The nexus between land-use planning and water resource management

For several decades a growing conflict between land-use management by local government entities and water resource management by the Washington State Department of Ecology (Ecology) has greatly impaired the ability of local governments to effectively plan and manage land-use within their respective jurisdictions. This issue arose as Ecology, often with complicity or even outright direction of the courts, began to recognize the relationship of water-use with the management of in-stream flows in watersheds throughout Washington. Because these actions carry the full regulatory force and budget allocations of State Government, Ecology has prevailed in essentially directing local governments in how they must manage land-use in many regions. The primary tool through which this control has been achieved is the setting of in-stream flow levels through Ecology’s rulemaking at the watershed level and the restriction of what are referred to as “exempt wells” within affected areas where rulemaking applies. The effect of this rulemaking is tantamount to usurpation of local government authority to effectively plan for and manage land-use within its jurisdictional boundaries.

The one concession Ecology has provided to local governments has been the establishment of a “reserved” water supply within a given rule through which smaller uses of water would be allowed. The most prominent expression of these water set asides is in the context of rural development where an individual or group domestic use typically acquires its water right through an element of groundwater law commonly referred to as the “exempt well.” Though the exemption (RCW 90.44.050) had been generally left in effect in earlier in-stream flow rules (1978 to 1982), more recent Ecology rules have declared the well exemption to be closed within certain regions covered by additional rulemaking. The establishment of a finite and generally small groundwater reservation to serve rural domestic growth – where purveyor supplied water is unavailable – is at times added to the rule to provide an asserted solution for that small water need. Sadly though, Ecology’s rural water reservations have proven to be inadequate toward satisfying this aspect of domestic-related growth on many occasions.

Even in instances where current rulemaking reserves some water for future rural land-use, this approach essentially places a time limit on the subsequent development and use of rural properties. As such, the projection of future rural water-use is not a particularly fair or appropriate constraint when considering a region’s ultimate land-use.

Two recent State Supreme Court rulings (Kittitas County v. Eastern Washington Growth Management Hearings Board – 2012, and Swinomish Indian Community v. Ecology – 2013) have changed the entire decision making landscape with regard to how local government land-use decisions relate to State water resource management. The Kittitas County case made it clear that the responsibility to verify that water is available before issuing a building permit extends to the legal availability of water as well as the physical availability of water. The above referenced court rulings have created a legally binding reality and framework that county planning and permitting programs must incorporate.

Furthermore, the Swinomish State Supreme Court ruling struck down the practice of setting aside water reserves as exercised in Ecology’s “Overriding Considerations for Public Interests” (OCPI) provision contained in its 2006 amendment made to the Skagit Basin In-stream Flow Rule (WAC 173-503). Though this represents a special case where the water reservation was accomplished after in-stream flows had been set, the court’s decision has placed the entire OCPI concept under great scrutiny. Within the Skagit Basin, the Court’s decision has essentially closed the area to exempt well drilling. The overall effect of the recent Swinomish Court ruling is almost certain to have further implications across the state.
Although there are arguments that could be brought to defend the water reservation approach, it is our assertion that there is a better and fundamentally more appropriate way to define the relationship between land-use management and water resource management.

Since this conflict must be addressed as a matter of governance before it can be addressed as a matter of science and economics, we propose that the relationship between local government responsibility and authority, and State (Ecology) water resource management responsibility and authority, should be clearly defined. This task could be accomplished through Memoranda of Understanding (MOU’s) between individual local governments and Ecology. However, after years of observation and direct industry involvement with Ecology’s ongoing rulemaking process, which has, on numerous occasions, resulted in unfortunate rural-region impacts, we are convinced that the governance responsibility and authority issue could be better addressed and established on a statewide basis through legislative means.

The legislation should clearly state that the authority for land-use planning and its overall decision making rests with local governments. However, where Ecology has demonstrated the need and has removed the RCW 90.44.050 domestic well exemption by rule, and in those cases where local government decisions are demonstrated to result in an adverse impact on water resources – or can reasonably be predicted to have such effects, the nexus between land-use management and water resource management must be coordinated. The legislature should state that in such situations it shall be incumbent upon Ecology to inform the local government that its actions are contrary to Ecology’s responsibility to protect and manage the water resources of our State. Such notice will have to be sufficient in detail, to define the magnitude, timing and place of the asserted impairment of the water resource in order to allow for the reasonable development of a mitigation plan. As in all other aspects of Western Water Law, the entity asserting water right impairment carries the burden of proof and the assertion must be substantiated with sufficient evidence to demonstrate that impairment will occur or is reasonably predicted to occur. Upon supplying notification of the expressed or predicted impairment, it shall then become the responsibility of the land-use authority to: 1) offer mitigation as a governmental entity, 2) condition land-use permitting that requires mitigation by the applicant, 3) challenge the assertion of impairment, or 4) rescind or not issue the permit(s) for land-use or amend the subject land-use policies.

The above approach allows local governments to proceed with their responsibilities toward managing land-use and allows Ecology to fulfill its obligations in managing the State’s water resources. Once this governing interaction is defined, science and engineering can be brought to bear to define mitigation options. Economics will then determine whether mitigation will be practical or not.

Because the primary hardship of our State’s current groundwater situation falls predominantly on the rural (exempt well) property owner, let us briefly consider domestic water-use from that perspective. The development of a single domestic water system currently comprises the drilling of a source well, the building of a dwelling with appropriate plumbing, and the construction of an on-site waste disposal system (septic drainfield). Ecology has already written a rule (WAC 173-518) for the Dungeness River area in Clallam County that addresses the water resource implications of such single domestic well systems. In it they defined the consumptive use for a single domestic water system’s indoor use to be just 15 gallons per day (gpd) based upon a 90% return flow.

Therefore, if a sub-basin in this area were to have 10 rural homes built, the in-house net consumptive use would equal 150 gpd. One hundred homes would consume just 1500 gpd. It is important to note that different regions of the State (based upon climate, hydrogeology and precipitation patterns, etc.) have their own water use patterns. This is equally true for rural exempt well users. The rural domestic water demand as defined for a given permitting jurisdiction could be higher than the amount defined for the Dungeness Basin. However, as water studies and facts already dictate, a substantial return flow from such systems remains true throughout the State. Indeed, the consumptive use portion of rural domestic well production likely represents the most efficient water use in the State.

To provide added perspective to the Clallam County consumptive use example, 1500 gpd is equivalent to slightly more than 1 gallon per minute – which can be produced by a very small well. Mitigation could easily be accomplished by placing, equipping, and operating such a well positioned at the headwaters of each of the threatened tributaries at a cost
of less than $50,000. This undertaking would be complete with a solar powered pump that is controlled by the stream-flow stage, capable of assured operation during the identified period of water impairment. A local government can then weigh the costs of such mitigation against the projected tax revenue to be gained by the construction of 100 new homes and determine if the cost of mitigation is justified as a government project. If not, the fee for building permits could be increased to offset the $50,000 cost of mitigation ($500 per home in the Dungeness) – or the local government could consider some other means to facilitate private sector groups in the funding of such projects. If not simple wells, storage devices such as small off-stream reservoirs or even small aquifer storage and recovery projects should be considered. Simply stated, small magnitude impairments are able to be efficiently mitigated at reasonable cost.

The consumptive use calculations previously referred to in WAC 173-518 have been used for illustration purposes. The daily water-use amount ultimately represents a permitting decision made by the land-use authority. If the land-use authority determines that more than 150 gpd of indoor single domestic-use water is appropriate within a particular geographic setting, the mitigation amounts previously discussed would increase proportionately. In any event, the mitigation requirement would still be small.

We offer the discussion of rural domestic mitigation to clearly demonstrate that mitigation represents a reasonable solution and to further illustrate that, long-harbored, assertions made regarding the impairment of streams as a result of rural development are at best gross overstatements and perhaps even intentional exaggeration by those pursuing other agendas. It’s time to replace those assertions and allow for sensible, feasible technologies and economics to play their rightful role in resolving our State’s water impairment issue. Once the way is opened for the application of ingenuity and technology, many methods for the definition and mitigation of impairment will be found.

The solution is to accept credible assertions of water impairment, knowing the impairment is manageable through mitigation. The first step is for the legislature to acknowledge both the local governments’ land-use role and Ecology’s water resources role, thereby making it clear that neither governing body holds power over the other – but rather each government entity is required to recognize the other’s established responsibilities and authority. Ecology must demonstrate the asserted impairment and local governments must then research appropriate mitigation options available to them and make their respective land-use decisions in the context of established water resource management requirements.

In the end, all governing entities involved are answerable to the same power … THE PEOPLE.