



**Oregon Physicians for Social Responsibility Position on the  
Long Term 2 (LT2)  
Enhanced Surface Water Treatment Rule July 15, 2009**

The Long Term 2 (LT2) Enhanced Surface Water Treatment Rule, issued by the Environmental Protection Agency (EPA) in 2006, is a “one-size-fits-all” approach to managing municipal drinking water across the nation. The LT2 rule requires expensive treatment for all unfiltered water systems, regardless of the unique protections of some individual watersheds.

The Bull Run Watershed, located in the Mount Hood National Forest, provides some of the best drinking water in the world for the city of Portland and surrounding communities. For over a century the watershed has enjoyed unique protections from harmful human activities. In 1996 and 2001, federal legislation was passed that further safeguarded the area from pollution caused by logging and human-caused fire. These protections have kept Portland’s drinking water clean, pure, and affordable. There has never been a case of *Cryptosporidium* associated with Portland’s drinking water.

According to public health officials, there will be no measurable public health benefit from new treatments required by the EPA to address *cryptosporidium*.

**Recommendations from Oregon Physicians for Social Responsibility:**

- 1) Applaud the support of Senator Merkley and that of others in the congressional delegation and the City of Portland in their effort for a variance. Encourage them to continue to pursue extension in compliance deadlines from the EPA.
- 2) Continue focused efforts to pursue alternative compliance strategies in the short and long term. (Implementation of a monitoring plan worked out with EPA may result in Portland being granted a “waiver”)
- 3) Any treatment decision must be accompanied by unequivocal Council support for current federal safeguards and to call for enhanced safeguards against human entry and pollution of Bull Run Management Unit.

**Background which supports these recommendations**

**History of Portland’s Response**

- 2001-2002 Bull Run Treatment Citizen Panel
- 2005 Portland City Council Resolution No. 36297 to "pursue regulatory or legislative alternatives to the pending rule"
- 2007 Court challenge by the City of Portland to final LT2 rule (with amicus brief by Oregon Wild/Oregon PSR)

- 2008 Court challenge rejected. The case was lost because the judge deferred to agency discretion, not because he answered the points of our case.

### **Crypto testing**

- Over 30,000 liters (nearly 8,000 gallons) in approximately 360 samples of varying volumes
- 46 samples detected at least one Cryptosporidium oocyst (no testing was done to determine whether the genotype was infectious to humans as this was not scientifically available)
- 100 Cryptosporidium oocysts total have been detected prior to 2003  
Science has only just recently been able to detect different genotypes but it is very expensive.
- No Cryptosporidium found in samples, 2003–2009

### **Current City Multi-Track Response to LT2 Treatment:**

- Pursue variance to the rule with alternative compliance method (increase in monitoring)
- Legislative alternative –considered not feasible by Senators Wyden and Merkley.
- Traditional compliance (treatment)

### **Implementation of LT2 will provide no measurable public health benefit**

Additional treatment mandated by LT2 will provide no measurable public health benefit for those drinking from the Bull Run, according to:

Gary Oxman, M.D. Multnomah County Health Officer

Water Bureau, City of Portland

Bill Keane, PhD, MPH-Oregon Health Department, Specialist in Acute and Communicable Disease.

### **Implementation of LT2 is Wasteful**

**Costs for complying with the rule through building new treatment facilities will approach one billion dollars, including debt service, just for capital expenses.**

Current City of Portland Estimated Capital Costs of Treatment for preferred choices:

- Ultraviolet (UV) \$100,000,000
- Direct Filtration (Bureau recommendation) \$385,000,000

Double above to cover interest = \$200,000,000 (UV) or \$770,000,000 (Direct Filtration)

Add additional costs for annual maintenance (estimate for UV \$16 million), personnel and additional energy. 40% of the Water Bureau's current budget is currently dedicated to debt service.

### **Implementation of LT2 creates expensive reliance on energy-intensive infrastructure.**

- Due to generations of citizen advocacy, the Bull Run Management Unit is one of the most stringently-protected, federally-protected watersheds in the United States.

- It is a unique, green, elegant, gravity-fed water system with no carbon footprint.
- Strict limits on human entry have been in place for over 100 years and, even today, unregulated entry and activity by members of the public and by domestic animals is completely prohibited.
- There is no sewage or chemical exposure from agricultural, industrial, recreational or municipal sources.
- A Crypto outbreak has never been caused by Bull Run drinking water.
- The general prohibition on entry into the Bull Run Management Unit by humans, domestic animals or livestock ensures that Crypto will not pose a public health threat. Consistent water purity is a direct result of the watershed's isolation from human entry and development and the exclusion of livestock.
- The isolated and protected nature of the BRMU limits the occurrence of crypto to levels that are so low that they are not a "measurable source of exposure." City of Portland White Paper, Long Term 2 Enhanced Surface Water Treatment Rule at 7 (June 2005) (EPA-HQ-OW-2002-0038-0719)
- The major outbreaks of Cryptosporidiosis that the EPA cites as examples of the danger from drinking water actually resulted from sewage leaks, not the natural occurrence of crypto in closed and protected watersheds.
- To insist that the City install costly new facilities to combat a pathogen occurring so rarely in the Bull Run that it poses no measurable health threat would waste scarce public resources and potentially divert them away from the protection of the source watershed, in direct contradiction to the goals of the 1998 Safe Drinking Water Act Amendments.
- Bull Run federal legislative protections of 1996 and 2001 were put in place in part to ensure that residents of the City could ensure the safety of our water through watershed protections and avoid the costs of additional treatment, including filtration.
- Once water filtration infrastructure is put in place, pressure will dramatically increase to open the Bull Run to logging, development, and other human activities – all of which will bring people and pollution, *including but not limited to Cryptosporidium*, into the watershed and increase the risk of fire.
- Additional Environmental Impacts* – There are a number of uncertainties regarding the environmental impacts of various water treatment technologies. Among these are concerns regarding a continuous waste stream generated by filtration systems and potential hazards related to mercury in ultraviolet lights.
- Energy- intensive Carbon Footprint* – Large new treatment facilities will require significant energy resources to build, operate and maintain.
- Future Regulations* - will complicate treatment decisions and costs (i.e. a future one-size-fits-all regulation of pharmaceuticals could require treatment by combination of UV and ozone. Direct

filtration (currently recommended by Water Bureau as treatment choice if we are forced down path of traditional compliance) cannot filter out pharmaceuticals.