

Date: 8<sup>th</sup> June 2008

Copy: WALKING THE LAND/water issues  
Including well water contamination and filters

I have leaned out of bed these squelchy soggy mornings and spread toes extra wide. Will this be the day, I wonder, when a duck's webbing membrane between them becomes fact, not fiction - ?! Reassured, straightening, a quick glance towards Horse Creek flowing zip-fast free, and a new spring that's churning out gallons from the wetlands upcountry a mile westwards. It looks clear, crystal sharp, the odd weird bit of vegetation wiggling on the journey towards Hudson Bay. The horses dig their noses deep and appreciatively into the siphoned off trough above the creek (which in a riparian area means less damage to the river bank and grasslands).

Water, a subject that Alberta Environment is addressing constantly these days - a water well maintenance workshop at Pigeon Lake on July 11<sup>th</sup>, a multi-stakeholder advisory committee progress report on coal bed methane's effect on water wells - 44 recommendations/42 accepted - strongly suggest water's a Very-Big-Deal.

**SIDEBAR>> From Cara Van Marck , Communications, Alberta Environment: -**  
"The Multi-stakeholder Advisory Committee was established in 2003 as part of an extensive review on rules and regulations surrounding coalbed methane. They released their recommendations in 2006 after consultation with Albertans. Government accepted 42 of the 44 recommendations. One of the recommendations was to develop a Code of Practice for coalbed methane in wet coal zones above the base of groundwater protection. Public and stakeholder consultations [now] will be a part of that process.".

Partially this results as a process of evaluating more health conscious standard updates initiated following Walkerton's disastrous 2000 fallout of water system monitoring. These days too, by Longview and south along the Porcupine grasslands, we have eastern slopes concerns (well heeled, informed and street savvy activist ranchers in for the long haul with their Pekisko Group, arguing with cool logic against fracking by oil and gas into groundwater aquifers). Their top two latest news entries are worth reading alone for the impact on your children and their children's generations at [www.pekisko.ca](http://www.pekisko.ca)

Roxanne Walsh, meanwhile, of Turner Valley has proved she just won't give up on water quality for her municipal patch - and recently lauded with admiration at the newly formed Water Matters, a Calgary based political lobbyist group (the

staff decamping sideways from the Bow Riverkeepers Alliance, which operates powerfully – think Kennedy - throughout the States and with Canadian links) at their inaugural launch in Calgary last week.

Albertan glaciers are fast melting, acreage developments on never before seen expansions, all with water, water, water requirements. Current water flood run-off (please not another 2005!) is occurring right now, where farmers and ranchers and acreage owners subsequently require regular ‘shocking’ individual wells (as E-coli readings soar) sometimes two or three or four a year.

Upriver overflowing septic systems, slurry nitrates, coliform nitrates “too numerous to count or with confluent growth” may not necessarily cause diseases but can be indicators that cheerfully say, hurrah, let’s get into here! with intestinal infections of dysentery, hepatitis, typhoid and cholera). Add in spring run-offs slurping down pesticides, herbicides, and fizzy fertilizers, these are heady cocktails.

An early acreage cluster group (14 dwellings) just north of Cochrane has a **daily** digital chlorine monitoring requirement, tested daily x 5 days a week. Plus another batch of weekly samples goes in for analysis into the Calgary Health Regions’ monitoring (Oddly, if the development were 15 houses or over, the same stringent qualities of monitoring currently wouldn’t apply). Meticulous record keeping’s necessary for these residents of this area around Camden Lane.

Shocking and water quality is the use of chlorine bleach flushed through every single tap and pipe in your own water system, to zap all these nasty bacteria into oblivion. Some have to do it three or four times a year (I know of two old ranches that absolutely have to), it’s tiresome and expensive. Here at the Pink House after the 2005 upstream gunk floated down, now is a double filtering system that also by-passes a UV ray killing all remaining nasties (that’s the theory, anyway; you do, though, have to be very particular to change filters regularly and absolutely no sediment let-through, and which needs an annual maintenance check-up.

On shocking, can you answer ‘yes’ to these questions: - ?

- Is your well located at least 50 feet from a septic tank or any non-watertight sewer line? [you can’t shock chlorine into a septic tank, by the way].
- Is the well located at least 100 feet from any seepage pit, cesspool, tile field, privy or other subsurface disposal system?
- Is the well located at least 100 feet award from any feedlot, manure pit, or sewage lagoon – or livestock lot?
- Does your well have a watertight casing (many old ranches and acreages do not), preferably of heavy-gauge metal or approved heavy-duty plastics?
- Are all the joints in the well casing screwed, double welded and seriously sealed?

- Does the well casing extend to at least 12 inches above the grade of the land?
- Is a sanitary well cap used on the casing?

Now, if you click onto the excellent website [www.agric.gov.ab.ca](http://www.agric.gov.ab.ca) there's a wonderful wee book from which you can download "Water Wells That Last For Generations". It's *very* comprehensive – one section is on shock well maintenance which they recommend twice a year as a given. Iron and sulfate reducing bacteria is mentioned with real relish, detailing the horrors of slimy growth, rotten egg odors, and increased staining – that's on your water pipes so imagine your internal organs, eh?

Eek.

And, once it get's to the how-to section, well I have no problem with changing tyres or tightening fences but this stuff reads like an advanced chemistry exam. You need, definitely, a man; they like these kind of challenges.

"Once a year," mentions Bryce Rowe of his own Rowe Water Systems operating all over Springbank and around Cochrane, "and there'll be no charge by the Health Region to investigate your bacteria [you can pick bottles and forms up from the Cochrane Provincial Buildings, Monday's the once a week collection]. The Environmental Farm Plans installed better values from 20 or 30 years ago, people are much more aware. Old wells are being closed properly now, they were akin to an open scratch on your body, and a potential for infection...and that's how they still can be for the land too. He's a member of the Canadian Water Quality Association, a first-rate website with listed memberships of well qualified technicians – with one impressive water treatment page with 29 headings for starters.

SIDEBAR>>If you have information about a spill, release or other environmental emergency, call 1-800-222-6514, operating 24/7.

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