DAILY JOURNAL OF COMMERCE
SEATTLE
Helping Business do Business Since 1893
September 28, 2017

ENVIRONMENTAL OUTLOOK

Water for rural development: tapping the Hirst ruling

Counties must determine whether water is legally available when issuing building permits that rely on permit-exempt wells.

By CHRIS PITRE and SHARON HAENSLY, Special to the Journal

Rural development relies largely on permit-exempt wells to provide drinking water to private residences, small water systems and other uses. In October 2016, the Washington Supreme Court's Hirst decision confirmed that counties must determine whether water is legally available when approving development that relies on permit-exempt wells.

This decision presents a challenge for counties, developers and the Washington Department of Ecology. This article offers some solutions to meet Hirst's requirements.

Background

Water in Washington is a public resource allocated on a "first-come, first-served" basis, meaning that new water uses cannot impair older senior water rights. Most water in Washington is already fully committed to meeting the needs of senior rights issued for drinking water, agriculture, industry and instream flows.

Photo from Copper Hills Construction [enlarge]

Rural developments, like this home under construction in Selah, often rely on permit-exempt wells for drinking water.

Instream flows are water rights that specify a quantity of water that must remain in the stream for salmon habitat. Water shortages are occurring with greater frequency and climate change will make it worse.

While these wells are exempt from Ecology's permitting process, they remain subject to the law against impairing senior rights. Groundwater pumping by permit-exempt wells in a basin can decrease water needed for older water rights.

Counties have historically only asked whether a well could physically provide the required quantity and quality of water. Hirst now clarifies that counties must also determine whether water is legally available before approving buildings and subdivisions that will use permit-exempt wells. Ecology has been largely passive here.

The legal availability of water varies statewide with the biggest variable being whether Ecology has adopted instream flow regulations that now cover about half of the 62 basins in Washington. Groundwater is not legally available if pumping reduces streamflows that are not being met unless the use is mitigated.

Hirst concerns

Landowners and developers are concerned about financial losses if the water supply they assumed would be available from permit-exempt wells is in fact not available. They include individuals who bought undeveloped property as part of their retirement plans and were uninformed about water availability constraints.

Counties are concerned about the administrative burden. They typically lack technical staff to assess water availability. They are also uneasy about liability when approving development reliant on permit-exempt wells whose use might be curtailed during a water shortage.

Varying responses

The counties' reactions to the Hirst decision have included:

- Requiring applicants to obtain professional opinions (Pierce and Spokane counties)
- Issuing building permits with disclaimers to "proceed at your own risk" (King and Snohomish counties)
- "Wait-and-see" approaches (Thurston and Lewis counties)
- Building moratoria (portions of Skagit and Kittitas counties)
- Offering water banking institutions (portions of Clallam and Walla Walla counties)

Dealing with Hirst

The Hirst decision is likely to remain in one form or another. Therefore, how will counties implement it? Counties may consider site-specific and regional approaches to mitigate impacts from permit-exempt wells and to avoid further disturbing natural hydrologic systems. While no one size fits all, tools exist and it is doable.

Site-specific approaches that help sustain the natural hydrologic system include stormwater management. Development can increase stormwater runoff to harmful levels — causing flooding, high stream flows that wash out salmon redds (egg nests) and erosion. Stormwater can be managed to avoid short-circuiting natural hydrologic systems, and can be done at the scale of homes (e.g., rain gardens), housing developments and the region (e.g., runoff from transportation corridors).

Septic systems and rain harvesting may provide a degree of impact mitigation but their benefits are often overstated.

Permit-exempt well use is split between interior use that returns to the groundwater system through septic systems, and outdoor landscape irrigation that evaporates and is lost. Giving up the green lawn is an obvious mitigation measure with 100 percent payback in reducing impacts.

Septic system return flows are about 90 percent of interior water use, and some claim that all of this should be applied as a mitigation credit. This may be true in certain settings, but may also be significantly less — possibly even zero — depending on the geology. Furthermore, septic return flow has water quality concerns.

Rain may be harvested in lieu of a permit-exempt well, or for later controlled release to mitigate permit-exempt well use. Rain ends up in evaporation, runoff and groundwater recharge.

Rain harvesting of the evaporation portion is a no-harm proposition with respect to watershed health. Harvesting the runoff portion may actually provide benefit by reducing harmful high stormwater runoff. However, harvesting the groundwater recharge portion impacts groundwater, though to a much smaller degree than permit-exempt well groundwater withdrawals (maybe two thirds less, depending on the geology).

Ecology's policy on rain harvesting is similar to that for permit-exempt wells in that: it is "not subject to the permit process"; and Ecology may curtail future rain harvesting if "rain harvesting systems are likely to negatively affect instream flow values or existing water rights."

Also, the reliability of water supply from rain harvesting will be quite variable year to year. Therefore, rain harvesting is likely only feasible as a source supplemental to another supply.

Photo from Seattle Public Utilities

Rain gardens help sustain natural hydrologic systems.

Metering well use will lead to conservation and efficiency, raise awareness and provide critical data to inform sustainable rural development. You have to know what you have in order to manage it.

Water banking is a regional solution that involves obtaining large water rights and distributing small portions to many users who then exercise their portion by installing a well. It is a purely administrative function with no physical transfer of water.

Water banks can be operated privately, publicly and by nonprofit non-governmental organizations such as the Washington Water Trust. They can only serve downstream areas; upstream sites have to rely upon site-specific mitigation measures.

Water banking transaction fees offset program costs. Yakima County is considering a form of water banking whereby the county retains ownership of the water right and charges homeowners a connection fee to install a well, plus a metered water use bill. This encourages conservation and provides a steady revenue stream to the county to administer the program.

Overcoming complexities

Any one of the above measures does not ensure a statewide — or even countywide — solution. Effective approaches will depend upon site-specific conditions such as geology and climate. Stormwater management in places with high precipitation may more than compensate for the impacts of permit-exempt wells, whereas rain harvesting may not be an option in dry areas.

Geology determines the timing and magnitude of impacts from permit-exempt wells on streams and the effectiveness of mitigation measures.

Therefore, a county's first task in responding to Hirst is understanding key countywide variables. Counties can develop a checklist to guide development by using GIS tools to overlay water systems, instream flow regulations and geology. They can identify areas where water is available, where simple mitigation measures will work, and where more work is needed to find workable solutions.

This approach will allow development to proceed in some areas and direct attention to areas that require more detailed management. This analysis can largely be completed with existing information.

The Foster decision

A 2015 court ruling known as the Foster decision requires drop-for-drop mitigation in the exact location and time that impacts occur. This standard rejects alternative mitigation measures such as conservation easements, restoration of streamside riparian vegetation, and creation/restoration of wetlands that may provide greater benefits than the impacts they are mitigating.

Opinions on this topic vary, with some desiring flexibility that will result in result in greater improvements for salmon habitat, while others are concerned that flexibility will allow misuse at the expense of salmon habitat.

Support for counties

Counties should not face this challenge alone. Ecology should provide information and technical assistance to help guide sustainable rural development.

Initial funding of Ecology's and the counties' efforts should come from the Legislature. A coordinated effort lead by counties, with Ecology's assistance, is far more financially efficient and fair than requiring each landowner to conduct their own water availability analysis, and will result in better stewardship of our water and salmon resources.

Finally, developing county policy and administering permit-exempt wells requires community support. This includes developers, real estate agents, landowners and tribes.

Tribes can help counties obtain the needed technical, policy and financial resources to succeed. Outreach and education are critical to soliciting this support. After all, most of us care deeply about maintaining rural development, healthy economies and thriving fish populations for the long haul.

Chris Pitre of Coho Water Resources consults in water resource management with specialties in watershed management, groundwater, water rights, water supply well installation, and aquifer storage and recovery.

Sharon Haensly, attorney in the Squaxin Island Legal Department, focuses on natural resources issues, and has represented tribes for nearly 25 years. Her views are not necessarily those of the Squaxin Island Tribe.