Require free and easy public access to a registry with detailed project information

Improve parts of the CEAA 1992 to reflect modern standards

- d. Include cumulative effects
- e. Prioritize regional environmental assessments
- f. Recognise environmental rights and their protection as a fundamental purpose of the act

Final recommendation: Move toward a complete overhaul of the CEAA to focus on regional strategic environmental assessments as a foundation for the environmental assessment regime.

3. Comparing CEAA 1992 and 2012

I've worked with the provisions of CEAA 1992 and the changes made in 2012. There are some striking differences.

CEAA 1992 was more democratic and applied more broadly:

- required projects be assessed in advance and significant environmental effects mitigated
- required consultation with affected communities and First Nations
- required environmental assessments for most significant federal action, funding or approval
- could be triggered to cause an environmental assessment by other laws (e.g. 5 sections of the Fisheries Act triggered mandatory EAs)
- required a public registry of projects

4. What was lost during the 2012 changes?

- reduced the number of projects assessed across Canada -- 3000 projects removed from registry
- removed triggers for environmental assessment
- added agency —and ministerial —discretion options to remove projects from assessment
- required that people prove they are “interested parties” before they can be heard
- delegated enviro assessment powers incorrectly to the NEB and Nuclear Safety Commission
- information requests dealt with through provincial Access to and Freedom of Information requests (creating cost barriers, delays)

5. How these changes affected my work to protect fish and their habitat

- virtually every gravel extraction operation on the Fraser River that was proposed prior to the proclamation of CEAA 2012 was subjected to some form of environmental assessment
- lost the ability to track gravel projects and to contribute information to environmental assessments.
- knowing about a project has become a matter of chance and providing meaningful input requires filing formal information requests
- projects have proceeded that have un-challenged environmental impacts, without the benefit of information on less damaging alternatives.

6. What goes wrong when CEAA doesn't work to protect the environment and wildlife?

Example from Fraser River gravel removals. Gravel removal was having drastic impacts on fish and fish habitat. In one case, at a location known as Big Bar, removal operations in 2006 resulted in the loss of water to thousands of salmon nests and the demise of possibly millions of young salmon about to emerge from the gravel.

7. What our supporters are calling for

environmental assessment should do five things for people in Canada:

- allow everyone to say “no” to environmentally damaging projects in their communities
- ensure that the environmental safety net, which includes other laws and regulations, is intact and working to keep air, water and soil healthy
- guarantee public participation and the free, prior and informed consent of Indigenous peoples.
- consider the “big picture” and include cumulative effects
- include scientific and traditional Indigenous ecological expertise on all environmental assessment panels.

If revisions to the CEAA can't achieve these outcomes, we suggest developing new regulations to replace it.

8. Conclusions

- triggering provisions that existed under CEAA 1992 worked to create better choices for the environment
- environmental assessments must not be defined in such a limited manner
- environmental assessments must no longer be undertaken on a project by project basis
- the right to a healthy environment — every person's right to clean air and water, safe food and a stable climate — must be included as a guiding principle to help interpret the Act



**David
Suzuki
Foundation**

Vancouver (Head Office)
219-2211 West 4th Avenue
Vancouver BC V6K 4S2
604 732 4228

Toronto
102-179 John Street
Toronto ON M5T 1X4
416 348 9885

Montréal
540-50 rue Ste-Catherine Ouest
Montréal QC H2X 3V4
514 871 4932

Presentation: How the Canadian Environmental Assessment Act 2012 is failing Canadians
From: John Werring, senior science and policy advisor with the David Suzuki Foundation

Date:

Summary

My name is John Werring. I am a senior science and policy advisor with the David Suzuki Foundation based in Vancouver, B.C.

I am appearing before you to provide recommendations on reforms to Canada's environmental assessment laws and, in particular, a to offer a concrete example of how the Canadian Environmental Assessment (CEAA), amended in 2012, is allowing environmental harm while also failing to provide the public with adequate opportunity for input into project reviews that directly affect the environment. My presentation is based on two decades of personal experience reviewing projects proposed and reviewed by regulatory agencies throughout Canada during the implementation of the 1992 and 2012 versions of the CEAA.

Specifically, I would like to address an issue — large-scale gravel removals from British Columbia's Fraser River — that environmental organizations, scientific experts and the general public have been actively engaged in for more than 15 years. An examination of this issue and related project assessments will highlight the changes to the act, the environmental harm permitted under the 2012 act and the loss of public access to information and participation in reviews.

The David Suzuki Foundation is represented here because more than 4,800 of our supporters care enough about protecting the environment and our right as Canadians to be a part of decision-making that they have written, emailed and called their MPs, the ministers responsible and the members of this committee. These Canadians want the opportunity to provide input in a meaningful way through the environmental assessment process.

Key points:

CEAA 1992

- Required projects be assessed in advance and any significant environmental effects mitigated or avoided — in many cases alternatives to the proposed project, or portions thereof (e.g. mine tailings disposal methods), had to be considered
- Emphasized the value of, and required, consultation with affected communities and First Nations
- Required environmental assessments (EAs) for most significant federal action, funding or approval and applied across every federal agency, so long as their actions, funding or approvals



David
Suzuki
Foundation

Vancouver (Head Office)
219-2211 West 4th Avenue
Vancouver BC V6K 4S2
604 732 4228

Toronto
102-179 John Street
Toronto ON M5T 1X4
416 348 9885

Montréal
540-50 rue Ste-Catherine Ouest
Montréal QC H2X 3V4
514 871 4932

- had an environmental effect
- Could be triggered to cause an environmental assessment by other laws like the Fisheries Act or Navigable Waters Protection Act
- Required the Canadian Environmental Assessment Agency to maintain a public registry of projects

CEA 2012

- Significantly reduced the number of projects assessed across Canada; Almost 3,000 projects that were on the CEA registry have been removed and the public can no longer get information on them
- Changed CEAA and related laws to remove triggers for environmental assessment, further reducing the number of projects reviewed
- Added agency — and ministerial — discretion options to remove projects from assessment
- Substituted open community and stakeholder consultation with the requirement that people prove they are “interested parties” before they can be heard
- Delegated some environmental assessment powers to the National Energy Board and Nuclear Safety Commission, which do not have the expertise required to assess environmental and biodiversity impacts from projects
- Removed the public access registry and forced interested parties to file federal or provincial Access to and Freedom of Information requests, adding a cost barrier and often delaying the access to information until it is too late

Since these changes, the David Suzuki Foundation has lost the ability to track gravel projects and to contribute unique and important information to environmental assessments. Knowing about a project has become a matter of chance, and providing meaningful input requires filing formal information requests that do not support timely participation in environmental assessments. This has allowed projects to proceed that have unchallenged environmental impacts, often without the benefit of information that could have provided less damaging alternatives.

Therefore, we recommend:

- 1) Repair the parts of the act lost in 2012
 - a. Reinstate triggers from other acts and mandatory assessments for a broad range of projects
 - b. Ensure that public consultation is free and unfettered
 - c. Require free and easy public access to a registry with detailed project information
- 2) Improve parts of the CEAA 1992 to reach modern standards
 - a. Include cumulative effects
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act

A comparison of two CEAs

CEAA 1992

The Canadian Environmental Assessment Act (1992) mandated that environmental assessments be undertaken in the planning and proposal stages of projects that may affect the environment. Environmental assessments were designed to evaluate the impact of a project on the environment and used to advise decision-making and determine mitigation measures. CEAA 1992 required environmental assessments be conducted for federal projects and activities. “Significant adverse environmental effects” from these projects or activities had to be avoided or minimized. Environmental assessments included mandatory consultations with affected communities, including First Nations. Government was required to provide the public with access to the information upon which CEAA assessments were based. Public participation in federal environmental assessments was meant to ensure an open, balanced process that strengthened the quality and credibility of a project’s review.¹ Local and traditional knowledge about a project’s physical location was seen as a way to help identify and address potential environmental effects at the early stage of an environmental assessment.

“Triggering” of environmental assessments under CEAA 1992

Under the CEAA 1992, projects and government actions that interacted with other environmental legislation such as the federal Fisheries Act could trigger mandatory environmental assessments. An environmental assessment became a part of almost every significant federal action, funding or approval. This applied across every federal agency, as long as their actions, funding or approvals were deemed to have an environmental effect. For example, any action that caused a harmful alteration, disruption or destruction of fish habitat, or that would result in fish mortality in a way other than fishing, required an environmental assessment.

The following sections of the Fisheries Act triggered mandatory environmental assessments:

- Section 22(1): stipulated that no construction act may alter water flow, level or depth in a way that prevents fish from safely descending in water (e.g., fish must be able to safely swim through rapids or down a waterfall).

The trigger: Application for a project that will lower water depth or alter water flow and/or ministerial approval of a project that will lower water depth or alter water flow.

- Section 22(2): stipulated that construction/project activity cannot prevent a fish from ascending or descending in water and that the owner of any obstruction must make alterations to allow fish to ascend/descend in water.

The trigger: Application, commencement or approval of construction that causes an obstruction that prevents fish from ascending or descending in water.

¹ <http://www.ceaa.gc.ca/default.asp?lang=en&n=8A52D8E4-1>



David
Suzuki
Foundation

Vancouver (Head Office)
219-2211 West 4th Avenue
Vancouver BC V6K 4S2
604 732 4228

Toronto
102-179 John Street
Toronto ON M5T 1X4
416 348 9885

Montréal
540-50 rue Ste-Catherine Ouest
Montréal QC H2X 3V4
514 871 4932

- Section 32: stipulated that no one may kill fish in a way other than fishing without prior approval from the minister.

The trigger: Application for ministerial approval of an action or project that would kill fish in a way other than fishing.

- Section 35: prohibited harmful alterations, disruptions or destruction of fish habitat without approval from the minister.

The trigger: Application under Fisheries Act section 35(2) for or ministerial approval of a harmful alteration, disruption or destruction of fish habitat.

- Section 37(2): prohibited the deposit of deleterious substances.

The trigger: Application for or ministerial approval of a project that is expected to deposit deleterious substances contrary to the Fisheries Act.

Virtually all of these triggers applied in the case of large-scale gravel removals from rivers, and in a case I am familiar with, the Fraser River. Gravel removal often resulted in harmful alterations to fish habitat, allowed for deposits of deleterious substances (in this case, silt and sediment) and could result in the direct killing of fish (as was the case at Big Bar in 2006)². As well, virtually every proposed gravel-extraction project at the time required a section 35(2) authorization.

Public notice and participation

When a project became the subject of a CEAA review, the responsible authority was required to post public notice of the project in both official languages within 14 days of the commencement of an environmental assessment.

The CEA Agency (section 55, CEAA 1992) was required to maintain a public registry called the Canadian Environmental Assessment Registry, which consisted of an Internet site, public notices of commencements of EAs and project files.

As a minimum requirement under the act, public notices for EAs were to be included on the registry's website³. Additionally, if a responsible authority determined that interested parties were not likely to be aware of the posting on the website, notices were distributed through additional channels, including news releases or print advertising.

When the responsible authority believed public participation in a project's screening was appropriate — or where required by regulation — the authority was required to give the public an opportunity to examine and comment on the screening report and ***on any record relating to the project that was included in the registry.***

² See attached Appendix – “Historical Context”

³ <https://www.ceaa-acee.gc.ca/default.asp?lang=En&n=46425CAF-1&offset=3&toc=hide>



David
Suzuki
Foundation

Vancouver (Head Office)
219-2211 West 4th Avenue
Vancouver BC V6K 4S2
604 732 4228

Toronto
102-179 John Street
Toronto ON M5T 1X4
416 348 9885

Montréal
540-50 rue Ste-Catherine Ouest
Montréal QC H2X 3V4
514 871 4932

Section 55 of the act required information to be easily accessible to the public so they could stay informed about the proposed project and the EA process. The registry project file contained all records produced, collected or submitted in relation to the EA. The responsible authority was required to provide a member of the public with a copy of requested records in a timely manner. Records were defined as any documentary materials, regardless of medium or form. This included items such as written documents, plans, maps, drawings, photographs, film, sound recordings and videotapes.

Public consultation allowed the public opportunities to express knowledge and views on aspects of the EA. The intent of consultation was to raise awareness and understanding about a project or activity, and to receive public comments for consideration to make better, more informed decisions about proposed projects⁴. Public consultations allowed responsible authorities, other stakeholders and the public the opportunity to learn about each other's plans, local knowledge, views, issues and expectations.

Ministerial guidelines were used to assess the need for, and level of, public participation.⁵

The following criteria were considered:

- there is an indication of an existing or likely public interest in
 - (i) the type of project;
 - (ii) the location of the project; or,
 - (iii) the ways the project might affect the community;
- those who may be interested have a history of being involved;
- the project has the potential to generate conflict between environmental and social or economic values of concern to the public;
- the project may be perceived as having the potential for significant adverse environmental effects (including cumulative environmental effects and effects of malfunctions and accidents);
- there is potential to learn from community knowledge or Aboriginal traditional knowledge and, thereby, improve the environmental assessment and the project;
- there is uncertainty about potential direct and indirect environmental effects or the significance of identified effects; or
- the project has been, or will be, subject to other public participation processes of appropriate scope and coverage that would meet the objectives of this guideline.

CEAA 2012

While CEAA 2012 still allows for public participation in the environmental assessment process, amendments to the act and changes to companion legislation (such as the federal Fisheries Act and

⁴ <http://www.ceaa.gc.ca/default.asp?lang=En&n=46425CAF-1&toc=hide&offset=3>

⁵ https://www.ceaa-acee.gc.ca/Content/1/F/E/1FE6A389-4547-4B5C-8DE1-1196B1AE19C9/Assessing_the_Need_for_and_Level_of_Public_Participation_in_Screenings_under_the_CEAA.pdf



David
Suzuki
Foundation

Vancouver (Head Office)
219-2211 West 4th Avenue
Vancouver BC V6K 4S2
604 732 4228

Toronto
102-179 John Street
Toronto ON M5T 1X4
416 348 9885

Montréal
540-50 rue Ste-Catherine Ouest
Montréal QC H2X 3V4
514 871 4932

what was then the Navigable Waters Protection Act and is now the Navigation Protection Act) have limited the number and types of projects that were once subject to a CEAA review.

The previous CEAA applied to **all projects that had a federal trigger** (unless specifically excluded). This meant that a federal environmental assessment was required for all projects that triggered CEAA by virtue of involving the federal government as a proponent, in relation to federal lands, for a prescribed federal permit or as related to federal financial assistance. Under CEAA 2012 only projects listed in the Regulations Designating Physical Activities section may be subject to a federal environmental assessment. In addition, the minister has the discretion to designate a project for federal environmental assessment on an ad hoc basis.

Fewer projects are falling into the purview of CEAA 2012 than with the previous CEAA and fewer projects are being assessed. Even those projects that fall under the act may be excused from a federal environmental assessment at the discretion of the CEA Agency or the minister.

More than 3,000 projects that were once subject to the CEAA by virtue of the decisions that triggered EAs under the CEAA 1992 have disappeared from the books and the CEAA Registry, although some of the old information has been transferred to an electronic archive⁶.

Public participation in environmental assessment processes conducted by the NEB or a review panel is now limited to “interested parties” and not the unrestricted public, as before. An interested party is defined as any person who is directly affected by the project or has relevant information or expertise.

Fraser River gravel extractions and CEAA 1992

Virtually every gravel-extraction operation on the Fraser River that was proposed prior to CEAA 2012 was subjected to some form of environmental assessment (at minimum, a CEAA screening level EA) because projects required a section 35(2) authorization under the federal Fisheries Act. The EA process was triggered by the fact that a federal permit was required.

As a consequence, the public was notified of every proposed project, either through the CEAA Registry or through some other form of public notice.

The ad hoc committee that I was a part of worked on environmental conservation objectives related to gravel extraction between 2004 and 2014. We were able to track all projects and, when information was posted, we would contact the federal responsible authority (in this case, Fisheries and Oceans Canada) and request to be engaged. The committee was able to engage because the projects we were most concerned about met the criteria in the Ministerial Guidelines. We had free and easy access to all relevant, project-specific documents and records in the project registry file, including maps of project locations and descriptions of project scale and scope and gravel-extraction methods.

⁶ <http://www.ceaa.gc.ca/052/index-eng.cfm>



David
Suzuki
Foundation

Vancouver (Head Office)
219-2211 West 4th Avenue
Vancouver BC V6K 4S2
604 732 4228

Toronto
102-179 John Street
Toronto ON M5T 1X4
416 348 9885

Montréal
540-50 rue Ste-Catherine Ouest
Montréal QC H2X 3V4
514 871 4932

This access allowed me to visit sites and conduct independent fish-population and habitat-mapping assessments. These assessments became part of the review process and provided a counterbalance to the project proponent's assertions and findings. We often were able to provide authorities with information they otherwise would not have had to allow them to fully determine the potential environmental impacts of the proposed projects. CEAA EA screening reports and decision documents that started out as single-page documents blossomed into thorough 20-page reports that considered all aspects of the proposed projects and often resulted in proposed project plans being modified or rejected outright.

Fraser River gravel extractions and CEAA 2012

Since CEAA 2012 was enacted, Fraser River gravel-extraction projects are no longer subject to environmental assessment under the CEAA.

As a consequence, there is no longer public notice that such projects are even being proposed. All too often, the public only finds out that a project is going ahead by accident — either through word of mouth, a leak from inside an agency or by accidentally stumbling on a project already in progress.

Projects are no longer listed in the CEAA registry and there are no registry files opened in which project-related records are kept. Now, when we ask to see project-related records — including federal permits or project-review or decision documents — we are told by the responsible authority that we must file an Access to Information request under the federal Access to Information and Protection of Privacy Act (ATIPP). We are often referred to the responsible provincial regulatory authorities for project-related information. Provincial regulatory authorities then tell us that to access the requested information, we must file a Freedom of Information request under provincial Freedom of Information and Protection of Privacy (FOIPP) legislation.

ATIPP and FOI requests often take many months to process and can come with some hefty fees that the requester must pay before they can receive the requested documents. In addition, processing these requests takes a lot of valuable time and resources away from government agencies and may involve several parties, divisions and program areas that would otherwise not be involved in the process. In many cases, by the time the ATIPP or FOI request is processed, the issue has passed and the opportunity for public input is over.

Additional considerations with respect to Environmental Assessment generally

We would also like to direct the panel to the fact that the David Suzuki Foundation has a history of supporting regional strategic environmental assessments.

For example, in comments from the Foundation on the Draft Far North Land Use Strategy in Ontario in 2015 (EBR posting #012-0598), we outlined that a regional, cumulative-effects screening process must be a component of EA processes to support planning for linear feature density/road density metrics, the



David
Suzuki
Foundation

Vancouver (Head Office)
219-2211 West 4th Avenue
Vancouver BC V6K 4S2
604 732 4228

Toronto
102-179 John Street
Toronto ON M5T 1X4
416 348 9885

Montréal
540-50 rue Ste-Catherine Ouest
Montréal QC H2X 3V4
514 871 4932

application of disturbance thresholds, stream-crossing density, and the Far North Act objectives of maintaining ecological processes and functions and the maintenance and restoration of caribou habitat.

Further, we argued:

“A cumulative effects assessment model must be developed by the province and shared with communities as part of an environmental assessment process, in order to ensure that a) regional assessments are made to address the values identified above and; b) the methodology across the province for gauging cumulative effects is consistent. The model must be able to collate the present impacts of disturbances and predict future disturbances and the cumulative impacts that they will bring so that this information can be factored into decision-making processes.”

The David Suzuki Foundation is also supporting the Regional Strategic Environmental Assessment Process in the Peace region in British Columbia.

We strongly believe that the Regional Strategic Environmental Assessment Agreement has potential levers to support sustainable land-use decision-making processes, such as section 3.1.5.3, under which the parties agree to incorporate “the identification of explicit risk relationships between potential short and long term development scenarios and the desired future state of the VCs [Valued Components of the traditional territories identified by participating First Nation communities] and associated indicators”, and section 3.1.6.2, which creates a space for collaboratively developed recommendations on “potential new legislative, policy and regulatory mechanisms to address any risks to VCs [...]”⁷[1]

Finally, our organization and thousands of our supporters believe that Canada and the Canadian Environmental Assessment act should recognize the right to a healthy environment. Through email submissions and personal presentations, our supporters are asking that environmental assessments do five things:

1. Allow everyone, including Indigenous peoples, to say “no” to environmentally damaging projects in their communities.
2. Ensure that the environmental safety net, which includes other laws and regulations, is intact and working to keep air, water and soil healthy.
3. Guarantee public participation and the free, prior and informed consent of Indigenous peoples.
4. Consider the “big picture” and include cumulative effects from multiple projects on interconnected ecosystems in ways a case-by-case approach cannot.
5. Include scientific and traditional Indigenous ecological expertise on all environmental assessment panels.

⁷ REGIONAL STRATEGIC ENVIRONMENTAL ASSESSMENT AGREEMENT BETWEEN: Her Majesty the Queen in Right of the Province of British Columbia, as represented by the Minister of Aboriginal Relations and Reconciliation, the Minister of Forests, Lands and Natural Resource Operations, and the Minister of Natural Gas Development (the “Province”) AND: Doig River First Nation, Halfway First Nation, Prophet River First Nation, Sauteau First Nations, and West Moberly First Nations, each a “band” within the meaning of subparagraph 2(1) of the Indian Act, R.S.C. 1985, c. I-5, represented by its Chief and Council (collectively, the “Participating First Nations”), August, 2015



**David
Suzuki
Foundation**

Vancouver (Head Office)
219-2211 West 4th Avenue
Vancouver BC V6K 4S2
604 732 4228

Toronto
102-179 John Street
Toronto ON M5T 1X4
416 348 9885

Montréal
540-50 rue Ste-Catherine Ouest
Montréal QC H2X 3V4
514 871 4932

Conclusions and recommendations

In our opinion, the most significant failings of CEAA 2012 with regard to environmental assessment generally was the removal of the triggering provisions that existed under CEAA 1992. Only those projects designated by the Regulations Designating Physical Activities are subject to environmental assessment, narrowing the scope of environmental assessments considerably.

Undertaking environmental assessments on a project-by-project basis has proven to be ineffective. We support the call, echoed by the public and experts across the country, for an eventual complete overhaul of the CEAA in favour of a new approach that incorporates regional strategic environmental assessment as a foundation for environmental assessments.

Recommendations:

- 1) Repair the parts of the act lost in 2012
 - a. Reinstating triggers from other acts and mandatory assessments for a broad range of projects
 - b. Ensure that public consultation is free and unfettered
 - c. Require free and easy public access to a registry with detailed project information
- 2) Improve parts of the CEAA 1992 to reach modern standards
 - a. Include cumulative effects
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**David
Suzuki
Foundation**

Vancouver (Head Office)
219-2211 West 4th Avenue
Vancouver BC V6K 4S2
604 732 4228

Toronto
102-179 John Street
Toronto ON M5T 1X4
416 348 9885

Montréal
540-50 rue Ste-Catherine Ouest
Montréal QC H2X 3V4
514 871 4932

Appendix

Historical context of Fraser River gravel extraction and CEAA:

In the mid 1990s, Fisheries and Oceans Canada placed a moratorium on gravel extraction on the Fraser River because of concerns about the impacts of such removals on fish and fish habitat. Shortly after, the B.C. provincial government began to argue that gravel removal from the Fraser was necessary to protect lives and property due to accumulations of gravel that were allegedly “massive” and causing the riverbed to rise.

A series of public meetings was held to debate the issue. Experts were called in to assess the scope of the problem. UBC geography professor Michael Church provided the most compelling testimony on how gravel and sand enters and moves through the Fraser River’s gravel reach. He estimated that approximately 280,000 cubic metres of gravel were entrained into and through the reach below the Agassiz Bridge annually. Areas upstream near Seabird Island, in contrast, were seen to have undergone large-scale (four million cubic metres) natural losses of sediments.

The B.C. government and proponents of the gravel industry incorrectly interpreted this to mean that 280,000 cubic metres of gravel and sand entered the gravel reach each year and merely “piled up” in the river, causing a rise in riverbed elevation that would over time result in increased flood risk for people living along the river. In fact, the UBC geography study showed that gravel and sand accumulations in the active channel of the river downstream of the Agassiz-Rosedale Bridge were largely offset by losses of overbank sand on islands and river edges, resulting in little net gain of sediment.

Nevertheless, the proponents of gravel extraction argued that lives and property were at risk and pushed for DFO to lift the moratorium on gravel extraction.

In 2004, a five-year federal-provincial agreement was reached to allow removal of up to 500,000 cubic metres of gravel in each of the first two years and up to 420,000 cubic metres in the following three years. The agreement was touted as a long-term plan for reducing the flood hazard risk in the lower Fraser River.

In fact, during the life of this agreement, the gravel industry and provincial agencies targeted easily



**David
Suzuki
Foundation**

Vancouver (Head Office)
219-2211 West 4th Avenue
Vancouver BC V6K 4S2
604 732 4228

Toronto
102-179 John Street
Toronto ON M5T 1X4
416 348 9885

Montréal
540-50 rue Ste-Catherine Ouest
Montréal QC H2X 3V4
514 871 4932

available gravel bars and did not provide any evidence to support the claim of flood-mitigation benefits. Observers noted that the gravel bars targeted were easily accessible by equipment, which perhaps coincidentally makes them the most economically efficient gravel to extract. It is important to note there are few large gravel bars in this reach. Those gravel bars are high-quality fish habitat and, for the most part, form slowly, often taking many decades to recover once removed.

Since that time, a number of highly controversial gravel-removal operations have taken place. That controversy was related to where gravel was being removed from the river, when it was being removed and the decision-making processes involved in site selection and approval.

Critics argued that gravel removal was only taking place in areas where it was easily accessible to industry and that removal from the targeted areas provided no flood protection benefits whatsoever. In addition, gravel removal was occurring in such a manner as to have drastic impacts on fish and fish habitat. In one case, at a location known as Big Bar, removal operations undertaken in 2006 resulted in the de-watering of thousands of salmon redds (nests) and the demise of possibly millions of young salmon that were about to emerge from the gravel. Evidence suggested that similar fish losses had occurred at a few other sites in the same year, and in years previous. The main reasons for the losses were that the construction of causeways across river channels, to access mid-river gravel bars, effectively stanching the river flows in those channels, resulting in reduced water levels downstream of the causeways that dewatered salmon redds. At other locations, such as at Popkum Channel in 2005 and 2006, there was no known fish or fish habitat inventory and assessment, no mitigation or compensation for habitat losses, no known benefits to flood protection, and we have been advised that the project removed far more material than was authorized under the Water Act.

In response to what happened at Big Bar in 2006, DFO conducted an in-depth evaluation of the problems that led to the massive fish kill. The final result of the investigation was publication of a report entitled “A Review of Access Issues Associated with Lower Fraser River Gravel Extraction Operations”.

This report provided a set of recommendations that, if followed, were designed to prevent the unwarranted destruction of fish and fish habitat at all future mining sites on the river.

However, despite these recommendations, which were clearly designed to provide reasonable protection in the face of such projects, the DFO’s decision-making process with respect to gravel removal continued to ignore good science, technology and engineering, as well as legislation, policy regulation and process in approving sites for gravel extraction. Indeed, there is no evidence that anyone at the technical-committee level ever properly reviewed or understood what the impacts of the gravel extractions were or are.

With this understanding of the situation, a number of citizens in British Columbia gathered to form an ad hoc committee called the Fraser River Gravel Stewardship Committee and implored DFO and the province to work with the committee to review these gravel-mining projects in light of the available public participation opportunities allowed for and provided under the Canadian Environmental Assessment Act (1992).



**David
Suzuki
Foundation**

Vancouver (Head Office)
219-2211 West 4th Avenue
Vancouver BC V6K 4S2
604 732 4228

Toronto
102-179 John Street
Toronto ON M5T 1X4
416 348 9885

Montréal
540-50 rue Ste-Catherine Ouest
Montréal QC H2X 3V4
514 871 4932

The FRGSC comprised members of various public-interest groups with vested interests in protecting and enhancing B.C.'s salmon and sturgeon resources for future generations, including the Fraser River Salmon Society, David Suzuki Foundation, Fraser Valley Angling Guides Association, Fraser River Sturgeon Conservation Society and various experts in fish biology and river hydromorphology and geology.