

# **THE HOLLYBURN LOGGING ROAD: COMPILATION OF INFORMATION**

**Written and presented by Will Koop**

The following report, details, and letters were presented to the Burnaby Environment Committee and the Greater Vancouver Regional Water Committee in 1997. Over the course of many years, the Water District has been reluctant to admit that its logging activities have been responsible for the ongoing degradation of the public's water quality in the Capilano Reservoir from the Hurricane Creek area, and in failing to mitigate its damage to the mountain soils.

As a consequence of my letters and concerns, the Water District finally budgeted some efforts in 1998 to altering the way in which water was eroding the road and the lower adjacent slope.

However, as of the November 20, 1998 Water Committee meeting, the Water District's Watershed Management Manager Bob Cavill released information that there was yet another failure onto the Hurricane Creek road from the enormous and eroded cutslope during the recent heavy rainstorms.

## **1. A SUMMARY AND RECOMMENDATION REPORT TO THE BURNABY ENVIRONMENT COMMITTEE, REGARDING THE HOLLYBURN SECONDARY BRANCH, CAPILANO WATERSHED, BY WILL KOOP, FEBRUARY 19TH, 1997**

In the late 1960's and early 1970's, the Greater Vancouver Water District constructed a secondary access logging road overtop of the Capilano Timber Company's overgrown and narrow railway grade. This secondary logging road, known as the Hollyburn road, transects the western slopes of the Capilano Reservoir, rising 500 meters in elevation over a distance of some seven kilometers. The road was built to access timber on the Hollyburn Ridge area, plans which were left in abeyance, and the road was left abandoned.

Since the construction of the Hollyburn access road there have been a number of serious and minor problems to do with the erosion of landforms and the transport of sediments into the Capilano Reservoir. The two more serious problems on the Hollyburn road have been with the erosion of cutslopes and fillslopes adjacent to Hurricane and Nickey Creeks. Here, multiple annual failures of glacial till and clay sediments are blocking ditches, flooding and eroding roads, and bringing sediments in the public's drinking supply.

The Water District hired a consultant in 1987 to specifically examine the Hurricane Creek area. In his brief report (Description & Evaluation of Hollyburn Spur Creek Crossing, Capilano Watershed, by Terence Lewis, May 1987, 9 pages) Lewis described the area as having a "chronic erosion problem". Prior to his report, the entire width of the road just north of Hurricane Creek washed out, and the erosion of a steep section of glacial till at Hurricane Creek brought sediments, via Hurricane Creek, directly into the Capilano Reservoir. The Water District attempted to mitigate the first matter by cutting a new road width into a steep clay bank directly beside the washed out section, thereby creating a greater problem. Mitigation of the second matter was in fortifying the large section of exposed glacial till with rip rap just below the road at the intersection with Hurricane Creek. Since 1987, the bank above the newly widened road has eroded backwards a maximum of 58 meters, with an annual collapse of materials, filling and blocking of the road ditch, causing water runoff to erode

the road and wash out the fillslope, and the transport of fine clay sediments into the Reservoir. These “chronic problems” have also been documented by the author of this informational letter for three successive years, from 1995 to 1997. The recommendations by the Water District’s consultant to mitigate the problems associated with Hurricane Creek, which have persisted and become quite serious since 1987, were not acted upon.

Some of the “minor” landform erosion problems on the Hollyburn road have to do with smaller sized glacial till and clay cutslopes. Some of these steep and collapsing cutslopes, which have been increasingly aggravated by weathering after 25 years, are now becoming problematic. The nature of the terrain, especially in the switchback road directly north of Hurricane Creek, is that it is quite steep and composed of glacial deposits, which when exposed, are easily erodible. Despite annual efforts by the Water District to protect these cutslopes with hydroseeding, the slopes both collapse and are gullied from water runoff on a regular basis. This results in sediments deposited into the ditch and transported to the nearest culvert, or in some situations, the ditch becomes blocked causing water runoff to run over and then down and over the edge of the road, causing the fillslope to become saturated and then to collapse, finally causing further problems downslope. Overall, the annual accumulation of sediments deposited from the very small to the very large cutslope banks along the entire Hollyburn road into the ditch, is not insignificant. These matters have also been recorded and noted by the author of this report.

Finally, the construction of the Hollyburn road has resulted in the alteration, or re-routing, of water runoff. There are a number of sections along the Hollyburn road where the ditch re-routes runoff for a considerable distance. This results in large concentrated volumes of water to be transported either through culverts or water bars randomly down the mountain slope. Before the construction of both the Capilano Timber Company’s railway grade and the construction of the Hollyburn road, the mountain was hydrologically self-adjusted, meaning that the landscape had conformed to the extremes of flood events. Roads alter the ancient patterns of water runoff, thereby bringing erosional stress to areas downslope. This can be particularly damaging when an area, such as the area below the Hollyburn road, has been clearcut, even after 70 years. A highly probable and significant example of this was the October 1995 landslide into the Capilano Reservoir, where diverted waters brought excess water through a culvert, down the mountain slope, and directly through the initiated landslide zone, a matter which ended up costing taxpayers over one half a million dollars.

The Water District has admitted that the Hollyburn road was not constructed to provincial standards, and that it has not been maintained properly. This is especially disconcerting since the road transects highly erodible landforms directly above the Capilano Reservoir. According to statements by Water District staff, the reason that this road has not been decommissioned in the past is because it is an access route for the North Shore Rescue Association. This statement is both untrue and indefensible. According to the 1987 consultant’s report, mentioned above, the Water District’s intentions were for “projected logging further up the Spur”. The long-term costs to both public taxpayers, through annual maintenance, contracting consultants, and expensive mitigations, and the effects to the Capilano Reservoir’s water quality are certainly not worth the extremely occasional use that the North Shore Rescue Association has with the Hollyburn road.

Given the fact that the Hollyburn road has and will continue to hydrologically stress the western slopes of the Capilano Reservoir, and that it has and will continue to bring sediments into the public’s water supply reservoir, I recommend that the Burnaby Environment Committee approach the Greater Vancouver Regional District to instruct the Water District to conform the Hollyburn

road back to its original slope, to put it to bed. Such an initiative, though unprecedented in the hundreds of kilometers of existing roads in our three water supply watersheds, is necessary in addressing the present and persistent problems mentioned above, and in conforming to the long-term importance of the public's water supply.

**2. HOLLYBURN ROAD VIDEO COMPILATION: THE AREA AT AND NEAR TO HURRICANE CREEK. COMPILED BY WILL KOOP, AS ORIGINALLY PRESENTED TO THE BURNABY ENVIRONMENT COMMITTEE ON FEBRUARY 11TH, 1997. PRESENTED TO JOHNNY CARLINE ON MAY 20TH 1997.**

Descriptions of video sequence in relation to running time in terms of minutes.

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|---|----------------|
| 1. Video taken on February 26, 1995.<br>- Shows rain-on-snow washout of Hollyburn road immediately south of Hurricane Creek and debris on road below steep cutslopes. | 0:00 - 5:44.   |
| 2. Video taken on October 14, 1996.<br>- Shows high water flow on Hurricane Creek.  | 5:45 - 6:38.   |
| 3. Video taken on February 10, 1996.<br>- Demonstrates annual pattern of debris below cutslope.   | 6:39 - 9:40.   |
| 4. Video taken on October 14, 1996.<br>- Shows waterfall over cutslope.   | 9:41 - 10:50.  |
| 5. Video taken on November 27, 1996.<br>- Closeup and examination of cutslope.  | 10:51 - 14:16. |
| 6. Video taken on February 1, 1997.<br>- Demonstrates conclusively the annual problem.<br>- Demonstrates second cutslope north of Hurricane Creek area.               | 14:17 - 26:15. |
| 7. Video taken on October 14, 1996.<br>- Demonstrates the annual accumulation of fine sediments in ditch.   | 26:16 - 28:45. |
| 8. Video taken on October 14, 1996.<br>- Cutslope problems at switchback north of Hurricane Creek.  | 28:46 - 30:23. |
| 9. Video taken on February 3, 1997.<br>- Shows problems of cutslope just south of bridge, area below video sequence #8.   | 30:24 - 34:17. |

**3. APRIL 15, 1997**

**GVRD WATER COMMITTEE MEMBERS**

In your Water Committee Agenda for April 18th, 1997 is a recommendation by Burnaby Council, based on a two page letter of information from myself, to decommission the Hollyburn logging road, a road which extends above the northwestern section of the Capilano Reservoir.

I gave two presentations to the Burnaby Environment Committee, once in early 1996, and again in February 1997, detailing the erosion and water runoff problems associated with the Hollyburn logging access road. I presented relevant video information to the Committee, demonstrating the fact that fine clay sediments were persistently entering the Reservoir from several sites on the road. After my February 1997 presentation, where I showed a video of recent slides and erosion along the

road from this year, the Committee asked me to provide them with a brief account of my presentation, including my recommendation for decommissioning the Hollyburn road. My letter was later unanimously accepted and endorsed by the Environment Committee and then passed on to Burnaby Council, where it was also endorsed and then sent on to the Water Committee.

The Water District hired a consultant in 1987 to assess the severe erosional damage associated from road building next to Hurricane Creek. The consultant recommended that the Water District mitigate the matter immediately, which he referred to as having a “chronic erosion problem”. The Water District has not heeded their own consultant’s recommendation for ten years, resulting in ten additional years of erosion into the public’s drinking supply. If the Water District’s mandate is to provide the Greater Vancouver residents with the highest quality water, a matter which they have so often stated to be secondary to logging interests, then why have they failed to address this repeated and serious problem, and directly above the Capilano Reservoir?

For the Committee’s background interest, I have identified this problem to the GVRD repeatedly and to the public in two of my reports in 1995 (A Critique of the Landslide Report From John Morse, March 10, 1995; Not Coming Clean, December 8, 1995). I have also requested, in written and oral form, that the Water Committee conduct an investigation of this road. The area was also written about and photographically identified in the North Shore News, and the same area was also displayed on CBC Television News. The Water District has not only failed to act on a matter which has been publically and repeatedly identified, but has also been played down by Water District Manager John Morse who appeared before the GVRD Board on April 28/95.

I would ask the Water Committee to investigate this matter, and ask why it has taken so long for the Water District to act on this obvious and important public health issue. Thank you.

#### **4. APRIL 23, 1997**

##### **TO GVRD WATER COMMITTEE MEMBERS**

At the April 18, 1997 Water Committee meeting, members briefly reviewed and commented on a recommendation by Burnaby Council to decommission the Hollyburn logging road. This recommendation was based on evidentiary findings and an analysis which I presented to the Burnaby Environment Committee in early 1996 and in February 1997, who then forwarded a two page summary I wrote to Burnaby Council. On April 18th Water Committee member and Burnaby Councillor Doug Evans insinuated that the video information I presented to the Burnaby Environment Committee was fabricated, and concentrated his discussion of the Hollyburn road on my trespass into the Capilano watershed. Councillor Evans also complained that he had been absent at the last Burnaby Council meeting and was opposed to Council’s resolution.

In Councillor Evans’ challenge to my information, never once did he refer to the fact that the Water District’s own consultant had provided an assessment in 1987 which corroborates my findings and concerns at Hurricane Creek. It is unfortunate that the Water Committee did not request that I provide an account of this matter at the meeting, where I would have had an opportunity to defend myself. Perhaps at future meetings Water Committee members should indicate to the Chair that members of the public, who are the subject of discussion, be extended the privilege to speak on their own behalf, much like Water District staff are usually asked by members of the Committee and

John Morse to provide an account of a situation being referred to. This would seem to be a proper, fair, and democratic course of action.

In all of my reports, presentations, and correspondence over the last five years on historical and resource management issues regarding the Greater Vancouver Watersheds, I have always been honest and have tried to be as accurate as possible in presenting information. I can confidently assure members of the Water Committee that the video information I presented to the Burnaby Environment Committee is from the Hollyburn road, and not from anywhere else, as Councillor Evans inappropriately suggested. That information was collected over a period of three consecutive years, along with photographs. At the end of the Water Committee meeting I indicated to Water Commissioner Johnny Carline that I would gladly make my video information available to the Committee and the Water District for their interest.

The reason I first entered this area without authorization in February 1995 was because Water District staff refused to grant me access to the watersheds to assess numerous landslides reported by Water District staff at that time. Because of my concerns about the lack of more details on the subject by Water District staff, I then went to examine two of these sites identified in their report. Subsequently, when I first saw the problems on the Hollyburn road, I became very concerned about the effects that this road was having on the erosion and displacement of sediments into the Capilano Reservoir, and about information that was not being reported to the Water Committee. I recorded these problems on video and film, and I immediately made the information public. At the March 17, 1995 Water Committee meeting, I asked SPEC president Paul Hundal to present my information to the Committee on problems with the Hollyburn road. However, instead of Water Committee members discussing the facts and then investigating the matter, a meeting which Councillor Evans was also present at, the issue of unauthorized access became the point of focus, rather than the problem itself. This is the same approach which Councillor Evans decided to take at the Water Committee meeting, and he was unwilling to acknowledge that the information I presented to his municipality might be correct. Regrettably, the situation was further confused by John Morse's interpretation of the Hollyburn road which watered down my findings and recommendation. In contrast, the Burnaby Environment Committee were concerned about the facts and understood my motives for unauthorized access.

Since 1992, I have gone through all the hoops at the GVRD to request access to the watersheds. My requests have been both for my own research on the history of watershed management issues and later in 1996 for a small public group to monitor situations in the watersheds. Except for one occasion in October 1993, access has been denied. A group of us went through a formal process a year ago with the Water Committee regarding access, only to be finally told we couldn't enter. Councillor Evans asked if I had requested access to film the site at Hurricane Creek this year. I didn't because, as he knows only too well, it would have been fruitless. Councillor Evans, as a former member of the IWA, has been consistently opposed to my having access to the watersheds. If I had not been monitoring the Hollyburn area without permission, and presenting annual information, would members of the GVRD and the public have been notified of these problems by Water District staff? Probably not. That reality is reflected in John Morse's statements at the Water Committee meeting about the Hollyburn road, statements which he has also made in the past. This should deeply concern members of the Water Committee.

Why has the Water District been unwilling to diligently enlighten the Water Committee about erosion problems with the Hollyburn road, or with problems on other roads? I think it is appropriate that the Water Committee take a hard look at establishing an account of what is occurring with

some of the roads in the Greater Vancouver watersheds, and to reconsider granting certain members of the public access to the watersheds to monitor and referee watershed management activities. Watershed Management road maintenance and patrol staff are very familiar with all the problems that occur on an annual basis from roads in the watersheds. This information is not being disseminated and should be carefully collected and presented to the Water Committee on a consistent basis, information which should also be available upon request by the public. When John Morse categorizes problems on the Hollyburn road as “minor”, what is his definition of this, and what is the actual and annual quantifiable measurement?

Councillor Evans was also concerned that the Burnaby Environment Committee was not provided with an account of the Hollyburn road by Water District staff, that we should hear accounts from “both sides” of the issue. I welcome such an approach, but I should also comment that the public has been provided with only one side of the issue for over thirty years. The Water District has much information on the history of the Hollyburn road, some of which I have been hindered from obtaining. I recently requested information from the Water District’s files and log books on the history of this road and the Sister’s Creek access road in the same area. I was told that I would be billed \$4000 (four thousand) for Water District staff to retrieve and then to make the information available. I then asked Water District staff why this information was not already available, since Thurber Engineering had been asked to assess the history of this road in their contract on the recent Capilano landslide. Apparently Thurber Engineering had not even looked at these records. Concerned members of the public who take an active interest in the Greater Vancouver watershed management activities should be able to access the Water District’s files on their roads without the financial roadblocks which I encountered, and to be provided with the information they request.

John Morse has told Water Committee members a number of times over the last few years that the Hollyburn road was built to access blowdown on the upper southern flanks of the Hurricane Creek drainage, near the Hollyburn ridge. That very minor blowdown occurred in 1962. Six years later the Water District suddenly built a road to supposedly access this site to remove the blowdown because it was a potential fire hazard - the blowdown was not removed. Six years later? What threat did this very minor blowdown pose? None. This is 1997, 35 years later, and this extremely small area is quite intact and has naturally regenerated tall new growth. In actuality, the Water District intended to log a large 70 acre block of timber southwest of the blowdown site, all on District Lot 1137. That is what they had in mind and it is so stated in the Water District’s Management and Working Plan No.1. But the Water District didn’t log Lot 1137. So, then, why was the Hollyburn road constructed, and why did they push a road directly above Greater Vancouver’s water supply reservoir, where they destabilized steep slopes with sensitive and fine clay soils? What is the correct information on this matter?

A question was raised by one of the Water Committee members whether the statements in my two page letter about the Hollyburn road not being built to standards and not properly maintained were true or not. John Morse said that he disagreed with my statements. My statements were based upon an oral account by watershed manager Bob Cavill before the Water Committee on March 17, 1995. I provided a transcript of his speech on page 21 of my report, Not Coming Clean, mentioned below. I based my statements on this transcript. When the Water District built this road, as I explained in my report, they had to comply with provincial road building standards, standards which were not adhered to.

The 1968 aerial photograph shows that, just months before they started building the Hollyburn logging road overtop of the old narrow Capilano railway grade, the railway grade was overgrown

with a 35 to 40 year old canopy of pioneering tree species which were beginning to heal and fortify the soil structure with an interconnected web of roots. Air photos from 1979, 1987, and 1992 clearly show the evolutionary degradation of Hurricane Creek area as a result of road building. I presented this visual information in my December 8, 1995, 56 page report Not Coming Clean (see pages 14, 19, 20), copies of which were given to all the GVRD Board Directors at my delegation to the Board. Since that report was circulated to the Board, I have yet to receive critical comments from any of the municipal representatives or from the Water District. The information in that report was based on another report I wrote and finished on March 10, 1995, which also presented information on the Hurricane Creek area, a report which the GVRD Board also received. Granted, I am not the GVRD's hired consultant, but even one of the principals of Thurber Engineering, who conducted the Capilano landslide investigation for the GVRD, said that my report was very interesting.

I believe it is paramount that members of the public be able to work constructively with the Water District to achieve the public's mandate for the highest quality water, and not to be forced into a position of conflict. The public needs to have access to the best and most reliable information about their watersheds. This means access to the watersheds themselves and access to the information. If roads are not accomplishing the Water District's mandate, then those matters should be properly and publically addressed, and then properly mitigated.

In my estimation, the Burnaby Environment Committee and Burnaby Council have provided the Water Committee with a formal opportunity to investigate and then mitigate matters on the Hollyburn road, matters which have and may become quite serious.