

**SELECTIVE INFORMATION ON THE CONTROVERSY
AGAINST LOGGING
IN THE SCRD'S COMMUNITY WATERSHEDS**

No.C926687
Vancouver Registry

IN THE SUPREME COURT OF BRITISH COLUMBIA
BETWEEN:
SUNSHINE COAST REGIONAL DISTRICT, PLAINTIFF
AND:

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA and
INTERNATIONAL FOREST PRODUCTS LIMITED, DEFENDANTS

AFFIDAVIT (November 26, 1992)

I, Sheane Reid, of the Sunshine Coast Regional District, P.O. Box 800, 5477 Wharf Road, Sechelt, British Columbia, V0N 3A0 do hereby MAKE OATH AND SAY THAT:

1. I am a Planner employed by the Sunshine Coast Regional District (the "Regional District") and as such have personal knowledge of the facts and matters hereinafter deposed to, save and except where same are stated to be based on information and belief and where so stated, I verily believe same to be true.
2. The Regional District is a geographical area which consists of the municipalities of Gibsons and Sechelt and a large unorganized or rural territory. The Regional District has a population of approximately 20,785.
3. The Regional District has jurisdiction over the supply of water and provides potable water to its inhabitants by way of a water distribution system taking the water from Gray Creek and Chapman Creek, though primarily from Chapman Creek.
4. The Purity of water is of vital concern to the Regional District.
5. The Gray Creek and Chapman Creek areas are designated as watershed reserves under Section 12 of the *Land Act*.
6. There is no other viable alternative source of domestic water on the Sunshine Coast.
7. It has been well recognized for many years that logging in the watershed has an adverse affect on water quality through the PH factor decreasing and turbidity being caused due to fine solids becoming suspended in the water.
8. Because of this deleterious affect on the water quality which activities such as logging may have, an Integrated Watershed Management Plan ("I.W.M.P.") study has been established for the area and the Defendants are both participants in that process.
9. The facts alleged in paragraphs 4 - 6 of the Statement of Claim in this action are true.

10. With respect to paragraphs 7 - 13 of the Statement of Claim:

- (a) there has been a build up of silt and other materials in the water distribution pipes; and
- (b) I believe that logging is a likely cause of such build up of silt and other materials in the water distribution pipes and deterioration of water quality, and because of the failure of the Defendants to complete an I.W.M.P. we have not been able to determine what further logging and logging related activity could be carried out in the watershed reserves without adversely impacting on water quality.

11. To date, approximately 45% of the watershed areas have been logged.

12. Attached hereto and marked as Exhibit "A" to this my Affidavit is a report dated November 1, 1973 entitled Chapman Creek Reconnaissance prepared by an employee of the Crown Provincial confirming that the Sunshine Coast Regional District had expressed concerns about logging in the watershed, expressing the need for management of the watershed and indicating that the Regional District's views on topic would be sought.

13. Attached hereto and marked as Exhibit "B" to this my Affidavit are minutes of a December 5, 1973 meeting at which Regional District representatives met with Forestry officials.

14. Attached hereto and marked as Exhibit "C" to this my Affidavit is a report dated September 5, 1975 prepared by the B.C. Forest Service, entitled "Chapman Creek Investigation -Sedimentation Problems" indicating there was an affect on water quality created by logging and referring to the need for an I.W.M.P.

15. In 1990, terms of reference for an I.W.M.P. were established and endorsed by the lead agency, Ministry of Forests, which are attached hereto and marked as Exhibit "D" to this my Affidavit. To date no such I.W.M.P. has been completed.

16. I am advised by Barry Miller of the Ministry of Forests, that an I.W.M.P. may be completed by March, 1993.

17. Attached hereto and marked as Exhibit "E" to this my Affidavit is a document entitled "Guidelines for Watershed Management of Crown Lands Used as Community Water Supplies", being the policy and procedures for community watershed planning of the Crown Provincial dated November 26, 1984. Gray Creek and Chapman Creek Watershed Reserves are community watersheds.

18. The local medical health officer, employed by the Crown Provincial, has advised the Regional District that, as a purveyor of water, the Regional District must protect its water quality in a letter dated September 2, 1992 which is attached hereto and marked as Exhibit "F" to this my Affidavit.

19. Water quality in the Regional District's system has deteriorated over the years. In 1991 the local health officials advised that the Regional Districts' water system was a "high risk" for future disease outbreaks and that disinfection is not considered to be a long term alternative. Attached hereto and marked as Exhibit "G" to this my Affidavit is a report entitled "Safe Drinking Water for British Columbia". The Regional District was also advised recently by the Crown Provincial that a "boil water" order for the entire Sunshine Coast was a very real possibility.

20. At this point. International Forest Products Ltd. is logging in the Regional District's watershed and getting progressively closer (less than 100 meters) to the main stem of the Chapman Creek water supply.

21. Attached hereto and marked as Exhibit "H" to this my Affidavit is a Ministry of Environment tenure report on the Chapman and Gray Creek areas identifying these lands in the Crown Provincial's records as being watershed reserves. Chapman Creek was identified as such in 1975, with the designation not to expire until the year 9999 and in the case of Gray Creek it was so designated in 1987, again not to expire until the year 9999. I note that the review date for Chapman Creek is set at 1995 and for Gray Creek at 1997 and that there is no specified cut licence or clearing indicated on this document.

22. Attached hereto and marked as Exhibit "I" to this my Affidavit is a Ministry of Lands, Parks and Housing Community Watershed Reserve Policy.

23. Attached hereto and marked as Exhibit "J" to this my Affidavit is an extract from explanatory notes from the Ministry of Forests indicating in particular on page 5 that reserve lands are lands on which the Forest Service is not to dispose of timber values.

24. The Gray Creek watershed area has been substantially logged in the past whereas the upper Chapman Creek watershed area is more or less pristine. I am advised by Jeremy Frith, a Director of the Regional District and verily believe to be true, that PH tests on the respective water sources have disclosed that upper Chapman Creek which has not to date been logged extensively has a PH of over 1, whereas Gray Creek has a PH well under 1, in fact barely 6, when the standard for Canadian drinking water is 7 and above. This change in acidity of the water can lead to the need to have to filter and treat water.

April 15, 1993.

Attention: Honourable John Cashore. Minister Dean Mr. Cashore

Re: Chapman Creek Community Watershed Reserve. Management Application. Meeting Request

Please accept this as a request to meet and discuss an increasingly difficult issue for the Sunshine Coast Regional District. At your convenience, we would like an opportunity to discuss me protection and management of the Chapman Creek Watershed. As you are already likely aware, our recent application to have the management of the watershed reserve transferred to the Sunshine Coast Regional District, was denied by the Crown Lands Branch (Dick Roberts, 660-5500). The reported inability of this agency to receive and process this application is very concerning, and for a number of reasons:

- 1) There is a very lengthy history which documents both the lack of watershed planning management practices, and very delayed response to several detrimental logging practices, which continue to seriously compromise the ability of the watershed to hydrologically function as a reliable and sustainable community water supply;
- 2) For the last four years an IWMP process (Water Management Branch, Marion Jamieson 582-5200, Ministry of Forests. Barry Miller 485-0700) has been underway, while timber harvest has continued within the watershed. The Ministry of Health (Bob Weston 886-8131) now requires purveyors of water to be legally responsible for ensuring a potable water supply, and as a result, the Regional District

increasingly finds itself in a very difficult situation because both past and present logging practices are having on going and uncertain impacts on the raw water supply for the regional water system.

3) The Section 12 watershed reserve (your File #0326774) was put in place by your ministry some twenty years ago with the view of providing the purveyor greater control over the watershed, we are now ready to assume this management responsibility.

4) Perhaps most concerning for the Regional District, is that we understand that your administration's most current thinking on efforts such as ours (i.e. local government's management of community watersheds), hold the most hope for managing for water quality, and also for considering community watershed orientated resource opportunities (e.g. timber harvest).

If we can be so bold, we believe that our watershed management proposal could, if given the opportunity, be used by your administration as a model for "balanced" watershed management strategies for not only our community, but for other small communities through out the province - a copy of our watershed reserve management plan proposal package is attached for your review.

With the many challenging growth management issues facing the Sunshine Coast Regional District, it would be very much appreciated if you could assist us with protection and our management of perhaps the Sunshine Coast's most precious resource. We would like to suggest that you could be of great assistance by directly taking an interest in our attempt to implement this most progressive and responsible watershed management plan proposal, by facilitating the necessary steps required for our watershed reserve management plan to continue to proceed.

Unfortunately, we believe that not until this local government has management responsibility over the Chapman Creek Watershed, that there will continue degradation of water quality, quantity, along with a progressive loss of opportunity or other potentially sustainable resource opportunities within the Chapman Creek watershed.

We would like the opportunity to discuss this twenty year issue further with you, and to again request your assistance.

The elected representatives which would like the opportunity to meet with you are Peggy Connor, F. Gurney, Jeremy Frith, Brett McGulivray, Jane Reid, and staff member Sheane Reid.

If possible, one hour of your time would enable us explore this matter fully with you, and give us the opportunity to obtain your thoughts on how we can resolve this very important community issue. We look forward to hearing from you about arrangements for our hopeful meeting.

Yours Truly, Peggy Connor, Chairperson, SCRD

**Shawn [sic, Sheane] Reid, Planner
Sunshine Coast Regional District
5477 Wharf Rd
PO Box 800 SECHELT BC VON 3AO**

Dear Shawn [Sheane] Reid:

Re: Application to lease Chapman Creek Watershed

Thank you for your application dated February 11, 1993, for the purposes of acquiring a lease over the Chapman Creek Watershed. As noted in your letter, the area you have applied for is currently encumbered by a Section 12 Map Reserve, established on July 22, 1975, for community watershed purposes. The establishment of this reserve is consistent with present legislation, Ministry policy and in particular reference to the "Guidelines for Watershed Management of Crown Lands used as Community Water Supplies", Ministry of Environment, 1980. The existence of the Section 12 Map Reserve effectively precludes the receipt of applications. The only exception to this being applications for temporary occupation (Section 10) and Statutory-Rights of Ways or easements (Section 37), provided such uses are considered compatible with the primary purpose of watersheds.

Based on the foregoing, we are unable to accept your application for lease. However, we would like to emphasize the fact that the Ministry recognizes and supports your critical role and responsibility as purveyors of the regional water supply. In this regard, your specific concerns over the integrity of the watershed are best addressed through the ongoing Chapman/Gray Creeks Integrated Watershed Management Planning (IWMP) process. It is our sincere hope, that this process can be resumed, as it represents a good example of inter-agency cooperation which will hopefully culminate in a watershed management agreement, acceptable to all parties concerned.

We trust this clarifies our Ministry's position with respect to community watershed reserves. We enclose herein your application and cheque for \$107.00

Yours truly, Margo Elewonibi, Manager, Land Administration.

**TETRAHEDRON LRUP - WATER - Final Report of the Water Subcommittee -
December 31, 1993**

**REPORT FOR TETRAHEDRON LRUP
SCRD WATER SYSTEM HISTORY**

I. THE BEGINNING

The formation of the Sunshine Coast Regional District in 1967 provided the political vehicle to address, in a comprehensive way, the myriad of problems associated with domestic water supply on the Sunshine Coast. Thus, one of the first acts of the SCRD was to commission a study to investigate water supply for the whole coast. The thrust of this study was to identify feasible bulk water supply and recommend how these sources could be utilized to serve the entire Sunshine Coast. The introduction and summary of that report are attached (APPENDIX A).

SOURCE

Chapman Creek was identified as the only source of high quality water on the Sunshine Coast for a number of reasons. Its location in proximity to the settled areas of the coast made it the only viable source which could be practically accessed. Its size is large enough to serve the further population potential of the Sunshine Coast. If fully developed, Chapman Creek could supply a population of 250,000 people. The year round flows in Chapman Creek were particularly important to its identification as the only supply. While many other creeks exist on the Sunshine Coast, all are characterized by high winter flows and low or nonexistent summer flows. These characteristics are caused by relatively small, short watersheds with no significant lakes or ponds. Chapman Creek differs in that its watershed is some 27 km in length, 64 sq. km in area, and includes two significant lakes, several small ponds and numerous alpine wetland areas. Also, Chapman is the only watershed with significant Alpine areas which hold snow pack well into the summer months. Chapman Creek has one other important advantage in that it was a source of high quality water. Forest harvesting had only taken place in the lower portions of the Chapman watershed by 1967, leaving the upper areas in their natural state. It was also considered, at that time, that forest activity in the upper areas was somewhat unlikely given high development costs, short season and comparatively low yields and quality. These soon changed. In the early 1970's logging activities, and more particularly the associated road building, caused considerable deterioration in water quality in the form of increased turbidity. Forest harvesting heretofore had occurred mainly in the more stable, lower portions of the Chapman Valley. As logging activity progressed up the valley, areas of very steep terrain with unstable soils were encountered. Concern over the deteriorating water quality was impressed on the Ministry of Forests by the SCR D and a review of the effects of soil stability in 1973 (APPENDIX B) was followed by Chapman Creek Hydrology Study (APPENDIX C), and a multi agency study in 1974 (APPENDIX D). The recommendations of those two documents are in the attachments. A detailed work schedule, together with firm criteria for industrial activity, was presented in the 1974 report. The report also identified the potential for serious impact on water quality from industrial activity in the upper Chapman basin, and recommended that no logging activity occur in the upper basin until a comprehensive management plan for the entire watershed was in place. As a gesture of commitment to those recommendations, the Ministry of Forests removed the Upper Chapman Basin from the working forest. A review of the 1973 and 1974 reports was conducted by Ministry of Forests in the early 1980's to determine if the recommendations had been followed. The results of the review were inconclusive in that it could not be identified that the recommendations had been followed. No further action seems to have been undertaken. In late 1989 the Regional District became aware that road building activities were occurring near Edwards Lake in the Upper Chapman Valley Basin. This activity was an extension of harvesting activity in the Gray Creek Watershed, and was occurring in the area removed from the working forest in 1973. This activity occurred at a time of growing concern over water quality, or rather safety, in the Regional District System from the source that was diminishing the effectiveness of disinfection and promoting the regrowth of bacteria in the system. A meeting between the SCR D, Ministry of Forests and Ministry of Environment in late 1989 resulted in the decision to proceed with an Integrated Watershed Management Plan; a plan similar to that recommended in 1974. In late 1990 heavy rains, combined with rapid snow melts, caused three major landslides involving logging roads, one of which was the failure of a logging landing site on the east side of the Upper Chapman Valley. For approximately two days, Chapman Creek was clogged with logging debris and turbidity levels were extremely high. During the first eight months of 1991, numerous meetings and communications with Ministry of Forests and the threat of legal action by the SCR D failed to achieve any action with respect to rehabilitation or stabilization of roads in Chapman Valley. On July 28, 1991 the SCR D issued a writ on the Ministry of Forests calling for the cessation of all forest harvesting activities in Chapman Valley until rehabilitation or stabilization of the road system had occurred- In an out-of-court agreement the SCR D agreed to set aside its action in exchange for some \$175 000 of stabilization

work, which was carried out during September/October of that year. This work produced a noticeable improvement in water quality during the winter of 91/92.

POTENTIAL DAMAGE TO THE MUNICIPAL WATER SUPPLY BY LOGGING ACTIVITIES

The two most significant potential hazards for consumers of water from a watershed that is subjected to logging are the siltation of rivers, and the discharge of colloidal clay and of organic colloids (i.e.; humus) into drinking water (5). Generally, public attention focuses on the aesthetic aspects of siltation; the deposit of silt and, in particular, colloids in pipes of the water distribution network and the problem this causes through formation of organic deposits that act as breeding foci for microorganisms, is less known. The discrepancies between the low concentrations of coliform bacteria at the water intake in Chapman Creek, and the often above-federally recommended maximum concentrations in water samples taken from within the water distribution system of the Sechelt area (14), are likely due to silt and colloid deposits within pipes. There are other potential health problems associated with the displacement of clay colloids into the communal water supply. As outlined above, direct exposure of clay to rain reduces the chemical buffer capacity of the soil and hence enhances acidification (5). From this results the increased release of water-soluble aluminum from aluminum silicate. The widely publicized circumstantial association between the uptake of aluminum ions by the brain and the deposits in the central nervous system of amyloid beta-protein, which has been implicated as the possible cause of Alzheimer's disease, (15, 16) calls for caution. It must also be kept in mind that the degree of bactericidal chlorination that is required in Sechelt during rainy spells often exceeds the maximum set by federal guidelines. High levels of chlorination cause further depression of the water's pH through the formation of hydrochloric and hypochlorous acids (17). In the district of Sechelt, pH levels of <6 are frequently measured in tap water; consequently, contamination of drinking water with health threatening concentrations of lead from plumbing systems must be seriously Considered. For reasons outlined above, logging often requires artificial fertilization to encourage regrowth. Depending on the nature of the fertilizer, chemical precursors of trihalomethanes, which are major by-products of chlorination, may enter the water supply at increasing concentrations. One of these compounds, chloroform, has been shown to be carcinogenic (18). Furthermore, logging effects an increase in humic acid that may enter the community's water supply (5). Chlorination of humic acid results in the formation of the highly mutagenic compound 3-chloro-4(dichloro-methyl)-5-hydroxy-2(5H)-furanone (19, 20). The requirement for above normal levels of chlorination (due to siltation) to sterilize the water from the Chapman River, combined with the river's already high content of humic acid, are reasons for concern.

August 6, 1967. Timber Licence File **X97265** for Chapman Creek is changed to **A00044**.

Timber Sale Harvesting Licence A00044 Indenture. August 1967. 9 pages. Part 6.
"Protection of Water Supply.

In conducting logging operations on the licence area, no person shall foul or render unfit for irrigation, drinking or domestic purposes any lake or stream which provides the water supply for any irrigation system or of any person or community. Unless otherwise authorized and subject to any requirements by the Minister of Lands, Forests, and Water Resources:

(i) No logging debris or road building debris or any substance likely to cause pollution shall be deposited at any time within any such lake or stream.

(ii) At no time shall logs be skidded, equipment operated or gravel be displaced or any damage done to any stream channel between high water banks of any such stream.

(iii) All stream crossings shall be provided with a bridge or culvert of sufficient dimensions to accomodate the maximum stream flow and no obstruction or fill shall be placed within any stream.”

July 12, 1967. The logging company owners write to forester E. Knight. “Jackson Brothers Logging Co. Ltd. have held logging contracts with McMillan & Bloedel for some years now (who) are co-operating in this venture and we anticipate no difficulty in securing an average of 5 million board feet per year for the next ten years.”

December 12, 1967. Universal Timber Products and Phillips and Lee Logging Ltd. sign off and get out of the logging business. All interests transferred to Jackson Bros. Logging. Official letter from Jackson Bros. say that they have the ability to log the Chapman.

January 6, 1969. Letter from Jackson Bros. to District Forester D. Brewis, regarding an explanation of delays for logging. They had three washouts on their partially constructed road.

October 7, 1969. D.W. Brewis to Jackson Bros. “During a recent inspection it was noted that there was an unusually heavy incidence of silt in Chapman Creek. As you are aware the waters of this creek are used as a community supply and it seems likely that increased use of this supply will be made in the near future.”

April 6, 1970. D.W. Brewis to E. Knight. Summary letter of concerns. “Cutting Permit No. 1 in this watershed was issued without any special clauses in regard to means of controlling silting in particular. Some means are laid down in Part 6 of the Licence Document, however these are somewhat limited.” “With expanding use of this water for domestic supplies we feel that extra ordinary measures should be taken to prevent pollution. Our main problem at the moment is silting and the greatest cause of this appears to be road construction.”

November 17, 1972. Wes Cheston, Forest Service forester, to E.R. Cuyllits, SCRD Chairman. Letter in response to allowing Cheston to address the Technical Planning Committee re logging in Chapman. “We have reached the stage where greater emphasis must be placed on managing our forest lands in such a way that the greatest overall benefits associated with the forest will be achieved. We must seek a balanced use of forest land and recognize that in addition to the basic consideration of the timber harvest, we must be fully aware of the overall public interest in the uses made of this land and of the need to hand over the land in an acceptable state to succeeding generations of British Columbians. This requirement commits us to preventing exclusive dedication of forest land to the unreasonable restrictions of any single-use demand.” The letter is an excuse for continued logging.

October 3, 1973. John Hind-Smith to Frank West of the SCRD. On September 27th a letter published in the Peninsula Times was read at the Regional Board meeting.

“In a letter from the Water Investigations Branch of the Dept. of Lands and Forests we are told that the Chapman Creek Watershed has not been declared a Health District and that Mr. Bell, the senior Public Health Inspector of the Coast Garibaldi Health District is taking the matter up with the Regional District to clarify the situation.”

“Following up on the logging activities, it would appear that no one has any control over what goes on in our so called watershed area. A large section has been completely logged off on the north side of the creek at the end of the West Road. According to a letter received from Mr. Johnston, the Zone Forester, buffer strips 130 wide were to be left on creek banks. No such strip has been left on Chapman Creek and the trees have been felled right down to the water.”

August 15, 1974. Forest Minister Bob Williams to A. Stott, SCRD.

“It is my belief that any activities in the drainage must be conducted in such a manner so as to preclude a deterioration of both the quality and quantity of water. However I feel that a co-operative integrated resource approach is also necessary for the management of such valleys as Chapman Creek.”

“I have reviewed the recommendations of the Board of Directors and am somewhat surprised that the Board has requested that regulations be established to preclude logging....”

“Since the Chapman Crk Resource Study was inter-disciplinary in nature, I can see no reason to establish regulations to carry out the recommendations of the Board.”

“With strict regulation the watershed can divest multiple benefits which will satisfy the water user, those dependent on the forest for a livelihood and those who use the forest for recreational purposes.”

August 14, 1974. H.M. Pogue to Ranger R.S. Wilson, R.D. #7.

“We cannot and will not tolerate the continuation of inferior road construction, inferior road maintenance and inferior wood utilization practices in the Chapman Creek watershed. This domestic watershed is a priority for superior supervision of all activities related to logging, and accordingly the standards of inspection and instructions (to the licencees) by you and your staff must immediately be increased.”

September 24, 1974. H.M. Pogue to Jackson Bros. Reponds to their complaints of time delay.

“You must recognize that integrated resource management, particularly in this sensitive community watershed, is more time-consuming than single resource use. For example, it would be expedient to ban logging for protection of the water-users, or to ignore water quality in favour of the logging industry.”