

## Key Events Related to the Long Term 2 Enhanced Surface Water Treatment Rule (LT2)

Uncovered Reservoir Compliance Efforts	Date	Treatment Compliance Efforts
	<b>April 1993</b>	<i>Cryptosporidiosis</i> outbreak from drinking water in Milwaukee, Wisconsin, results in an estimated 403,000 people becoming sick and at least 50 <i>Cryptosporidium</i> -associated deaths.
	<b>1996</b>	Congress amends the Safe Drinking Water Act, requiring the U.S. Environmental Protection Agency (EPA) to establish regulations for contaminants, and specifically, <i>Cryptosporidium</i> .
	<b>1998</b>	EPA issues the Interim Enhanced Surface Water Treatment Rule prohibiting the construction of any new uncovered drinking water reservoirs and announces its intention to propose the Long Term 2 Enhanced Surface Water Treatment Rule (LT2 rule) by May 2002. The proposed rule would include additional requirements in two areas: storage of finished drinking water in uncovered reservoirs and treatment for contaminants such as <i>Cryptosporidium</i> .
	<b>April 2001</b>	Commissioner-in-Charge Sten convenes a Citizens Panel on Bull Run Treatment to investigate and recommend treatment methods to comply with the LT2 rule.
	<b>May 2002</b>	City Council approves through the fiscal year 02-03 budget to replace the uncovered drinking water storage at Mount Tabor with enclosed tanks, make parks improvements to retain the existing uncovered reservoir structures above the tanks, and provide temporary floating covers for the Washington Park reservoirs.
	<b>May 2002</b>	The EPA delays issuing a draft LT2 rule until 2003.
	<b>July 2002</b>	The Portland Utility Review Board (PURB) recommends that Portland pursue a waiver to the LT2 rule.
	<b>August 2002</b>	Commissioner-in-Charge Saltzman writes to the EPA to inquire whether the upcoming LT2 rule would be issued with a waiver provision for the treatment requirement.
	<b>September 2002</b>	A report from the Citizens Panel on Bull Run Treatment recommends membrane filtration treatment to comply with the LT2 treatment requirement.

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	<b>September 2002</b>	The EPA responds to Commissioner Saltzman indicating that it does not contemplate including a treatment waiver provision in the LT2 rule. The agency cites a lack of a technical basis for demonstrating that alternative approaches will provide equivalent public health and safety protection.
	<b>January 2003</b>	With no LT2 rule from EPA, Commissioner Saltzman announces that he will delay the treatment decision for at least a year and bring the treatment decision to City Council.
	<b>August 2003</b>	EPA issues its draft LT2 rule and opens a 90-day official comment period. For the treatment requirements, the draft rule provides unfiltered systems compliance options of filtration, ultraviolet light, ozonation, and chlorine dioxide. For uncovered reservoirs, the draft rule provides the compliance options of 1) covering finished drinking water reservoirs, 2) treating their discharge, or 3) implementing a “state-approved risk mitigation plan.”
	<b>November 2003</b>	Commissioner Saltzman submits comments regarding LT2 to the federal docket. The comments request that a waiver provision be included in the treatment portion of the final rule to enable water systems “with protected, low-risk drinking water sources, such as the Bull Run, to avoid substantial expenditures that may potentially provide very little benefit.”
Commissioner Saltzman convenes the Mount Tabor Open Reservoirs Independent Review Panel (IRP). During the first five months of 2004, the panel conducts a review of the City Council’s May 2002 decision to replace the uncovered Mount Tabor reservoirs with enclosed storage.	<b>December 2003</b>	

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	<b>January 2004</b>	The official comment period for the LT2 official rule—extended by EPA for 60 days beyond the regular 90-day period—ends.
Mount Tabor IRP recommends to City Council to wait to comply with LT2 until the rule is finalized and then, if necessary, pursue the risk mitigation approach.	<b>May 2004</b>	
	<b>May 2004</b>	Mayor Potter and Portland Business Alliance representatives meet with EPA officials to request further discussions regarding Portland’s desire for alternatives to treatment.
City Council accepts the Mt. Tabor IRP recommendations, directs the Water Bureau to halt the replacement project at Tabor and the temporary covers project at Washington Park and directs the bureau to implement an interim enhanced security plan and deferred maintenance program for Mount Tabor and Washington Park reservoirs.	<b>July 2004</b>	
	<b>August 2004</b>	PURB sends a letter to the Portland Congressional delegation, requesting support and efforts on behalf of Portland in the EPA rule-making for alternatives to the LT2 treatment requirements.
	<b>September 2004</b>	Congressman Earl Blumenauer sends a letter to the EPA requesting answers about EPA’s plans for publishing comments to the rule and its plans for including a waiver provision regarding the treatment requirements.

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	<b>November 2004</b>	Commissioner Saltzman meets with staff from the Portland Water Bureau (PWB), the City Attorney's Office, the Office of Government Relations, and a contract lobbyist to develop a follow-up strategy in support of his November 2003 comments to EPA on the LT2 rule.
	<b>December 2004</b>	Congressman Blumenauer shares the EPA's response to his September letter. EPA indicates that it will publish all responses to the rule but that it does not envision including a waiver provision for treatment in the rule.
	<b>January 2005</b>	City Council commits to pursue alternative forms of compliance for the LT2 rule.
	<b>March 2005</b>	City Council approves Resolution 36297 describing Portland Mayor Potter's strategy to work with EPA to propose alternatives to the treatment requirement of the LT2 rule.
	<b>April 2005</b>	An <b>LT2 White Paper</b> , spelling out Portland's arguments for seeking alternative compliance options to the treatment requirements of the LT2 treatment requirements, is developed by PWB in conjunction with Mayor Potter's Office. Two recommended approaches are included: one from PWB and one from community stakeholders including Floy Jones, Scott Fernandez, and Regna Merritt.
	<b>May 2005</b>	Mayor Potter and Portland Business Alliance representatives meet with EPA officials to request further discussions regarding Portland's desire for alternatives to the treatment requirements of the rule.

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	<b>June 2005</b>	In June, Mayor Potter’s Chief of Staff Nancy Hamilton, Multnomah County Health Official Dr. Gary Oxman, and lobbyist Len Simon meet with EPA staff to present the LT2 White Paper and its proposed alternatives to treatment.
	<b>July 1, 2005</b>	Randy Leonard is assigned as Commissioner-in-Charge of the Water Bureau. He begins meeting regularly with the Friends of the Reservoirs, Oregon Wild, and other stakeholders to discuss LT2 and Portland’s approach for compliance.
	<b>January 2006</b>	The final LT2 rule is issued by the EPA. The preamble to the rule acknowledges that the Safe Drinking Water Act includes a treatment variance clause. The final rule does not include a risk mitigation option to comply with uncovered reservoir requirements. The rule requires jurisdictions with uncovered finished drinking water reservoirs to either comply with the reservoir requirements or receive approval of a state approved schedule for compliance by April 1, 2009.
	<b>January 2006</b>	City Council authorizes a contract with Boston law firm Foley Hoag— selected by Floy Jones, Kent Craford and Scott Fernandez—to challenge the final LT2 rule.
	<b>February 2006</b>	Portland files a legal challenge to the LT2 rule in the Washington D.C. District Court of Appeals. [City of Portland, OR vs. EPA (D.C. Cir. 2007), Docket 06-1068B] New York City joins as an intervenor and Walla Walla, Washington, and Oregon Wild file amicus briefs in support.
	<b>Early 2007</b>	PWB staff work closely with the Office of Government Relations, representatives from Oregon Wild, and Friends of the Reservoirs to introduce state legislation regarding the LT2 rule. The legislation seeks to ensure that the opportunities to seek a variance to the LT2 treatment requirements available at the federal level will also be available through the State of Oregon when it obtains primacy for the rule. The legislation passes the Legislature and is enacted by the Oregon Health Authority in the Oregon Administrative Rules (OAR 333-061-0045(13)).
	<b>September 2007</b>	Oral arguments occur in Portland’s legal challenge before the Washington D.C. District Court of Appeals.

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	<b>November 6, 2007</b>	
<p>The Washington D.C. District Court of Appeals issues its decision dismissing the City’s challenge—the LT2 rule is upheld.</p>	<b>December 4, 2007</b>	<p>Commissioner Leonard convenes a meeting in City Hall that includes representatives from Senator Wyden, Congressman Blumenauer, and Congressman Wu's offices, the City Government Relations Office, the Water Bureau, Cascade Anderson Geller, Floy Jones, Jeff Boly, Scott Fernandez and others. Congressional staffs recommend that PWB pursue a treatment variance in advance of seeking legislative solutions because it would be better to exhaust all administrative options before seeking a legislative “end-around.”</p>
<p>Stakeholders Floy Jones, Regna Merritt, Scott Fernandez, and others meet with Commissioner Leonard. They urge him to pursue a variance to the LT2 rule and seek federal legislative intervention by Portland’s Congressional delegation. Some participants urge Commissioner Leonard not to comply with the rule</p>	<b>December 6, 2007</b>	
	<b>December 2007</b>	<p>Commissioner Leonard instructs PWB to pursue the variance option as a means of alternative treatment compliance, while beginning the planning and design for conventional treatment compliance with LT2.</p>
	<b>January 23, 2008</b>	<p>EPA Region 10 sends a letter to PWB initiating dialogue about the November 2007 U.S. Court of Appeals decision and acknowledging that PWB intends to pursue a variance.</p>

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	<b>Early 2008</b>	PWB works directly with Multnomah County Health Officer Gary Oxman, Multnomah County Epidemiologist Amy Sullivan, Floy Jones, Scott Fernandez, Jeff Boly, and Cascade Anderson Geller on developing a proposal to the EPA for how PWB would approach gathering evidence to support a treatment variance.
	<b>February 2008</b>	PWB proposes an outline of its first treatment variance data collection strategy to the EPA in a meeting in Portland that includes Multnomah County health officials, staff from the Oregon Health Authority, Floy Jones, Scott Fernandez and Regna Merritt. EPA subsequently rejects the City's proposal. EPA also reiterates that it will not consider a variance application for the uncovered finished drinking water reservoir requirements of the rule.
	<b>November 2008</b>	Commissioner Leonard meets with stakeholders Floy Jones, Regna Merritt, Scott Fernandez, and others to find a common strategy regarding notification to the new Obama Administration of Portland's interest in seeking legislative alternatives to the uncovered finished drinking water reservoir requirements of the LT2 rule.
	<b>November 2008</b>	Commissioner Leonard's office, PWB, and other stakeholders collaborate on a letter to the Obama transition team, indicating the City's strong interest in seeking alternatives to the uncovered finished drinking water reservoir requirements of the LT2 rule.
	<b>January 15, 2009</b>	PWB staff meet with EPA staff in Seattle to discuss compliance with the LT2 uncovered finished drinking water reservoir requirements. PWB and EPA discuss an 11-year compliance schedule for the reservoirs.

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<p>EPA responds to the draft compliance schedule discussed during the January 15, 2009 meeting. EPA indicates that the initial reservoir compliance schedule appears reasonable, but states that all projects that require review and approval by EPA and/or the Oregon Health Authority must identify specific dates. EPA states that it, "...cannot approve a schedule that provides for any unnecessary delays. EPA can only approve a schedule under which Portland begins taking immediate steps toward compliance with the open reservoir components of LT2. The schedule needs to show that you will work steadily and consistently toward compliance."</p>	<p><b>February 11, 2009</b></p>	
	<p><b>March 2009</b></p>	<p>Commissioner Leonard sends a letter to each member of Portland's Congressional delegation to ask for its help in introducing and passing federal legislation to allow Portland to continue to use its five uncovered finished drinking water reservoirs for drinking water storage and to allow the City to continue to use Bull Run source water without an additional treatment facility.</p>
<p>City Council accepts the compliance schedule for the uncovered finished drinking water reservoirs that PWB proposes to submit to EPA. The schedule calls for the construction of three enclosed storage tanks—one at Powell Butte, one at Kelly Butte, and one at Washington Park, as well as some transmission and system improvements to support the reservoir changes. The 11-year compliance schedule calls for disconnecting the uncovered reservoirs at Mount Tabor by December 31, 2015 and disconnecting reservoirs at Washington Park by December 31, 2020.</p>	<p><b>March 25, 2009</b></p>	

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PWB submits its proposed LT2 compliance schedule for the uncovered reservoirs to the EPA.	<b>March 25, 2009</b>	
The EPA approves PWB’s compliance schedule for the uncovered finished drinking water reservoirs.	<b>March 27, 2009</b>	
Community meeting at Glencoe Elementary School includes Commissioner Leonard, PWB staff, representatives of Oregon Congressional Offices, Floy Jones, Scott Fernandez and Regna Merritt. Citizens express strong support for continued efforts to achieve alternative compliance options for LT2 through Congress	<b>April 11, 2009</b>	
	<b>April 10, 2009</b>	PWB proposes a second data collection approach to the EPA in support of an LT2 treatment variance, which is subsequently rejected.
	<b>June 18, 2009</b>	In a letter to Commissioner Leonard, Senator Merkley indicates that, “...it is very clear from conversations with my colleagues in the Senate that a legislative approach has very little chance for success.” Senator Merkley commits to supporting the Portland’s efforts to secure alternative compliance options to LT2.
	<b>July 29, 2009</b>	City Council approves Resolution 36720 directing the Water Bureau to continue to seek administrative and conventional solutions to compliance with LT2 while also directing the bureau to build an ultraviolet treatment facility, if a treatment variance is not granted.

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<b>July 2009</b>		
The Oregon Health Authority begins transition to receiving interim primacy for the LT2 rule.		
<b>October 27, 2009</b>		
At the request of Senator Merkley, EPA Deputy Administrator Pete Silva meets with PWB staff and Commissioner Leonard for a briefing and tour of Bull Run and the open reservoirs at Mt. Tabor.		
<b>November 4, 2009</b>		
PWB sends letter to Deputy Administrator Pete Silva at EPA requesting written guidance from EPA regarding the City's intent to pursue a variance to the uncovered finished drinking water reservoir requirements of the LT2 rule.		
<b>November 2009</b>		
	PWB submits a third sampling plan to EPA in support of its efforts to pursue a treatment variance.	
<b>December 16, 2009</b>		
EPA Deputy Administrator Pete Silva sends letter to PWB indicating that a variance to the uncovered finished drinking water reservoir requirements of the LT2 rule is not available.		
<b>December 2009</b>		
	PWB begins sampling to establish the basis for a treatment variance.	
<b>March 3, 2010</b>		
Per the City Council's request, PURB hears public testimony on the uncovered finished drinking water reservoir requirements of the LT2 rule.		

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By a 6 to 2 vote (with 1 absent), PURB recommends that City Council adopt a formal resolution directing PWB to replace the existing uncovered finished drinking water reservoirs with secure enclosed storage on a schedule to comply with the EPA-approved plan.	<b>March 18, 2010</b>	
	<b>May 24, 2010</b>	The Oregon Health Authority receives EPA confirmation that its transition to become the interim primacy agency for the LT2 rule was complete on March 18, 2010.
PWB proposes modifications to Oregon Health Authority regarding interim milestones for PWB's uncovered finished drinking water reservoir compliance schedule (originally approved by EPA in March 2009). The modifications concern the dates to submit plans and begin construction of Powell Butte Reservoir 2.	<b>June 8, 2010</b>	
Oregon Health Authority approves PWB's interim milestone modification request for the Powell Butte Reservoir 2 schedule.	<b>June 15, 2010</b>	
	<b>December 2010</b>	PWB concludes its treatment variance sampling. The data indicate that PWB has a strong case for a variance, as no <i>Cryptosporidium</i> was detected in any of the 449 water samples (totaling over 10,250 liters) taken and tested at the drinking water intake.

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	<b>December 2010</b>	Commissioner Leonard meets again with Senator Merkely to inform him of PWB's variance sampling results. Senator Merkely renews his commitment to ensure that the EPA is fair and transparent in its evaluation of PWB's request for a treatment variance.
	<b>February 2011</b>	PWB staff meets with Oregon's Congressional delegation and EPA staff to discuss Portland's treatment variance efforts.
	<b>February 2, 2011</b>	Senator Merkley addresses EPA Administrator Lisa Jackson regarding Portland's pending variance request during the Environment and Public Works Senate Committee Hearing on Public Health and Drinking Water Issues.
Commissioner Leonard requests written guidance from Oregon Health Authority regarding the availability of a variance from the uncovered reservoir requirements of the LT2 rule, given new legal analyses of the rule from the City of New York Law Department and the Portland Large Water Users Coalition.	<b>June 1, 2011</b>	
	<b>June 6, 2011</b>	PWB submits its comprehensive request to Oregon DWP for a variance to the treatment requirements of the LT2 rule.

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<p>Oregon Health Authority responds in writing to Commissioner Leonard that a variance to the federal and state requirements for uncovered reservoirs is not available. Attached to the letter is a memo from the Oregon's Attorney General affirming that no variance for uncovered reservoirs is available.</p>	<p><b>June 16, 2011</b></p>	
<p>EPA Administrator Lisa Jackson indicates in a letter to Senator Charles Schumer of New York that the agency would be conducting a review of the LT2 rule, committing that "EPA will reassess and analyze new data and information regarding occurrence, treatment, analytical methods, health effects, and risk from viruses, <i>Giardia</i>, and <i>Cryptosporidium</i> to evaluate whether there are new or additional ways to manage risk while assuring equivalent or improved public health protection."</p>	<p><b>August 20, 2011</b></p>	
<p>Commissioner Leonard writes to Senator Merkley requesting his assistance in determining whether an alternative uncovered finished drinking water reservoir compliance option—similar to the option afforded to New York City—is available to Portland.</p>	<p><b>August 22, 2011</b></p>	
<p>PWB requests that Oregon Health Authority grant an indefinite suspension to Portland's uncovered finished drinking water reservoir compliance schedule during the EPA's review of the LT2 rule.</p>	<p><b>August 23, 2011</b></p>	
<p>City Council writes to Senator Merkley requesting his assistance in pursuing relief from the uncovered finished drinking water reservoir requirements of the LT2 rule, in light of potential changes that might arise from EPA's review of the rule.</p>	<p><b>September 12, 2011</b></p>	

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<p>Oregon Health Authority acknowledges PWB's request for an indefinite suspension of its reservoir compliance schedule and commits to providing a response once it receives guidance from the EPA.</p>	<p><b>October 11, 2011</b></p>	
<p>Senators Jeff Merkley and Ron Wyden and Congressmen Kurt Schrader, Earl Blumenauer, and Peter DeFazio send a letter to Administrator Jackson of the EPA requesting that, while the EPA reviews the LT2 rule, it delays implementing the requirements for uncovered finished drinking water reservoirs.</p>	<p><b>October 13, 2011</b></p>	
	<p><b>November 29, 2011</b></p>	<p>Oregon Health Authority issues a Notice of Intent to grant Portland a variance to the treatment requirements of the LT2 rule.</p>
<p>Oregon Health Authority replies to PWB's August 2011 letter and tells PWB that the EPA's guidance is that its rule review is not justification for amending an existing approved compliance schedule for uncovered finished drinking water reservoirs.</p>	<p><b>December 9, 2011</b></p>	
	<p><b>December 30, 2011</b></p>	<p>Portland detects <i>Cryptosporidium</i> at the raw water intake for the first time in nearly 10 years.</p>

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<p>EPA writes to Senator Merkley agreeing to conduct a thorough review of the LT2 rule, but denies his request to delay implementing LT2 requirements for uncovered finished drinking water reservoirs in Portland, stating that “The rule review process does not provide a basis to modify the City of Portland's LT2 compliance obligations.”</p>	<p><b>January 27, 2012</b></p>	
<p>City Council approves Resolution 36904, which directs PWB to request an adjustment to its uncovered finished drinking water reservoir compliance schedule from Oregon Health Authority. The adjustment proposal would add time to the schedules of selected projects and therefore delay the final compliance dates for Mount Tabor and Washington Park to 2024 and 2026, respectively.</p>	<p><b>February 1, 2012</b></p>	
<p>PWB submits its Request for Schedule Adjustment of LT2 Requirements for Uncovered Finished Drinking Water Reservoirs to Oregon Health Authority.</p>	<p><b>February 10, 2012</b></p>	
	<p><b>March 14, 2012</b></p>	<p>Oregon Health Authority grants Portland a 10-year variance to the treatment requirements of the LT2 rule.</p>
<p>EPA holds public meeting in Washington, D. C. on the LT2 rule and uncovered finished water reservoirs. PWB Administrator David Shaff and Water Quality Manager Rich Giani attend. Floy Jones and Scott Fernandez also attend and provide questions and testimony. Regna Merritt participates online.</p>	<p><b>April 24, 2012</b></p>	

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**May 17, 2012**

Oregon Health Authority sends a letter to PWB rejecting the requested reservoir compliance schedule adjustment, stating that PWB must comply with the schedule as approved by EPA (including the interim milestones schedule approved in June 2010 by Oregon Health Authority).

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