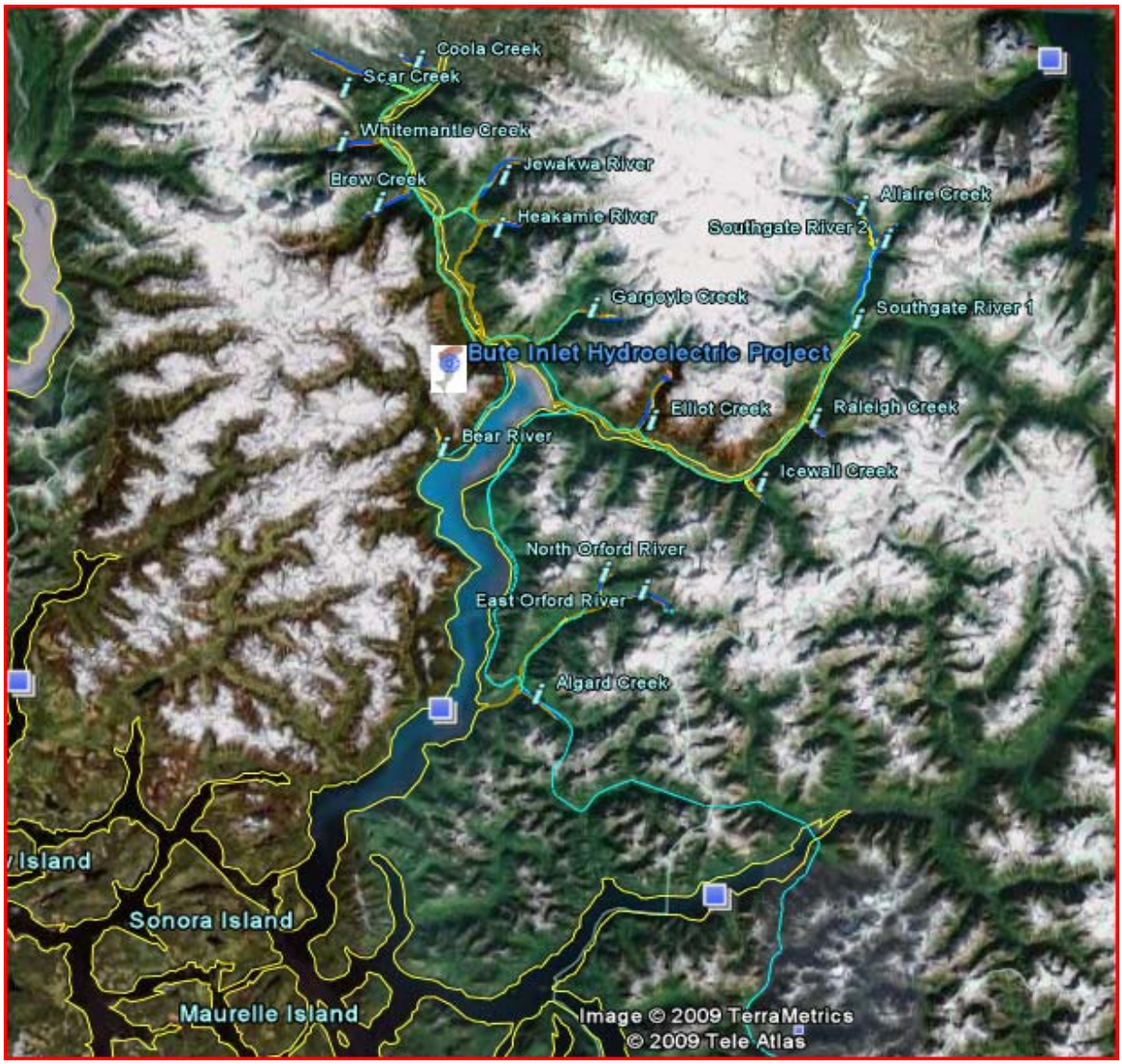
BACKGROUNDER

Watershed Watch Salmon Society

February 3, 2009

THE BUTE INLET HYDROELECTRIC PROJECT



Q: Where will the proposed project take place?

A: Bute Inlet is located on the south coast of British Columbia just north of Campbell River – about 250 km northwest of Vancouver.

Q: What is planned for Bute Inlet by Plutonic Power?

A: Plutonic Power, in partnership with Connecticut-based General Electric, wants to dam and divert 17 rivers that drain into Bute Inlet; more than a single project, the proposed development will see three distinct "clusters" of hydro projects, generating a total capacity of 1027 megawatts (MW). This network of many river diversions is being considered as a single project in the Province-led regulatory approvals process.

Q: What makes this project unique compared to other proposed run-of-river projects?

A: Plutonic's Bute Inlet project is unprecedented in British Columbia in terms of sheer physical size, generating capacity, and environmental footprint:

- The 1027 MW peak generating capacity of this single proposed development is greater than that of the massive Site C project planned for the Peace River – the difference being that Plutonic's project would be less efficient and produce less energy than Site C, despite its colossal environmental footprint.

- The project as proposed would require 443 km of new transmission line, 267 km of permanent roads, and 142 bridges, to be built in wilderness areas.

Q: What is the regulatory process for approving the project?

A: The Province of BC ultimately approves run-of-river projects. BC Hydro is responsible for issuing electricity purchase agreements which guarantee the public will buy the power generated by the project. The BC Ministry of Environment issues water licences enabling industry to legally divert rivers, provides permission to use Crown Land, and provides guidance on how to minimize impacts to fish, wildlife and ecosystem values. Fisheries and Oceans Canada provides guidance on minimizing harm to salmon, and other federal departments also give advice. For projects of this size, the federal government plans to be formally involved via a federal review panel under the Canadian Environmental Assessment Agency.

Q: What are cumulative environmental impacts, and why are these of particular concern with the Bute Inlet project?

A: Cumulative impacts are the sum of impacts caused not only by the specific river diversions, but by the wider system of infrastructure (e.g., roads, transmission lines) in the area, including the impacts of

nearby power projects and other industrial activities occurring in close proximity.

Cumulative impacts are the fatal flaw of the proposed Bute Inlet project – they can be neither accurately measured by the current approvals process, nor can they be adequately managed post-construction.

Cumulative impacts are particularly relevant to the Bute Inlet project, because Plutonic Power and other companies are proposing very large projects close by. Despite their proximity, each of the following projects will be evaluated by the Province in complete isolation from the others:

Bute Inlet: Three clusters of projects with 17 river diversions and 1027 MW capacity; hundreds of km of new roads and transmission lines. (Plutonic Power)

East Toba/Montrose: Two river diversions with combined 196 MW capacity; 148 km transmission line and extensive new roads; currently under construction. (Plutonic Power)

Upper Toba: Three river diversions with combined 166 MW capacity; currently in the approvals process. (Plutonic Power)

Knight Inlet: Three river diversions, 121 MW capacity; future proposal with no detailed info at this time. (Plutonic Power)

Toba/Powell Lake/Jervis Inlet: Twelve river diversions clustered in the Toba and Powell Lake watersheds and Jervis Inlet for 180 MW capacity; the same company is also studying another 22 sites in the immediate area for future projects. (Hawkeye Energy)

Klinaklini River at Knight Inlet – One massive river diversion for a maximum generating capacity of 700 MW; connected to a 180 km transmission line with aerial crossing to Vancouver Island over Johnstone Strait. (Kleana Power)

Tzoonie River Valley – Six facilities in the Tzoonie River valley, which drains into Narrows Inlet about 33 km north of Sechelt; total generating capacity of 62 MW. (Stl'ixwim Hydro Corp)

Q: What will the cumulative impact of the Bute Inlet and neighbouring projects – including the "spider web" effect of roads and transmission lines – be on fish, wildlife and the ecosystems they rely on?

A: Nobody knows for sure, and the Provincial government is not even asking the question. It's likely that wildlife like grizzly bears and marbled murrelets will be worst affected by the additive impacts of this and other projects.

Perhaps the greatest weakness of the current Province-led approvals process is that all proposed run of river projects in BC are evaluated and approved in isolation from any other projects and environmental impacts – even though developers like Plutonic Power seek to "cluster" their projects to maximize profitability.

No government agency is overseeing the planning for power in this region, or in any other part of BC. This means that individual companies like Plutonic Power are not participating in any kind of logical land use or energy acquisition plan. The result is that cumulative effects are impossible to manage, and competing companies operating in the same areas are building separate transmission lines through sensitive environmental areas all leading to the same place.

Q: Which fish and wildlife species inhabit the broader project area surrounding the Bute Inlet development?

A: This area is a wilderness refuge for many species that were once common all over the coast. Plutonic Power does not know all the species that are present, but has reported the following:

- All six species of wild Pacific salmon, including winter- and summer-run steelhead; bull trout and rainbow trout, sea-run cutthroat and Dolly Varden, eulachon and many other fish species.
- At least 18 plant species listed currently by the Species at Risk Act, including eight endangered species.
- "Due to the ecologically diverse landscape in the study area, a considerable number of rare ecosystems, plants and animal species could be affected by the construction and operational maintenance of the Project." (Source: Plutonic Power's "Revised Project Description for the Bute Inlet Hydroelectric Project, Dec. 19/08.)
- At least a dozen wildlife species listed currently by the Species at Risk Act, including marbled murrelets, peregrine falcons and great blue herons; also mountain goats and wide-ranging grizzly bears.

Q: Why are grizzly bear impacts of particular concern in the project area?

A: The spider-web of roads, transmission lines and other infrastructure from the Bute Inlet and neighbouring projects will fragment the habitat grizzly bears rely on. (Unlike black bears, grizzlies are highly averse to human disturbance and are strongly affected by habitat alteration and fragmentation.) The province's protection and management is very weak for wildlife such as grizzly bear: basic data about their abundance in the area is still being collected, making it difficult to understand, monitor and mitigate project effects.

Q: How much water can Plutonic take from any of these 17 Bute Inlet rivers, and are

they obligated to reduce stream flows in future droughts and climate change-induced shortages?

A: To date, BC water licenses have not included clauses that specify changing water entitlements in response to altered conditions. Plutonic is currently planning to remove anywhere from 77.5 to 95 percent of the mean annual flow from the 17 rivers, and will be required to leave a minimum flow in the stream. Under their water license, they would always need to provide this minimum level of flow; however, if water flow becomes more variable or decreases as currently predicted, conflicts between the water needed to sustain aquatic life and generate power are foreseeable.

River developers themselves will be directly responsible for controlling in-stream flows, with monitoring done by third-party companies hired directly by the company; the Province will likely conduct audits from time to time, but their capacity to do so is severely limited, and their ability to enforce compliance with in-stream flow requirements is questionable at best.

Q: What is the proposed timeline for environmental assessment, approvals and construction?

A: The Bute Inlet Hydroelectric Project entered the pre-application phase of the Provincial Environmental Assessment Process in April of 2008. Plutonic Power hopes to begin construction on the project in 2011 and have it partially operational by 2014. It is important to note that once a project is in the Environmental Assessment process, it almost always is approved.

Q: What can the BC government do to ensure this and future Run of River hydro projects are truly green and environmentally sustainable?

A: More than anyone else, the Provincial Government bears the responsibility to ensure that all run-of-river projects built in BC are truly green, and that providing energy for the future comes at an environmental, social and economic cost that British Columbians can afford to pay.

This means:

- A thoughtful and strategic energy planning process that minimizes environmental, social and economic costs per kilowatt of energy generated. Such a process will rule out projects that are not truly "green," and determine a mix of renewable energy types that will best serve the current and future public need.
- Regional and provincial land use planning that indicates which areas are environmentally and geographically appropriate for energy development, and

which areas are not – this is the only way forward if the serious issue of cumulative impacts is to be addressed.

- Given that projects will operate for many decades into the future, water licenses granted by the Province must be flexible to adapt to changes in diverted and in-stream river flows resulting from climate change and improved knowledge over time. The Province must make long-term data collection and adaptive management a legal requirement for all water licensees.

- More public say. British Columbians, First Nations, conservation groups and municipal governments need adequate opportunity to provide meaningful input that has a real effect on whether projects move forward or are rejected – this means better public access to information meetings (e.g., Bute Inlet), and the repeal of Bill 30, which took away the right of municipalities to reject unacceptable run of river development.

- The Province's current attempts to promote conservation are grossly insufficient and must be ramped up. Effective public education and incentives must be combined with a more aggressive pricing structure to encourage *conservation* – which is an alternative to new projects and will enable British Columbia to reduce future energy demand. It is imperative that we know the energy produced by run of river power projects today is really required in the future.

- Finally, in cases like Bute Inlet – where the project is both inappropriate in scale and location, the precautionary approach must be applied. This means the project should not be permitted to move forward due to the uncertainty around whether environmental risks and impacts can be adequately measured, mitigated and monitored.

Q: What can you do today?

- Ask questions and get involved – join or get behind BC groups that are working now to ensure run of river development serves the BC public interest. (See list of groups below)

- Write to your MLA – Tell them why you are concerned.

- Participate in the Environmental Assessment process for projects that concern you: for Plutonic's Bute Inlet project, the BC Environmental Assessment office will be accepting mailed letters and emails from the public until February 18. To express your concerns, write to:

Kathy Eichenberger, Project Assessment Director, Environmental Assessment Office,
PO Box 9426 Stn Prov Govt Victoria, B.C. V8W 9V1, Fax 250-387-2208,
eaoinfo@gov.bc.ca

ADDITIONAL INFORMATION/RESOURCES

- Google Earth map of the Bute Inlet project and all the project infrastructure: http://www.watershed-watch.org/news/item.html?nid=328
- The Province's Environmental Assessment Office: www.eao.gov.bc.ca
- Plutonic Power Corporation: www.plutonic.ca

Contact the groups participating in this event:

- Watershed Watch Salmon Society – www.watershed-watch.org
- Wilderness Committee – www.wildernesscommittee.org
- Raincoast Conservation – www.raincoast.org
- Save Our Rivers Society – www.saveourrivers.ca
- BC Creek Protection Society – www.bc-creeks.org