

# A Short Chronology of County Water Shortages

by Jean O. Melious

Whatcom Watch

Water shortages will increase as Whatcom County's population grows. Climate change will also exacerbate the county's water shortages, resulting in reduced water supply in the face of increasing water needs for farm irrigation, home landscape watering and wildlife habitat.

Nonetheless, Whatcom County has poured tax dollars into litigation intended to ignore and deny the county's water shortage. The county has argued, all the way to the state Supreme Court, that it has a "paper" solution to water shortages. Instead of adopting good planning and water conservation practices that would stretch its limited water resources, the county argued it had the right to ignore water shortages in its rural planning.

For more than 30 years, Whatcom County has been on notice of water shortages. In 1985, the state Department of Ecology adopted an Instream Resources Protection rule for the Nooksack watershed. (1) Because of longstanding water shortages, the rule closed most rivers, streams and lakes to new water withdrawals, either year-round or seasonally, and established instream flows intended to protect recreational values and wildlife habitat. As Ecology wrote to Whatcom County Executive Jack Louws in November 2016, "instream flows have not been met on average 142 days per year." Ecology has further concluded that "most water in the Nooksack watershed is legally spoken for." (2)

The county's response to decades of water shortages was simply to require senior water rights holders to, in effect, donate their water to new water users relying on permit-exempt wells. The county's approach clearly failed to comply with the state law of prior appropriation, and that is why the county lost at the state Supreme Court. In *Whatcom County v. Western Washington Growth Management Hearings Board* (often referred to as the "Hirst case"), the court held that the state law of "first in time, first in right" applies to all water users in Whatcom County, including junior water users relying on permit exempt wells. The county's practice of "last in time, first in right" is the wrong approach, and it will hurt farmers, water associations and existing well owners, to say nothing of fish.

In 1945, the state legislature decreed that when "the withdrawal of groundwater may affect the flow of any spring, water course, lake, or other body of surface water, the right of an appropriator and owner of surface water shall be superior to any subsequent right hereby authorized to be acquired in or to groundwater." (3) For more than 70 years, therefore, state law has specifically recognized that new wells reduced water flowing to

rivers and lakes, and the state law of prior appropriation, or “first in time, first in right” applies. If surface water users have “senior,” or preexisting, water rights, “junior” wells cannot legally encroach on their water rights. This is straight out of Water Law 101, and it has been state law for 72 years.

It should therefore have come as no surprise when, in October 2016 the Washington State Supreme Court ruled that Whatcom County must ensure that junior permit-exempt wells will not take water away from senior water users. Why has Whatcom County has expressed surprise at this decision? Only because the county has ignored state law for so long.

The court did not invent the doctrine of prior appropriation, and it did not invent Whatcom County’s water resource problems. The court simply ruled on the evidence in the record and applied the law. The following summary of the county’s long history of water shortages shows that the county has long been on notice that it needs to work proactively to address water shortages and severe water pollution problems.

### **1917**

Washington State Surface Water Code

- Implemented prior appropriation: “First in time, first in right.”
- Required a permit for surface water appropriation.

### **1945**

Washington State Groundwater Code

- The Groundwater Code differentiated water flowing under property from other attributes of the property and established the state’s jurisdiction over the appropriation and use of groundwater.
- It also recognized the concept of “hydraulic continuity” between surface and groundwater.

This code means that groundwater has not been part of a “property right” since 1945.

### **1946**

The Washington Department of Fisheries asked that a water right from Bertrand Creek be conditioned to require that the diversion be discontinued when the stream flow falls below 5.0 cubic feet per second (cfs).

### **1950**

Washington State Department of Fish and Game protested a water rights application for Bertrand Creek, noting that it is important spawning and rearing habitat and stating that 4.66 cfs out of a maximum flow of 6.0 cfs had already been appropriated from the Creek.

### **1953**

The “Bertrand Creek system” was recommended for closure.

## **1975**

Washington Department of Fish and Wildlife asked Ecology to close Bertrand Creek and all its tributaries to “consumptive diversion,” because low summer flows harm the “already limited Coho population.”

## **1983-84**

Emergency ban of the pesticide EDB and groundwater investigations in northern Whatcom County.

## **1985**

- Nooksack Basin instream flow rule adopted.
- Its purpose is to “retain perennial rivers, streams and lakes in the Nooksack water resource inventory area with instream flows and levels necessary to provide for preservation of wildlife, fish, scenic, aesthetic, and other environmental values, and navigational values, as well as recreation and water quality.”
- Most of the basins of the populated western portion of Whatcom County are closed to further water appropriations, year-round or seasonally, and minimum instream flows are adopted.

## **1990**

Growth Management Act (GMA) adopted. The GMA requires local governments to plan to protect water availability and water quality, and to ensure that water is legally available before issuing permits.

## **1991**

Whatcom County designated the entire geographic area of the county west of the national forest boundaries to be a “Critical Water Supply Area.” A critical water supply area is an area where “water supply problems related to uncoordinated planning, inadequate water quality or unreliable service appear to exist.”

## **1992**

The Washington state attorney general issued Opinion No. 17, which states that the Growth Management Act requires local governments to make the required water availability determination before issuing building permits for projects relying on permit-exempt wells. Local governments must consider both quality and quantity of such permits, specific to residential use, under state water appropriation law.

- The Washington Supreme Court’s 2016 decision affirmed the reasoning in this 1992 Attorney General Opinion.

## **1993**

Ecology sponsored a study (4) to examine hydraulic continuity. The author evaluated whether it was possible to specify a “critical distance” away from a stream that would prevent stream depletion from wells. The report states:

- “Where hydraulic continuity exists between pumped wells and surface water bodies, pumping can deplete stream flows. The glacial deposits of Whatcom County frequently allow for such continuity.”

- “It is not scientifically defensible to pick a single, critical, well/stream separating distance in order to minimize stream depletion.” Hydraulic continuity resulted in stream depletion when wells pumped water at various distances from streams.

### **1993**

Whatcom County completed the LENS [Lynden, Everett, Nooksack, Sumas] Groundwater Study, which states on page 2:

Some of these contaminants [in Whatcom County wells] have been found at levels exceeding those considered safe for drinking water under the federal Safe Drinking Water Act. The presence of contaminants in water can limit its ability to be used as a source of drinking water due to the increased costs of treatment, monitoring and source protection. The nature and extent of the quality problems has not been well understood making it difficult to develop appropriate management strategies

In addition to quality concerns, there are quantity problems which raise serious questions about how future and in some cases current water needs will be met. Obtaining legal permission from the Department of Ecology to use water for many needs is currently very difficult.

In-stream restrictions on withdrawals has restricted the use of surface water since flow limitations were established in the mid-1980s. More recently, getting legal permission to use groundwater has become very difficult due to the recognition that groundwater contributes to surface water flows (hydraulic continuity). Tribal water claims to water supplies both on and off reservation, as well as changes in the state’s role for allocation, have cast even more uncertainty into the allocation picture.

### **1999**

Whatcom County adopts a Comprehensive Water Resource Plan. On page 49, the plan states: “Many county residents use groundwater as a source of drinking water. Over 95 percent of 347 public water systems located in the county rely on groundwater. In addition, approximately 20,000 homes obtain water from exempt wells (not from ‘public systems’). Exempt wells pose difficulties for effective water resource management.”

### **1999**

Whatcom County Health Department asks Whatcom County to require all subdivisions to rely on public water systems rather than permit-exempt wells, based on concerns about the extent and severity of water pollution in northern Whatcom County. In 2000, after considering several proposals to limit or ban the use of permit-exempt wells, the county council rejected the proposal, stating that water problems were a state problem, and the county did not need to address problems with water quality or quantity.

### **2000**

Whatcom County adopted a Coordinated Water System Plan which states that “due to the shallow aquifer, some water systems have wells that go dry during the summer and early fall. For these sources, interties with other water systems, emergency sources and conservation measures may be options for providing a reliable source year round.”

## 2005

WRIA 1 Watershed Management Plan adopted.

- It states that “The instream flows established by [the Nooksack] rule are water rights under Washington law and are protected like any other right in the priority system ... ground water withdrawals are affected due to their potential (and in some cases, proven) ‘hydraulic continuity’ with surface water.”
- It further states that “Concerns associated with existing instream flows include:
  - Based on the limited streamflow data collected, it is clear the established instream flows are not met in many areas of WRIA 1 at many different times of the year — in fact, the natural flow of rivers and streams often does not satisfy the established flows;
  - There have been advances in the methods used to evaluate instream needs and the methods used to establish the 1986 flows may not reflect the best available science;
  - There is no mechanism to ensure that instream flow needs can be met (whether they are the 1986 flows or new flows).”

## 2011

Ecology released the results of a 2007 follow-up study of contaminated drinking water in northern Whatcom County. The study states, on p. vii:

“The results of this 2007 study indicate that pesticides are still present in groundwater in the Bertrand Creek area. The study showed six wells [out of a sample size of 32] failed to meet the drinking water standard for EDB, and one well failed to meet the drinking water standard for 1,2-DCP.

“Fifteen wells failed to meet the drinking water standard for nitrate. A total of 81 percent of the wells had higher nitrate concentrations in 2007 than in 1998.”

## 2011

In *Kittitas County v. Eastern Washington Growth Management Hearings Board*, (2011), the Washington State Supreme Court held that the county “is **required** to plan for the protection of water resources in its land use planning” because “[t]he GMA **requires** that counties provide for the protection of groundwater resources and that county development regulations comply with the GMA.” Ecology “ought to assist counties in their land use planning to adequately protect water resources.”

## 2011

A case contesting the legal right of a new subdivision relying on permit-exempt wells to take groundwater away from senior water users in the closed Bertrand Creek watershed came before the Pollution Control Hearings Board (PCHB). Ecology argued, and the Board agreed, that “the county’s reliance on Ecology cannot change the Legislature’s choice that the county is the appropriate entity to make the decision” regarding “whether appropriate provisions had been made for potable water for the subdivision.” *Steensma v. Dept. of Ecology*.

- The Washington Supreme Court’s decision in 2016 agreed with Ecology’s argument in *Steensma* and with the PCHB’s conclusion that the county, not Ecology, determines water availability.

## **2011**

Department of Ecology's Focus on Water Availability, Nooksack Watershed, WRIA 1 stated that:

"During the summer, there is little rain and many streams and rivers are dependent on groundwater inflow. This means that groundwater and surface water are least available when water demands are the highest.

"Most water in the Nooksack watershed is already legally spoken for. Increasing demand for water from ongoing population growth, diminishing surface water supplies, declining groundwater levels in some areas during peak use periods, and the impacts of climate change limit Ecology's ability to issue new water rights in this watershed ...

"Though not closed, the Mainstem and the Middle Fork Nooksack River are subject to year-round minimum instream flows. Based on USGS streamflow data, these minimum instream flows are not met an average of 100 days per year, often during the periods when new water rights are desired (late spring through early fall).

"The groundwater permit exemption allows certain users of small quantities of groundwater (most commonly, single residential well owners) to construct wells and develop their water supplies without obtaining a water right permit from Ecology. Such a use is only exempt from the requirement to obtain a water right permit. These water uses are subject to all other provisions of the water code including the seniority system and can be regulated to protect existing water rights.

## **2012**

The Lummi Tribe's chapter of the Northwest Indian Fisheries Commission report, State of Our Watersheds, shows that 77 percent of the increase in permit-exempt wells in WRIA 1 has taken place in basins closed year-round or seasonally to water withdrawal.

## **2012**

The Growth Management Hearings Board and the Western Washington Hearings Board determined that the county's Comprehensive Plan violates the GMA for numerous reasons, including the following;

- "Hirst's unrebutted evidence demonstrates that vacant lots in existing rural areas can accommodate 33,696 additional people, where only 2,651 are expected ..." *Governors Point v. Whatcom County*, and Order Following Remand.
- In these rural areas, outside of cities, most of this new population will rely on permit-exempt wells in areas where the water is already legally spoken for.
- The current population of Ferndale, Lynden, Blaine, Nooksack, Sumas and Everson does not add up to 33,696 people.

## **2013**

In June, the Growth Management Hearings Board, Western Washington Region found that amendments to Whatcom County's Comprehensive Plan "left [the county] without Rural Element measures to protect rural character by ensuring land use and

development patterns are consistent with protection of surface water and groundwater resources throughout its Rural Area,” as required by the Growth Management Act (“GMA”).

- The Board emphasized that “[t]his is especially critical given the water supply limitations and water quality impairment documented in this case and the intensity of rural development allowed under the county’s plan.” *Hirst v. Whatcom County, Growth Mgmt. Hearings Bd., Western Wash. Region Case No. 12-2-0013, Final Decision and Order (June 7, 2013) (“FDO”) at 43.*

### **2013**

The WRIA 1 Groundwater Data Assessment stated, at page 91: “From the review of compiled public water system information, it appears that 326 public water systems do not have water rights.”

### **2013**

The Department of Ecology denied the Bertrand Creek Watershed Improvement District petition to amend the Nooksack Rule to implement a seasonal, rather than year-round, basin closure, stating that instream flows “are often met” in the winter but “are not met 100 percent of the time.”

### **2014**

In November, Ecology representatives held a meeting in Whatcom County to explain how Ecology would respond to a request to modify the Nooksack Instream Flow rule, based on some residents’ belief that the Rule leaves too much water in streams. Ecology representative Dave Christensen stated that a rule revision likely would require more water to remain in streams, based on the following considerations:

- “Current adopted flows are based on fish preference curves and 50 percent exceedance values
- Scientific understanding has changed since 1985
- Could affect fish preference curves
- Definitely would affect reliance on exceedance values — we now use 10 percent exceedance curve
- Tribal requests for federal adjudication of treaty-reserved water rights
- EPA listings of Puget Sound Chinook and steelhead.”

### **2016**

Ecology’s November 14, 2016, letter to Whatcom County Executive Jack Louws states that “instream flows have not been met on average 142 days per year [up from 100 days per year in Ecology’s 2011 Focus on Water Availability], and there are no years when instream flows have been fully met.”

It is no secret that Whatcom County has a water shortage. It has long been known and acknowledged that permit exempt wells contribute to water problems in Whatcom County. We can continue to kick the can down the road, or the county and Ecology can buckle down and do the water and land use planning that will protect farmers, fish, and homeowners. That was the message of the Supreme Court’s decision in *Hirst*.

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**Endnotes**

1. WAC 173-501.
2. Wash. Dept. of Ecology, Focus on Water Resources: Nooksack Watershed WRIA 1 (Nov. 2016), <https://fortress.wa.gov/ecy/publications/documents/1111006.pdf>
3. RCW 90.44.030
4. Whatcom County Hydraulic Investigations – Part 1, Critical Well/Stream Separation Distances for Minimizing Stream Depletion, by Tom Culhane (Ecology Water Resources Open File Technical Report.