THE 2009 WRIG SUPERVISOR'S REPORT -Sam Arnold, Supervisor

The Crew:

This year, the supervisor was Sam Arnold, and Engineering student at UPEI. The crew of two was made up of Brodie MacLeod and Iddo van der Geer, both Grade 11 students from the Wheatley River area.

Summary of Work Accomplished:

The work on the watershed this year was quite successful. Most of the work was done on the upper main branch of the Hornes Creek, with some work in Greenvale and on the Little Bungay Rd. We already have half-filled brushmats at some sites, and the death rate of trees planted at the start of the summer seems quite low two months later. The crew worked hard: 555 trees were planted, and about 2380m of stream was worked on, with varying degrees of alterations. Around 600 kg of garbage was taken out of various streams. The nursery was maintained, with trees moving in and out. Three rounds of nitrate testing of surface water in the Wheatley River were conducted by the crew, and a drinking water nitrate clinic was held, largely organized by me, the summer supervisor, with help from Ann Wheatley.

Streamwork Site Details:

Hervé Poirier's Alder Stream:

Length: 360m

Overgrown with alders.

The crew cleared alders quite severely, and planted 132 trees along the stream. Extensive brushmatting was done to restore natural stream bending and help the silt problem. The crew tried to leave shade and fish habitat while still giving later-stage trees an opportunity to grow up and allowing the stream to flush itself. The crew also took several sacks of garbage, a car roof, and an old sink out of the stream. Our brushmats have already been half-filled by post-tropical storm Danny, and much more rock is appearing in the streambed than when the crew started. The buffer zone was down to less than 3m in some places, but this was brought up with the landowner, who has since expanded his buffer zone to meet provincial requirements. Around 30 more trees were given to the landowner for planting in the expanded buffer zone.

Laird's Alder Stream:

Length: 310m

Overgrown with alders.

We cleared alders fairly severely, and planted 21 trees on the upstream side of the bridge. Extensive brushmatting was done, especially downstream of the bridge. More trees could be planted in here next year, especially downstream. Upstream should be looked at to see how the stream has changed since the alders were cleared, as few brushmats were put in (we wanted to let the stream run naturally, but less obstructed, for a year, then put brushmats in after the stream has a chance to show us where they should go). There is also a log cut to be a digger log on the upstream side, but it was never installed due to permit problems. This could be pursued next year.

Greenvale Alder Stream:

Length: 340m

Not as overgrown. Work was done last year, but there was not much noticeable change, so somewhat more severe alder cutting was done. A few trees were planted, but more would help. Also, upstream and downstream of where we worked could be worked on.

Versteeg Run (Entire stream above Hervé Poirier's chalet):

Length: 760 m

Very nice stream already. Very old-growth forest. Stream has large pools with low flow, and small riffles and waterfalls between pools. Few fish, but some. Large blockage was cleared with the aid of HCWG's supervisor and his chainsaw. Garbage picking was done. What looked like a pile of scrap metal large enough to be a car buried beside the stream was left, as was an old rusted culvert. These are probably not harming anything but the aesthetic of the stream, but could be removed at some point. 95 trees were planted in one corner of Patrick Versteeg's field to both increase the width of the buffer zone around a small spring, and for general environmental improvement. These trees were also mulched.

Hervé Poirier's Chalet Section:

Length: 420m

Nice stream, but without any tree cover. There was a tractor crossing which has turned into a dam, obstructing fish passage, which could not be dealt with by the crew. Tractors no longer cross it as of 2009. We planted 277 trees, which the landowner has committed to pruning and maintaining.

Hervé Poirier's Open Section:

Length: 190m

Behind Hutchinson's pottery, this section had no trees. We convinced the landowner to plant a few trees here, and more could be done next year. Garbage picking was also done.

Garbage Picking in Detail:

~600 kg of garbage was removed. The crew walked the entire main Hornes creek from Hervé's bridge to the first spring, and the Little Bungay tributary of the Wheatley River (where the River Days stream walk happened). The crew removed a large chunk of twisted culvert, a kitchen stove and sink (not in the same place), 10-15 tires, and quite a few feedbags full of assorted glass, metal, plastic, and ceramic litter.

Nursery Work in Detail:

We started and ended our summer working in the nursery. On the first day, we weeded the nursery, and root-pruned all the plantable trees. Around 100 trees (all the tamarack, cedar, and hemlock, and some white spruce and red maple) were planted into the watershed from the nursery, and around 150 trees were planted into the nursery. They are species identified by the provincial nursery as running out early in the year (tamarack, sugar maple, red oak, and ash), so next year we will have a reliable supply of them. The seedlings were planted into the nursery in pots, so next year we should be able to simply pull the pots out of the ground instead of digging up the trees. Many thanks go to Donald Matheson for rototilling the beds, as well as for continuing to provide space for the nursery. We spent the last day of work mulching trees in the nursery and at Patrick Versteeg's.

Unfortunately, the dogwood bushes in the nursery had grown out of control, and so we were forced to cut them down. They should grow back next year, though, and could be used for cuttings.

Also, for the last few years the nursery beds have slowly been rotting away. We were forced to dismantle the wood around the beds, pile the wood at the back of the nursery, and dispose of the nails. The beds were so far gone in rot that in many places it was much easier to use a shovel to find and remove rotten nails than a crowbar.

Landowner Contacts:

On the whole, landowner contacts were positive, though many simply did not care very much what we did. Only two landowners wanted a personal meeting, Patrick Versteeg and Hervé Poirier. Mr. Versteeg asked us to plant in a section of one of his fields with trees, which we did.

Hervé lives on the property we were working on, and so he wanted quite a few details about what was going on. He even came out to help us plant trees a few times. A buffer zone was expanded to 15m.

Training:

The crew attended a 2-day first aid course (Standard First Aid) and a 1-day training session/stream walk with Rob Sharkey and the TREC crew.

Collaborations:

The Hunter-Clyde Watershed Group worked with us for 3 days, which helped us get a lot of work done. Brian Gauthier, their supervisor, brought his chainsaw, and that let us go through the alders much more quickly than normal. Brodie and Iddo went and helped HCWG for 6 days while I was away. It was a great experience, and I was impressed with how well HCWG worked. We did work at Hervé's, Laird's, and down in Greenvale with them and got a lot done in all three places.

An Environmental Futures crew also came and helped us for 2 days (we were scheduled for 6 days, but a 'priority job' came up for them during the last 4 days they were originally scheduled to be with us). They were not as enthusiastic as the HCWG group, but they did help us get quite a bit of work done at Laird's Alder Stream.

Lastly, Paul Strain's (the TP&W environmental officer) three summer students came out to work with us for a week. We had some difficulties with them, and I ended up putting them on a separate job from us. They were not very enthusiastic workers, but they did work, and I am grateful that Mr. Strain was able to lend them to us.

Stream Work for Next Year:

Downstream of Hervé Poirier's land on the Hornes Creek has not yet been done. Also, the stream around the work we did in Greenvale could be done. Also, all the places we have worked this year should be re-examined to see what worked, what did not, and what could be done better. Mr. Poirier has expressed particular interest in having the group do more work on his land, though what form that work might take will have to be up to the supervisor and depends on how the work we did last year has changed the stream. For other recommendations on more work to be done at specific sites, refer to the section headed 'Streamwork Site Details'.

Supervisor Work for Next Year:

Firstly, the supervisor next year should get all the previous supervisors' reports, and construct a map of where has been worked in the past. This would take a day or two. Second, the nitrate testing data we have should be combined with the data in the government's WATSIS database. Third, it would also be useful to spend a few days looking at past work for what was done right and wrong, especially if detailed descriptions of what was actually done can be found in past supervisors' reports.

Recommendations:

• The crew should have first aid training and preferably some training on doing streamwork as early in the summer as possible (by the end of the first week would be best). The supervisor could organize this. The crew should start working approximately 3 days early. This would give the supervisor 6 half-days over the eight-week season to call people who only work 8:00-4:00, to contact landowners, to write progess reports for the group, to write newsletter articles and blog posts, etc.; rather than having the supervisor work overtime to

complete these tasks.

The group should plan at least one day part-way through the season to come out and see the work that the stream crew is doing.

The supervisor and the coordinator should communicate and collaborate more.

Conclusion:

I think we had an excellent crew and a great year this year. I sincerely hope that WRIG will be able to go on doing the great work that it does, and do it even better next year.