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RE: Comments on proposed rule WAC Ch. 173-539A

The Center for Environmental Law and Policy (CELP) is a membership-based organization dedicated to responsible water resource management in Washington State and throughout the Columbia River Basin. CELP is actively involved in exempt well issues throughout the state and particularly in Kittitas County. Aqua Permanente (AP) is a non-profit organization dedicated to protecting senior water rights in Kittitas County. These comments are submitted on behalf of both organizations, and include supporting documents submitted as attachments, as well as incorporation of comments and documents submitted by other parties and as referenced in the endnotes below.

On January 7, 2009, the Washington State Department of Ecology (Ecology) published proposed rule WAC 173-539A. If promulgated, this rule would establish well management measures that permanently allow the use of exempt wells in Upper Kittitas County. Because WAC Ch. 173-539A continues to allow unmitigated permit-exempt wells, the proposed rule fails to responsibly manage the limited water resource available in Kittitas County. Because the Yakima Basin is already over-appropriated, permit-exempt well proliferation as allowed under the proposed rule would allow junior water rights holders, *i.e.* permit-exempt well owners, to take water that legally belongs to more senior water rights holders, *i.e.* post-1905 water rights holders, and stress instream flows, endangered species habitat, and water quality. These comments are intended to describe the concerns of CELP and AP's to the rule as drafted, provide Ecology with information that it may have failed to consider during the drafting process, and facilitate Ecology's redrafting of the rule to ensure new groundwater withdrawals will not harm senior users or the public welfare.

I. Introduction

The Yakima Basin, in which Kittitas County is located, is an area of the state where the amount of water permitted for use is greater than the amount of water available. In times of shortage, this over-appropriation of the Basin routinely leads to curtailment of junior water rights (those whose water rights date from May 10, 1905) in order to protect more senior water rights. Simply put, water supply is not adequate to satisfy current water users, much less new or future water users. This situation is particularly worrisome in light of two additional facts: 1) Kittitas County is a rapidly growing county with substantial increasing demand for water, and 2) the impacts of climate change in the Basin will decrease the supply of water now available for appropriation.

Almost all of the Basin's cities and towns rely solely on groundwater for their public water supplies.¹ Though Kittitas County is experiencing tremendous growth, Ecology has not issued any new ground water rights since the mid-1970s. The water deficit is being filled by permit-exempt wells, which are proliferating at an alarming rate despite over appropriation, routine curtailments, and Ecology's freeze on issuance of new groundwater rights. This is troubling for the following two reasons. First, most ground and surface waters in the Basin are hydraulically continuous. Thus, most exempt wells tap into the same limited water supply that supports more senior water rights, instream flows, salmon habitat, and water quality. Second, Ecology has historically failed to subject permit-exempt wells to curtailment orders, even though exempt wells are exempt only from the permitting process and not from other tenets of the water code establishing priority dates based on date of first use. These two factors coalesce to create an untenable situation: in times of shortage, users of new exempt wells take water that legally belongs to more senior users.

Stirred by a series of forced curtailments in Kittitas County, local residents with post-1905 water rights formed Aqua Permanente ("AP") to protect their water rights. AP's core concern is the proliferation of new groundwater withdrawals from permit-exempt wells. AP believes that it is unjust that their members are forced to curtail water use in times of shortage while more junior permit-exempt wells are allowed to pump water unabated. This concern led AP to petition Ecology in September 2007 to close Kittitas Valley to new groundwater withdrawals pending completion of hydrogeologic studies assessing the impacts that future permit-exempt wells will have on the Basin.

CELP joined AP's petition. CELP's letter asked Ecology to stop all permit-exempt groundwater withdrawals in Kittitas County until Ecology had sufficient hydrogeologic information to determine whether new withdrawals are harming senior users and the public welfare. The AP and CELP requests were made pursuant to RCW 90.54.050, which specifically allows Ecology to withhold such waters when faced with insufficient information or data.

Ecology denied the AP/CELP petition and instead released a Draft Memorandum of Agreement (MOA) with Kittitas County on March 4, 2008. CELP and AP commented on the Draft MOA, noting that its failure to halt future withdrawals of groundwater meant that

negative impacts to instream flows and senior rights would continue. On April 7, 2008, Ecology signed a Final Memorandum of Agreement with Kittitas County and began implementation of an emergency rule. The emergency rule, adopted on July 8, 2008, and renewed on November 6, 2008, also failed to address the problem of unmitigated and unmetered groundwater withdrawals. Instead, the emergency rule instituted a series of steps that exempt well users must take prior to using their wells. For instance, new subdivisions require SEPA review, and may require a hydrogeologic report of the groundwater conditions in the area. However, the emergency rule failed to make mitigation mandatory or subject exempt wells to curtailment. The end result remains the same: exempt wells are being drilled and put to use without consideration of or mitigation for impacts to senior water users and streamflows.

On January 7, 2009, Ecology proposed WAC Ch. 173-539A, which would make permanent many of the provisions set forth in the emergency rule. In this letter, CELP and AP provide written comments on the proposed rule. By submitting these comments, CELP and AP 1) state the reasons for our opposition to WAC Ch. 173-539A; 2) provide Ecology with information that it may have failed to consider during the rule-drafting process; and 3) request redrafting of the rule to ensure new groundwater withdrawals will not harm senior users, the public welfare, and instream flows. Pursuant to these aims, these comments make the following points:

1. Kittitas County residences and businesses are dependent on water from the Yakima River Basin. Most groundwater, including in Kittitas County, is hydraulically continuous with surface water in the Yakima Basin.
2. The Yakima Basin is over-appropriated in dry years, and as a result, is routinely subject to curtailment orders. Curtailment orders in Kittitas County affect post-May 10, 1905 surface water rights, but are not applied to groundwater withdrawals from permit-exempt wells.
3. In the hydraulically continuous Kittitas County area, unregulated groundwater withdrawals deplete surface water, leading to disruption of surface water uses. Specifically, unregulated groundwater withdrawals combined with the effects of climate change means that water is becoming an increasingly scarce resource in Kittitas County. Increasing water scarcity will lead to more frequent curtailment orders impacting post-1905 water rights in the future.
4. In Kittitas County, thousands of permit-exempt wells have been drilled, or are slated for drilling in the period dating from 1905 to the present. The cumulative impacts of these wells is affecting surface water flows.
5. Ecology is required to protect water supply. Despite this duty, Ecology has not taken action to ensure that permit-exempt wells do not individually, or in the aggregate, adversely affect post-1905 surface water rights, instream flows, salmon habitat, or the quality of water.
6. WAC Ch. 173-539A does not require that permit-exempt wells be subject to curtailment based on priority date as otherwise prescribed by the Washington water code. The effect is that in times of shortage, exempt well users are likely using water that belongs to post-1905 surface water rights holders.

7. WAC Ch. 173-539A does not require hydrogeologic studies aimed at establishing whether continued exempt well usage individually or in the aggregate harms post-1905 water rights, instream flows, salmon habitat or the quality of water in times of shortage. Instead, WAC Ch. 173-539A makes hydrogeologic impairment reports discretionary, and allows private parties to provide such reports. Ecology does not have authority to delegate its water code-based impairment duties to private parties or local government as prescribed by WAC Ch. 173-539A.
8. Metering of exempt wells is the only way to ensure that permit-exempt wells are not exceeding their statutory allowable amount, yet WAC Ch. 173-539A does not require metering of all exempt wells.
9. Mitigation can offset adverse impacts caused by permit-exempt groundwater withdrawals, yet WAC Ch. 173-539A does not make mitigation mandatory.
10. The Determination of Non-Significance issued for the draft rule is improper because the rule will cause impacts that should be, but are not, mitigated.
11. The Determination of Non-Significance is also improper because it is based on a checklist that either does not identify all impacts, or mischaracterizes the impacts, of the rule.

WAC Ch. 173-539A purports to reduce the amount of water available for new residential developments, however the fundamental aspects of the exempt-well regime do not change: exempt-wells are still permitted; Ecology cannot say that exempt well withdrawals, in aggregate, do not adversely impact other legally protected water uses; and mitigation measures remain voluntary. Thus, WAC Ch. 173-539A fails to protect post-1905 surface water rights from competition from new exempt wells, fails to remediate the unsustainable burden that exempt wells impose on Yakima Basin water users, fails to protect the public interest, and, in the context of global warming, exacerbates water availability problems.

II. WAC Ch. 173-539A is defective for the following reasons.

Ecology's proposed rule, WAC Ch. 173-539A, has little, if any, practical effect on protecting post-1905 surface water rights holders, instream flows, salmon habitat, and water quality within Kittitas County. This section outlines CELP and AP's general concerns with the proposal to continue to allow permit-exempt well withdrawals in the Yakima Basin where ground and surface water are hydraulically connected. Section IV below provides section-by-section comments on the rule.

A) *WAC Ch. 173-539A does not address the problem of over-appropriation of water in the Yakima Basin, which leads to curtailment of post-1905 water rights.*

According to the USGS, the Yakima Basin is fully appropriated in average years and over-appropriated in dry years.² Appropriately, since the *Acquavella* litigation commenced in 1977, Ecology has stopped issuing new surface water rights. Since 1993, Ecology has also stopped issuing groundwater rights with the exception of permit-exempt wells.³ Though placing a moratorium on the issuance of new water rights is the responsible course of

action in the Yakima Basin precisely because water is a scarce resource, the unrelenting pace of exempt well construction has undermined the protections afforded by Ecology's actions. Instead of making the moratorium on new water rights complete, which is the only way to protect existing water sources in the Basin, WAC Ch. 173-539A allows unmitigated permit-exempt well withdrawals to continue.

Evidence of water shortages in the Yakima Basin is uncontested. As explained in greater detail below, in 2001, the proratable entitlement to post-1905 surface water right holders was only 37 percent. Thousands of water users are ordered to stop using water in the Yakima Basin during water short years.

Even if the climate in Eastern Washington remained the same as it is today, uncontrolled growth of exempt wells will continue to increase unsustainable pressures on the already over-appropriated basin in Kittitas County. Unfortunately, water availability will worsen. The impacts of climate change on Eastern Washington are likely to cause drier conditions during most of the year.⁴ Because WAC Ch. 173-539A fails to curb the expansion of exempt wells and account for climate change, post-1905 surface water rights holders, instream flows, salmon habitat, and water quality are placed in jeopardy by this rule.

B) WAC Ch. 173-539A fails to recognize that surface and ground waters in the Upper Yakima Basin are hydraulically continuous and must be regulated in an integrated fashion.

From a physical standpoint, ground and surface waters are usually connected to and affect one another. According to Darcy's law, gravity causes ground water to flow down gradient from recharge areas to discharge areas. Discharge areas usually are surface waters. Geologic composition affects ground water seepage patterns, distances, and travel time.⁵ There is no reason to believe that the hydrology of the Yakima basin, including in Kittitas County, operates any differently than what Darcy's law describes.

Indeed, the Department of Ecology has explicitly acknowledged that ground and surface waters are connected in the Kittitas County. In 1985, Ecology issued a hydrogeologic evaluation of the Upper Yakima River Basin, stating that:

Stream alluvium and glacial and valley-train deposits of the Quaternary Age partly fill all the large basins and most stream valleys in the study area. . . . The alluvial and glacial deposits have a considerable ground-water storage capacity and are recharged by precipitation, by infiltration from streams during periods of high runoff, and by percolation of irrigation water. During the dry periods of late summer-early fall, ground water discharging from these deposits helps maintain streamflow."⁶

The conclusions of the Ecology report are supported by substantial hydrogeologic studies prepared before⁷ and since⁸ that date.

The groundwater study now underway for the Upper Kittitas Valley cannot be used to assert that Ecology is unaware that groundwater in Kittitas County is hydraulically connected to surface waters. That study, if done properly, will confirm scientific findings that have been known for several decades. It may be that some groundwater in Kittitas County is unconnected to the surface water system, but that does not obviate Ecology's present duty to manage groundwater in areas that are known to be hydraulically continuous with surface waters.

This duty is mandatory. In Washington, ground and surface waters must be regulated together. Pursuant to RCW 90.54.020(9), "full recognition shall be given in the administration of water allocation and use programs to the natural interrelationships of surface and ground waters." Both statutes and cases require integrated management of ground and surface water resources.⁹

In the arid Yakima Basin, domestic wells typically use substantial quantities of water for lawn and garden irrigation, in addition to indoor uses. Much of the outdoor water is consumed, i.e., evaporates rather than percolating back to groundwater. The USGS estimates 17 percent of the precipitation in the Yakima Basin is used consumptively.¹⁰ Consequently, not all water that is applied to domestic irrigation in the summer recharges the aquifer and returns to surface streams and the river. Exempt wells are affecting water supply for existing, senior surface water users in the Yakima basin.

Due to the dynamic relationship between surface and ground water, well pumping captures or intercepts ground water and irrigation return flows that would otherwise flow into streams. Thermal advection from ground water discharge plays an important role in regulating stream flow temperature and controlling aquatic ecosystems. In the Yakima River Basin, the ecotone where discharge meets stream flow provides habitats for salmonid species at different life stages, protecting egg survival for native bull, rainbow, steelhead, and kokanee trout.¹¹ Disruption or removal of ground water discharge also degrades water quality in surface waters. These impacts are exacerbated by broader environmental problems, including seasonal flooding, climate change-induced reductions to year round water supply, and changes in seasonal deliveries.

C) *WAC Ch. 173-539A fails to acknowledge that, because Yakima Basin groundwater is hydraulically connected to surface waters, permit-exempt well withdrawals contribute to curtailment of post-1905 water rights.*

As discussed above, the Yakima River Basin is an over-appropriated basin. The surface water adjudication of the basin has been ongoing since 1977 and is coming to conclusion.¹² Based on conditional final orders issued in the *Acquavella* case, as well as a federal court consent decree allocating water among users, "junior" water right holders in the Yakima basin are regulated and water deliveries curtailed in years when the U.S. Bureau of Reclamation (USBR) determines that "total water supply available" (TWSA) is insufficient to satisfy all users.¹³ The purpose of curtailment is to protect senior water rights in low

water years. The USBR has ordered curtailment of water deliveries several times in the last three decades.

Table 1 Water Delivery Curtailment and Proration Percentages

Year	Beginning Storage (AF)	Estimated TWSA (April-Sept. 30)	% of Proratable Entitlements Provided During the Year
1973	821,000	2,343,000	80%
1977	889,800	2,036,800	66%
1979	603,100	2,630,100	65%
1987	524,800	2,545,700	68%
1988	392,900	2,530,100	88%
1992	816,300	2,352,900	58%
1993	354,900	2,000,400	67%
1994	296,000	2,015,700	37%
2001	383,895	1,680,000	37%

Source: Adapted from Yakima Watershed Plan, 2003, Table 2-3, April 1 Forecast of TWSA for Years that Proration Occurred.

In addition to the dates shown in the table above, junior surface water users in the Yakima Basin were regulated in 2004 and 2005.

Curtailment orders apply to: 1) the four water users with the largest proratable supplies (Kittitas Reclamation District, Roza Irrigation District, Yakama Nation through the Wapato Irrigation Project (serving the Yakama Reservation) and Sunnyside Irrigation District); 2) the Yakima-Tieton Irrigation District, Selah-Moxee Irrigation District, and Union Gap Irrigation District; 3) seven other water users with entitlements over 5,000 acre feet; and 4) individual water users who hold post-1905 water rights.¹⁴

Curtailment orders have not, however, been issued to permit-exempt well owners.

Aqua Permanente members are members of the Kittitas Reclamation District (KRD). In years when USBR orders KRD to curtail water use, those orders are published and KRD members, including AP members, lose access to some or all of their surface water supply after the commencement of storage control and until October 31 or the date when prorationing ends.¹⁵ Water use for any purpose, including irrigation or domestic use, is prohibited. Users are instructed to lease or purchase surface water rights with priority dates that pre-date May 10, 1905.¹⁶

Curtailement orders extend even to municipalities. For example, the City of Roslyn, a 1908 water right holder, was ordered to curtail its water use during drought years 2001 and 2004, while nearby vacation and rural residences, utilizing recently drilled permit-exempt wells, did not face any restrictions. In 2001, Roslyn attempted to transfer an emergency water right from Swauk Creek, but was ordered not to use those rights because Swauk Creek had dried up.¹⁷ Meanwhile, a new residential subdivision was being built using exempt wells for water supply in the Swauk Creek drainage. Roslyn has spent more than \$600,000 attempting to purchase and transfer water rights to avoid future curtailment.¹⁸

Curtailement orders have also extended to more than 500 cabin and nonprofit camp owners in upper Kittitas County, including several YMCA programs. As junior right holders to the Yakima Irrigation Project, cabin and camp holders have been ordered to curtail water use three times since 2001. Temporary one-year water transfers have provided a limited solution, but sellers are hesitant to participate.¹⁹

With respect to groundwater, the U.S. Bureau of Reclamation (USBR) claims water rights, dating to May 1905, to all groundwater in the basin that is tributary to the Yakima and Naches Rivers, including all project water that seeps into the ground and returns directly or indirectly to the two rivers.²⁰ USBR claims this water both to satisfy water delivery duties to irrigation districts, and to protect instream flows for fishery purposes.²¹ USBR estimates that groundwater return flow, *i.e.*, water that is delivered to upper basin irrigation districts that percolates into the ground and re-emerges into the Yakima River to supply lower basin districts, comprises an estimated 350,000 acre-feet per year, or 11 percent of its total available water supply.²²

Ecology no longer issues groundwater rights in the Yakima basin. In 1993, the Yakama Nation appealed 43 state-issued water rights for deep groundwater pumping in the Black Rock-Moxee area of the Yakima River basin. Those appeals resulted in a settlement agreement in which Ecology agreed not to issue new groundwater rights in the Yakima Basin pending completion of a USGS groundwater study.²³ Several of the appealed rights were issued, but required mitigation, which was measured in tenths of acre-feet, to offset impacts to the Yakima River and TWSA.²⁴ It is anticipated that Ecology will not issue new, unmitigated groundwater rights in the basin, for the same reasons it will not issue new surface rights: water is over-allocated, requiring frequent curtailment. Because ground and surface waters are connected, pumping new groundwater will adversely affect existing surface water users. Hence ground water is not legally available for new appropriation.

D) WAC Ch. 173-539A fails to address cumulative impacts.

The problem with exempt wells is not necessarily a result of one individual well, but the cumulative impact of many exempt wells. Currently, as many as one-half million exempt wells exist in Washington. Each year, approximately 6,500 new permit-exempt wells are drilled in the state.²⁵ Though permit-exempt wells are subject to regulation based on priority dates, Ecology does not enforce against exempt wells and they are not included in general stream adjudications. Ecology itself acknowledges that abuse and proliferation are statewide problems.²⁶ Yet WAC Ch. 173-539A does not acknowledge or address the

proliferation of permit-exempt wells in Kittitas County, nor does it prevent the cumulative impacts of exempt wells from harming the public interest or senior water rights holders. The result, therefore, is an increased inability for the Yakima Basin to fulfill its various and legally protected water needs.

E) *WAC Ch. 173-539A fails to protect instream flows and endangered salmon habitat.*

(1) Fisheries flow impacts on the mainstem.

The Yakima River Basin and its tributaries, streams, and lakes are now the focus of substantial endangered species recovery efforts focusing on, among other activities, restoration of instream flows.²⁷ Historically, the Yakima Basin was populated by five healthy salmon runs; including spring, summer, and fall Chinook, Coho, sockeye, and steelhead along with bull trout. It is estimated that in the 1800's, prior to development of the USBR irrigation project, 790,000 salmon and steelhead returned to the Yakima each year.²⁸ The native peoples of the region, the 14 tribes and bands now comprising the Yakama Nation, were dependent upon salmon for economic and cultural survival.

The USBR irrigation project destroyed most of the salmon fisheries of the Yakima Basin. For many decades, up until the 1980's, the lower reaches of the Yakima River ran dry because of irrigation withdrawals. Lack of water instream destroys fisheries. As part of the *Acquavella* stream adjudication, the Yakama Nation claimed and won a right to maintain water instream for purposes of protecting salmon fisheries, as well as water for resident fish and other aquatic life. This right extended to both on- and off-reservation streams in the Yakima Basin and has a priority date of "time immemorial."²⁹

In addition, in 1994 the U.S. Congress enacted the Yakima River Basin Water Enhancement Project (YRBWEP).³⁰ YRBWEP requires that the USBR maintain a minimum instream flow at the Sunnyside Diversion/Parker gage. This gage serves as the control point for the entire Yakima River, including the reaches in Kittitas County.³¹ YRBWEP requires that the target flows be increased incrementally as water is conserved by irrigation districts; for every 27,000 acre feet conserved, instream flows will increase by 50 cfs.³²

Concurrent with these events, the National Marine Fisheries Service (NMFS) and U.S. Fish & Wildlife Service (USFWS) listed several Yakima River salmon and steelhead species as endangered or threatened pursuant to the federal Endangered Species Act. Native summer sockeye, coho, and chinook went extinct in the 1970's and steelhead and bull trout are threatened.³³ Upper Columbia spring-run chinook are listed as endangered.³⁴

As a result of these events, the USBR Yakima Irrigation Project is now operated to protect both instream flows for fisheries as well as water deliveries to irrigators. To determine fisheries needs, the Bureau has convened the Systems Operations Advisory Committee (SOAC), which monitors fish migration and river flows to determine how much water must be maintained instream to protect fisheries. The Bureau has, from time to time, directed the "spill" of water or flushing flows from its reservoirs to ensure fish passage up or down the Yakima River system.³⁵ These spills occur over and above the obligation, mandated by

Congress to maintain at least a 300 cfs minimum flow at Parker gage. To date, these spills and flows have not been adequate to recover the threatened and endangered populations of fish.³⁶

Hence, water delivery obligations in the Yakima River basin include not only providing 1,070,700 acre-feet of water (reservoir storage capacity) to irrigation districts, but also providing adequate flow in the Yakima River and its tributaries to ensure fish survival and recovery.³⁷

(2) Fishery flow impacts in the tributaries.

In addition, the Bureau of Reclamation – working with the Columbia Basin Water Transaction Program, Washington Water Trust, and local landowners – has expended substantial resources to restore tributary stream flows through the YRBWEP-directed water and land acquisition project. For example, the Bureau has expended considerable effort to restore streamflow in the Teanaway River in the upper Kittitas Valley, a river that historically was a major producer of spring Chinook, steelhead and coho salmon.³⁸ Similar efforts have yielded results in Taneum Creek, also in the Kittitas Valley.³⁹

The failure to protect tributaries such as the Teanaway and Taneum is a particularly problematic feature of the draft Kittitas rule. Because the upper watersheds of these tributaries do not have storage facilities, permit-exempt wells drilled into sediment, glacial till and possibly even bedrock are pumping groundwater that rightfully belongs to the rivers. It is impossible to protect acquired instream water rights from unregulated exempt wells.

Permit-exempt wells in the basin continue to be drilled without an adequate assessment of the source of the water or whether the withdrawals will impact instream flows for protected species. WAC Ch. 173-539A does not adequately address this problem, and as a result, leaves stream flows at risk. Until hydrogeologic studies are complete indicating that salmon habitat will not be adversely impacted by the cumulative effect of new wells, Ecology should place a moratorium on all new unmitigated permit-exempt well withdrawals.

F) *WAC Ch. 173-539A improperly relies on action by local government to protect existing water users and prevent impairment.*

Kittitas County has routinely failed to comply with its mandate under the Growth Management Act (GMA) to protect ground water sources for public supply. Because of lax enforcement, developers may also be violating the limitations set forth by the Washington Supreme Court in *Campbell & Gwinn*.

(1) *WAC Ch. 173-539A does little to curb the abuse of permit-exempt wells in Upper Kittitas County*

Residential development in Kittitas County in areas not served by public water systems puts pressure on already strained water supply. Because the basin is over-appropriated, and Ecology is issuing no new surface or groundwater rights, domestic exempt wells are

filling the water supply gap. Forty percent of Yakima Basin households depend upon domestic wells, most of them permit-exempt, as their water source.⁴⁰

The Yakima Basin Watershed Plan notes that many areas of Eastern Washington are experiencing long-term water declines in watersheds due to groundwater withdrawals.⁴¹ It also states that “similar overdraft might be occurring in the Yakima Basin” with exempt wells “adversely affect[ing] nearby water resources.”⁴² Yet, the Kittitas County Board of County Commissioners opted out of the Yakima River Basin Watershed Management Plan citing numerous reasons, including a lack of “demonstrated relationship in our region between groundwater and in stream flows” and fear that “exempt well statement[s] sets [the] stage for metering and/or termination of exempt well drilling.”⁴³ As of the date of filing of these comments, there appears to be no plan for the County to join the watershed planning process or otherwise comprehensively plan for water.

As of April 2007, more than 6,000 unimproved lots have been created in Kittitas County, most planning to use an exempt well for water supply.⁴⁴ While not all wells have been constructed, well drillers have filed 374 “start cards” or notices of intent to construct new water wells with the Department of Ecology’s groundwater database program between September 13, 2007 and February 18, 2009. This is in addition to the 5,082 wells that were drilled as of August 2007.⁴⁵ Ecology maps indicate substantial growth in development over time, and Kittitas County policy continues to create an urban density through short platting in rural areas despite lack of water supply data.⁴⁶

Section 173-539A-055 proposes to grandfather all of the permit-exempt wells that serve existing parcels and unimproved lots, regardless whether water has been put to beneficial use, and regardless of impacts on existing water users and streamflows. This provision should not be adopted as written.

Under RCW 90.44.050, exempt wells are exempt only from procedural permitting requirements, but still subject to the Washington water code priority system, beneficial use requirements, enforcement to protect senior water rights, and protection of the public interest. As development occurs in the county, these requirements are not being enforced. Additionally, Kittitas County has a history of non-compliance with growth management requirements, failure to implement a water resources management plan, and allowing for the violation of *Campbell & Gwinn* requirements.

(2) Kittitas County continues to violate Growth Management Act mandates regarding protection of water resources.

Rapid growth in rural areas dependent on permit-exempt wells contradicts the requirements of the Growth Management Act (GMA), Ch. 36.70A RCW. RCW 36.70A.020(10) requires counties to include the goal of protecting and enhancing the state’s high quality of life, including “the availability of water.” Though this is one of several broad goals, the GMA does require more specific protection of the state’s water resources. RCW 36.70A.070 details the mandatory components that must be included in every comprehensive plan. Every plan must have a section regarding “rural development” designed to protect the rural character of the county. To accomplish this mandate the GMA

requires all comprehensive plans to protect “surface and groundwater resources.” Water use and land use are inextricably connected so it makes perfect planning sense for counties to consider their available water resources when determining land use. Kittitas County has failed to properly implement these code sections.

In February 2007, Kittitas County Conservation Committee, RIDGE, and Futurewise filed a petition for review regarding several land use regulations promulgated by Kittitas County. In August 2007, the Eastern Washington Growth Management Hearings Board (Board) found Kittitas County in violation of RCW 36.70A.070 by including the allowance of three-acre urban density lot sizes, (Rural-3 and Agricultural-3), in rural areas.⁴⁷ Consequently, in March 2008, the Board ruled that Kittitas County was out of compliance with GMA requirements to protect and enhance water quality and quantity.⁴⁸ The Board found that the Kittitas County Comprehensive Plan allows multiple divisions of commonly owned property, leading to side-by-side subdivisions that should be required to obtain water rights, but instead rely on multiple permit-exempt wells for water supply.⁴⁹ This ruling comes less than a year after the Board found the County’s Comprehensive Plan inadequate for failure to protect the county’s rural character by allowing sprawl to occur in non-urban areas.⁵⁰ The most recent iteration of this on-going litigation is the February 4, 2009 decision of the Board finding that Kittitas County has persistently disregarded GMA requirements despite the Board’s earlier orders.⁵¹

The County has authority to deny subdivisions and building permits based on a finding that water supply is not adequate.⁵² In making this determination, the County must consider the requirements of the Water Code, Chs. 90.03 and 90.44 RCW.⁵³ To date the County has never exercised this authority to deny a subdivision plat or building permit. WAC Ch. 173-539A does not require the County to deny plats or permits based on water supply problems, nor does it mandate impairment studies for exempt wells. Kittitas County’s history of non-compliance with GMA requirements to protect the county’s water resources and the weak language of the proposed rule likely means this practice will continue in the county. Only a moratorium on all new groundwater withdrawals until the groundwater study is complete will allow the County to come into compliance with the GMA by finally protecting groundwater resources in the county.

(3) WAC CH. 173-539A does little to prevent against violations of the Campbell-Gwinn decision.

In *Campbell & Gwinn*, the Supreme Court held that the “statutory domestic uses exemption from groundwater permit requirement did not apply to allow collective withdrawal of more than 5000 gpd [per] subdivision.”⁵⁴ Thus, a developer cannot mask a violation of the groundwater permitting requirement through segmentation into separate uses that individually fall within the exemption. Consequently, developments must be assessed in the aggregate and local and state agencies may not allow developers to divide uses into exempt segments to bypassing permitting requirements.⁵⁵

Developers can skirt the *Campbell & Gwinn* decision, which restricts them from using multiple exempt wells to serve lots in common ownership, by, for example, creating multiple Limited Liability Corporations (LLCs) in different names when applying to develop

lands adjacent to their existing developments or serial short platting of commonly held properties. By masking their identities, developers can take more than their legal share of the ground water supply. Developers can also connect exempt wells in daisy chain formations to serve multiple homes. These practices violate the underlying principle of the *Campbell & Gwinn* decision: exempt wells may not be used to sidestep the water availability requirements set forth in the statutes. These water-abuse practices are occurring already in Kittitas County. Moreover, the proposed rule fails to adequately protect against these types of behaviors. Although the proposed rule limits the amount of water available to new developments and individual parcels, these restrictions may actually induce developers to create multiple LLCs to allow for more wells (under different development names) in what should be a single development entitled to use only one exempt well. The only way to avoid this problem is to place a moratorium on all exempt wells until more information is known about the impact on ground and surface waters in the Basin.

A related problem is that the County fails to account for the aggregated environmental consequences of adjacent developments because the parcel owner(s) submitting the SEPA documents submits them separately. In some cases the wells for “adjacent” developments may be drilled within days of one another, indicating that the projects are likely a “single course of action,” yet for the purposes of assessing the environmental impacts, the wells are considered independently. According to WAC 197-11-060(3)(b), proposals that “are related to each other closely enough to be, in effect, a single course of action shall be evaluated in the same environmental document.” The proposed rule does not address the importance of assessing the cumulative impact of adjacent wells, such as those that may be drilled under different LLCs, further limiting its effectiveness in protecting groundwater.

In a basin with very little, if any, legally remaining available water, the explosion of new developments and exempt wells in Kittitas County are likely negatively impacting senior water right holders and instream flows. The proposed rule fails to address these issues.

G) *WAC Ch. 173-539A fails to account for the aggravating impacts of climate change on water scarcity in the Yakima Basin.*

The problem of water scarcity is projected to be aggravated as climate change impacts water resources in the Pacific Northwest (PNW). Scientists project that the region will experience increased warming of .5 degrees F (.3 degrees C) per decade until 2050 with average-high annual temperature increases of 2-7 percent by 2020 and 2-9 percent by 2040.⁵⁶ The largest temperature increases will occur in summer. While precipitation changes, which are harder to predict, may be modest, unknown variables such as ocean currents and interactions between vegetation and the atmosphere could exacerbate changes.⁵⁷ The climatic changes that will have the most impact on Washington river basins are the decrease in winter and spring snow pack in the Cascades, along with more severe droughts.⁵⁸ Even though a slight increase in winter precipitation is predicted in the PNW, higher temperatures mean precipitation will fall in the form of rain, rather than snow.⁵⁹ Spring snow pack in the Cascades has declined an estimated 15-35 percent from mid-20th century to 2006.⁶⁰

The Yakima Basin relies on snow pack as its natural water storage system. Reduction in snow pack “leaves the region vulnerable to change in timing or variability of riverine inflows to these systems, because of limited ability to reshape the river flows to match seasonal patterns in the demand for water.”⁶¹ Winter and spring snowpack melt and release water in spring and summer and are critical in supporting late summer and autumn stream flows. Warmer temperatures in the winter will increase winter stream flows, cause earlier snow melt, and earlier peak stream flow. Decreased summer flows affect all water users, farmers and irrigation, resident and anadromous fish, and hydropower sources.⁶² Consequently, endangered species such as salmon, which fare better with “high precipitation, deep mountain snowpack, cool air and water temperatures” will be at substantial risk.⁶³

These effects are already felt in rivers relying on snowmelt, including the Yakima River Basin, and “are likely to increase existing conflicts among competing water users.”⁶⁴ Within 20 years, Cascade river basins are likely to see a significant decrease in summer season water availability.⁶⁵ As a result of hydraulic continuity, ground water is also vulnerable. A 1991 USGS study of Yakima subwatersheds used an average outcome from climate models to show that groundwater recharge estimates in Kittitas County’s Ellensburg Basin, incorporating 1980’s land-use conditions (irrigated crops), are 16 percent less than historical recharge rates.⁶⁶

A newly issued study of the Climate Impacts Group (CIG) predicts an even worse water supply future. CIG predicts that water curtailments in the Yakima Basin will increase to 32% of all years in the 2020’s and to 77% of all years in the 2080’s.⁶⁷ In other words, by the end of this century, post-1905 surface water rights will be curtailed three out of every four years.

H) For The Reasons Stated Above, CELP Urges Ecology To Change Course And Exercise Its Statutory Duty To Protect Water Supplies In Yakima Basin

Ecology’s proposed rule, WAC Ch. 173-539A, does not provide a responsible system of ground water management in upper Kittitas County. Because ground water is connected to surface water in the Basin, the continued failure to responsibly regulate permit-exempt wells will undeniably have an adverse impact on post-1905 water rights holders, instream flows, salmon habitat and water quality. Additionally, because the rule grandfathered existing exempt wells and fails to mandate metering or mitigation (see specific objections below), there is no incentive for existing well users to limit the quantities that they withdraw under the exemption. Finally, impairment to water users caused by unmitigated and unmetered withdrawals by exempt wells will only grow more severe as a result of climate change and unchecked development in the Yakima Basin.

III. AP-CELP’s prior petition to withdraw the basin from new groundwater withdrawals.

As discussed above, in September 2007 Aqua Permanente petitioned the Department of Ecology to withdraw the groundwaters of Kittitas County from further appropriation. In October 2007, CELP filed a joinder to the AP petition and subsequently, Washington

Environmental Council (WEC), American Rivers (AR), and Futurewise submitted a joint letter of support urging Ecology to “seriously consider” AP’s petition.⁶⁸ WEC, AR, and Futurewise agreed that the standard found in RCW 90.54.050 that “sufficient information and data are lacking” to make sound water resource decisions was met in this instance. The joint letter found that this lack of knowledge regarding impacts of exempt wells on surface flows is a significant problem and Ecology must address it. Finally, the letter stated that the information that is known about the basin leads to the conclusion that Ecology must act now in order to avoid a “full-blown crisis from developing.”

The Yakama Tribal Council did not take a position on the petition, but the Deputy Director of the Nation’s Department of Natural Resources submitted comments.⁶⁹ The letter expressed concern over Ecology and the County’s failure to protect its water rights, some of which are the most senior in the basin. Furthermore, the letter reiterated the substantive issues detailed in the petition. The Deputy Director stated that pumping water from wells captures surface water flows, that the Yakima basin is fully appropriated, and stopping exempt well abuse will not halt rural economic development in the County.

Two other major water right holders in the basin also submitted comments on the petition. The Bureau of Reclamation stated that the matter of the petition was strictly a state proceeding, but did express concern “over the ramifications of continued groundwater extraction in a fully-appropriated basin.”⁷⁰ The Bureau stated groundwater pumping directly affects its ability to supply irrigation water, maintain tribal trust obligations regarding stream flow, and meet YRBWEP obligations. Significant time and money was spent by the Bureau to protect its interests during the adjudication.

Additionally, Roza Irrigation District, a post May 10, 1905 water user, submitted comments.⁷¹ Roza noted its extreme concern “about the continued erosion of our water supply due to population expansion in the Kittitas Valley” and found the current situation “unacceptable.” Roza proffered an alternative approach to closing the basin of groundwater withdrawals. The irrigation district stated its desire for Ecology to take the lead on a “comprehensive mitigation program” that would allow for continued growth without negative impacts to TWSA. Roza’s proposal required exempt well users to pay a fee into a mitigation bank that would buy water to offset the impacts of the well. As noted in more detail below, Ecology’s new rule does not require mitigation.

The petition was denied but it led to a series of actions by Ecology and Kittitas County.⁷² First, in November 2007, Ecology and Kittitas County entered into an Agreement in Principle (AIP) to develop a Memorandum of Agreement (MOA).⁷³ On November 26, 2007, CELP and AP responded to the AIP by requesting public participation in the development of the proposed MOA and related activities, including a ground water study and mitigation effort.⁷⁴ CELP and AP also requested clarification on several issues, including Kittitas County’s risk reduction measures to protect senior water rights holders; the authority and data used for the County’s exempt well residential standards (quantifications of 400 gallon per day per household, up to 5,000 gallons on 40 acres); and written examples of notifications to prospective buyers on county plats.⁷⁵ Ecology did not respond in writing to CELP and AP’s concerns.

In March 2008, Ecology released a draft MOA.⁷⁶ On March 24, 2008, Ecology held a public forum in Cle Elum to discuss the draft MOA. Ecology Director Jay Manning spoke at the forum and commented that the basin is “fully if not over-appropriated” and that in dry years a junior water right holder will not get its full allotment of water.⁷⁷

CELP and AP submitted comments outlining the draft MOA’s extensive deficiencies and declined to support it as drafted.⁷⁸ Deficiencies in the draft MOA included a failure to address the immediate problems of over-appropriation in the Yakima basin and the harm and impairment that unmitigated ground water withdrawals would cause to instream flows and senior water users. Additionally, CELP and AP found flaws in the provision creating a “Hydrogeologic Investigation and Characterization Report” process, which failed to recognize the lack of sufficient hydrogeological data available for even preliminary determinations, much less the overarching hydrology and water management processes in the Yakima Basin.

WEC and AR also submitted detailed comments on the draft MOA.⁷⁹ WEC and AR stated that due to the existing Yakima basin over-appropriation, water availability unknowns, and prior curtailments, it is likely that judicial intervention tightening regulation of water supply in the basin is imminent. Additionally, the joint letter noted the County’s acknowledgment of water scarcity due to the inclusion of a “buyer beware” condition regarding water supply on all plat documents. The letter concludes this demonstrates that the County cannot provide evidence of “an adequate water supply” as mandated by State Building Code, RCW 19.27.097(1), and determined by local building departments. Neither the state nor County requires builders to follow their legal responsibility to ensure water availability.⁸⁰ The letter further states the MOA is inappropriately limited in focus to the Upper County despite uncertainties throughout the county about water availability. The lack of clarity around the enforceability of and connection between the SEPA and mitigation mandates, the lack of specifications for metering, and the limits of the hydrogeologic report are also cited as deficiencies in the MOA.

The Yakama Nation also commented on the draft MOA.⁸¹ As the senior water right holder in the basin and a sovereign nation, the Yakama Nation anticipated consultation with Ecology after the petition was denied. This did not occur and Ecology issued the MOA without input from the Tribe.

The final MOA was released on April 7, 2008 and did not incorporate or address any of CELP and AP’s comments nor address the majority of WEC and AR’s concerns.⁸² While the final MOA includes provisions for metering and a ground water study, the final MOA still leaves senior water rights holders and instream flows at risk and threatens the public interest, because it does not require mitigation or prevent exempt well drilling as more data is collected. Also, the final MOA guarantees developers water access and, contrary to CELP’s and WEC’s concerns, focuses mainly on action in upper Kittitas County, while most of the ground water impacts are affecting the lower County.

This final MOA has been the controlling regulation for development of exempt wells since April 2008. In January 2009 Ecology proposed WAC Ch. 173-539A, which seeks to make permanent many of the provisions of the final MOA.

IV. Specific Comments on WAC Ch. 173-539A

Ecology's proposed rule, WAC Ch. 173-539A, fails to protect post-1905 water rights holders, instream flows, salmon habitat, and water quality within Kittitas County. More equitable solutions, such as a moratorium on permit-exempt wells pending completion of hydrogeologic studies, or mandatory mitigation requirements, would balance Ecology's responsibility to protect water resource supply and existing uses. Specific concerns arising from the proposed rule are provided below.

WAC 173-539A-010

1. Subpart (1) purports to rely on the Ecology-County MOA as a basis for the rule. The MOA is not a legal basis upon which Ecology may grant authority to itself to take actions that are not otherwise legal.
2. Ecology lacks authority to make a "partial withdrawal" of the basin. Ecology also lacks authority to regulate permit-exempt wells in the manner set forth in the draft rule.
3. Subpart (2) is a false statement. The rule does not "minimize" adverse effects on Yakima River and tributary flows. Rather, it does just the opposite by grandfathering uses that have not yet even been established and guaranteeing water supply in an over-appropriated basin.
4. Ecology is not empowered to balance protection of existing water rights and instream flows that provide critical habitat for endangered species against the "local economy."
5. Subpart (3) states that Kittitas County "may" consider potential impairment of existing water rights and other environmental impacts during review of land use applications, and it "may" require mitigation or other ways to reduce risks of impact. Unless consideration of adverse impacts and mitigation methods are mandatory, Ecology has failed to fulfill its statutory mandate to protect existing water rights.
6. Kittitas County has proven unwilling to regulate its groundwater resources in compliance with the Growth Management Act. Reliance on the County to undertake actions to "consider" water right impairment is futile.
7. Ecology lacks authority to delegate its duty to local agencies to analyze and protect against water rights impairment.
8. Subpart (4) limits the rule's application to Upper Kittitas County as delineated in WAC 173-539A-990. Because ground and surface waters are hydraulically continuous throughout the Yakima Basin, of which Kittitas County is a part, limits on permit-exempt wells should apply throughout the entire County.
9. Subpart (4) should indicate that the rule applies to the entirety of WRIA 39.

WAC 173-539A-020

10. Ecology lacks authority to make a "partial withdrawal" of a basin in the manner proposed in this rule.

WAC 173-539A-030

11. "Application": The definition provided in the draft-rule deviates from the emergency rule. The draft-rule omits "one time split" and "boundary line

- adjustment” that were present in the emergency rule. These land use decisions should also be subject to exempt well restrictions.
12. The draft-rule fails to explain the basis for the changes described above or what their likely impact may be.
 13. “Group Use”: The definition provided uses the word “commenced” with out definition. What is the meaning of the word “commence” in the phrase, “where use of the exemption commenced or commence within five years of the date the current application was filed”?
 14. “Parcel”: The word “parcel” appears in its own definition; therefore, the meaning of the word is unclear. The terms should be more specifically defined, as in, for instance, Blacks Law Dictionary (8th Ed. 2004). Here “parcel” is defined as “[a] tract of land; esp., a continuous tract or plot of land in one possession, no part of which is separated from the rest by intervening land in another's possession.”
 15. “Total Water Supply Available”: This definition should be expanded to discuss what happens when the “Total Water Supply Available” is insufficient “to supply the contract obligations of the United States to deliver water and to supply claimed rights to the use of water on the Yakima River, and its tributaries....” When TWSA cannot meet all contract and claimed rights, post-1905 surface water rights are curtailed. Houses that utilize permit-exempt wells junior to all other rights in the Basin will not be curtailed under the new rule. This should be explained in the definitions section and addressed in the rule.

WAC 173-539A-050

16. The rule should not be limited to Upper Kittitas County. Rather, limitations on permit-exempt wells should be enacted and enforced throughout the Kittitas County WRIA. In addition, mitigation should be required to offset adverse affects of permit-exempt wells.
17. Subpart (1) makes the rule applicable to residential developments that vest on or after July 8, 2008. Grandfathering existing permit-exempt wells, or future exempt wells on previously created parcels, is improper because it fails to require analysis or require mitigation for adverse impacts caused by permit-exempt wells.
18. Subpart (2) requires that applicants for new residential development file a “sworn statement” to be recorded against the property in question without identify what the legal ramifications of such a statement may be. How will the statements sworn to be verified and enforced?
19. Subpart (3) states that Ecology assumes different default water amounts for parcels in residential development engaging in exempt lawn or noncommercial garden watering but does not specify what triggers a finding of lawn or noncommercial garden watering. Does any size lawn trigger the higher default amount?
20. Subpart (3) should specify the maximum number of parcels permitted in each development under the default rules to add clarity. For instance, if New Residential Developments are granted 5000 gpd, and each parcel is assumed to use 1250 gpd, then each development is limited to four parcels, unless a covenant restricting water use below the 1250 gpd maximum on each parcel is filed, in which case, the maximum number of parcels would proportionally adjusted.

21. Neither this provision nor WAC 173-539A-055 prevents developers from erecting an end-run around *Campbell & Gwinn* requirements by artificially sub-dividing new residential development projects held in the same ownership or intended to function as a single residential development. For example, adjacent properties may be purchased in the names of different partnerships or companies, even though they share the same membership and intend to establish a development that in all practical effects functions as a single project. In fact, this rule adds temptation for developers to violate *Campbell & Gwinn*, not adhere to it. Because the amount of water is reduced below 5000 gpd but demand remains the same, developers will seek to secure more water per residential development parcel by fictitiously dividing sub-projects under organizations differing in name only. The only way to secure against these kinds of abuses is to prevent exempt-wells entirely.

WAC 173-539A-055

22. This provision sets forth limitations on ground water withdrawals by permit-exempt wells according to parcel size. The test Ecology applies is that the parcel may use only the lowest amount made available by conditions or covenants on the plat; conditions specified in the water permit or public water system; or a default amount not exceeding 1250 gpd for parcels less than ten acres and not exceeding 5000 gpd for parcels greater than ten acres. Compliance with this provision presumes an ability to measurement amounts of water used, yet there is no applicable metering requirement. Pursuant to WAC 173-539A-070, metering is only required for withdrawal commencing after July 8, 2008. Metering should be required for all withdrawals.
23. As noted, the rule should not be limited to Upper Kittitas County. Rather, limitations on permit-exempt wells should be enacted and enforced throughout Kittitas County. In addition, mitigation should be required to offset adverse affects of permit-exempt wells.
24. Subpart (1) applies only to “[n]ew uses for residential purposes.” Presumably, this means that old uses of permit-exempt wells predating March 28, 2002 are not captured by this rule. Curtailment of senior water rights holders is already taking place while these wells are allowed to continue to pump water unabated. There is no basis for grandfathering existing uses of exempt wells (or futures uses based on a plat that occurred years ago).

WAC 173-539A-060

25. This provision is defective because it relies on the developer’s consultant to determine impairment. This “fox guarding the chicken coop” approach is inappropriate, and subsection (3)(e)-(g) amounts to an unauthorized delegation of authority by Ecology to private developers to determine impairment in contravention to SEPA.
26. This provision is also defective because it delegates authority to determine impairment, and even whether to determine impairment, to local government agencies.
27. The scope of the hydrogeologic assessment is not adequate to collect and analyze necessary information. For example, the use of any groundwater that discharges to

surface water that flows past Parker gage will affect TWSA. Affected surface water users include every post-1905 surface water right in the basin that is subject to curtailment in water-short years. If every post-1905 surface water right in the basin will be affected, a parcel or development-based assessment is manifestly not the appropriate mechanism to ensure protection of water rights.

WAC 173-539A-070

28. County-wide metering is appropriate, however, it should apply not solely to new uses dating from July 8, 2008, but should be retroactively applied to all existing permit-exempt wells.

WAC 173-539A-080

29. Expanding the scope of the rule to authorize expedited processing of municipal water rights is inappropriate. Neither Ecology nor Kittitas County can demonstrate with any degree of confidence that any water remains to be allocated.
30. Trust water rights (TWR) may not be sufficient to provide appropriate mitigation. TWRs may be created from water rights that have never been used and may be taken out of trust and put to beneficial use in the future. If the water has never been used, then in times of shortage that water merely exists on paper, and entering it into trust will have no mitigating impact whatsoever in an over appropriated basin.
31. Similarly, any mitigating effect TWRs may have is lost immediately upon removal of that water from the trust. Only an irrevocable TWR that represents water that has been validly used should be available to mitigate permanent domestic water rights.

WAC 173-539A-090

32. Given the over-appropriated status of the Yakima River basin, mitigation must be mandatory, not voluntary, in order to protect post-1905 surface water rights from curtailment.
33. Given the amount of media and public interest in this issue in Kittitas County, Ecology should take a firm stance that compliance is mandatory and enforcement will be taken. Compliance via voluntary means and education is not appropriate given the condition of the basin and the amount of outreach and education that has already occurred.

V. SEPA DNS & Checklist Comments

The issuance of the Determination of Non-Significance (DNS) for the draft rule is improper. Ecology must either adopt mitigation requirements as part of the rule and re-issue a Mitigated DNS or issue a Determination of Significance (DS) and complete an Environmental Impact Statement (EIS).

To issue a DNS, whether project specific or programmatic, Ecology must be able to say that all issues presented require no additional mitigation over that which is contained in applicable federal, state and local law. Ecology cannot make this statement based on the impacts identified in the comments set forth above.

At the crux of our comments is the problem that any additional appropriation of ground water through the use of permit exempt wells without mitigation, thus rendering the new water rights water budget neutral, will cause harm to more senior water users and to streams within the Yakima Basin. The DNS fails to consider or address these impacts and must therefore be withdrawn.

The SEPA checklist itself acknowledges that, in authorizing past and continuing use of exempt wells in Kittitas County, the agency is effectively creating new water rights (Checklist at p.3). The statement that the rule will protect and preserve water resources in Kittitas Valley, is not supported (Checklist at pp. 6, 8). In fact, the rule will do just the opposite by allowing new groundwater withdrawals that will reduce streamflows and water supply. The statement that the rule will protect and/or not affect existing water rights is patently false. (Checklist at pp. 6, 9)

The Checklist is incorrect and inadequate in stating that there will be no wastewater discharges as a result of this rule (Checklist at p. 6). Exempt wells for residential purposes create wastewater that must be discharged into municipal treatment systems or, more commonly, septic systems. This impact is ignored.

The Checklist is incorrect and inadequate in stating that the rule will encourage developments to locate in areas served by public water supply (Checklist at p. 12). The rule effectively grandfathers and guarantees water supply to several thousand presently undeveloped parcels in the County, which will have the opposite effect of discouraging location in public water service areas.

Finally, nowhere in the SEPA documents is there discussion of the cumulative impacts caused by drilling and withdrawing water from multiple exempt wells.

VI. Cost Benefit Analysis & Small Business Economic Analysis

1. Page 10, Hydrogeologic Investigations - "Ecology estimates the county will require 150 hydrogeologic investigations over the next 20 years." How was this number derived?
2. Metering and reporting costs - "Ecology assumes 1000 wells to go in during the next 20 years throughout the county." Again, how was this determined? Using the number of start cards in the past year and a half indicate that more than 6,000 wells could be drilled in the next 20 years and even if the trend slows, an estimate of 1,000 wells in 20 years is unrealistically low. As of April 2007 there over 6,000 unimproved parcels in Kittitas County that would likely want to use the exempt well provision. Under the proposed Rule, they would all be grandfathered in and not included in Ecology's analysis.
3. Page 14, CLC Market Supplement Sept. 2008. Is the economic analysis before or after the housing bubble? According to a Jan 2009 Cle Elum Real Estate Market report from John L. Scott, there is "a 3-year inventory supply if no other parcels

come on the market."⁸³ This seriously affects the economic forecasts of both the Department of Ecology and Kittitas County.

4. Page 15, Clarifying water supply, Total Probable Benefits: "Future groundwater modeling will support further withdrawal from permit exempt uses." If the state can make this sort of prediction for this currently over-appropriated basin, how can Ecology justify granting new water rights without mitigation?
5. Small Business Economic Impact Analysis Jan. 2009, Pages 3 and 6 - Rule applies only to residential use, not business use...What is the rationale for this distinction?
6. CELP and AP endorse and adopt the following comment prepared by Prof. Ken Hammond:

"The Cost Benefit document does not allow a thorough analysis. It is too sketchy. The assumptions about when the costs and benefits actually occur need to be clear. This is important when discounting future dollars back to Net Present Value. Dollars that accrue or are expended early in the period of analysis are worth a dollar, or nearly so. Dollars that accrue or are expended late in the period are worth much less than a dollar. It strains credulity to assume that costs and benefits are spread equally over each year of the period of analysis. For example, major groundwater study and modeling costs discussed on pp. 6, 9-10 of the C/B document come early, when a dollar is counted as a dollar, and lesser modeling costs occur over time so those dollars count for less. How much less depends on when they occur. Benefits from developed lots are far more likely to accrue later and on an uneven basis.

I do not quibble with the discount rate selected but must note that the lower the discount rate the more favorably future dollars are treated. This means, when most of the costs come early and most of the benefits later, a discount rate at an artificially low level makes a proposed project appear more favorable than it really may be.

Contrarily, the entire cost benefit analysis process fails to properly account for assets that appreciate or depreciate. This applies both to natural assets such as water flowing in a river and property as reflected in markets. In recent years more attention has been given to the values of services provided by natural systems. the 2004 National Research Council document listed on p. 18 shows the Department of Ecology is aware of this trend. The extent to which it influenced thinking here is not clear. The nuances of these considerations have yet to be incorporated into most formal cost benefit analysis. Given the growth of concern for health of the planet and the increasingly precarious prospects for long-term sustainability, they likely soon will be a part of the process. **Keep your options open.**"

VII. Conclusion

For the foregoing reasons, CELP and AP oppose WAC Ch. 173-539A. Rather than allowing continued proliferation of unmitigated exempt wells in the absence of more complete scientific data, Ecology should place a moratorium on exempt wells throughout the entire county. The moratorium should last until, using accurate and comprehensive USGS data, the County can appropriately assess their impact on post-1905 water rights holders, instream flows, salmon habitat, or water quantity and quality.

CELP and Aqua Permanente make the following requests:

- (1)** That the SEPA Determination of Non-Significance be withdrawn, that the SEPA Checklist be re-evaluated, and that Ecology issue a Mitigated DNS or proceed to prepare an Environmental Impact Statement that adequately describes and prescribes mitigation for all environmental impacts associated with the rule.
- (2)** That the rule be revised to withdraw groundwater in WRIA 39 and Kittitas County from new withdrawals.
- (3)** That the rule be revised to require development of a mandatory mitigation program that provides for realistic, timely and effective mitigation, including for instream flows in the tributaries.
- (4)** That the rule be revised to require all exempt well users with post-May 10, 1905 priority dates to meter and report their water use.

Respectfully submitted,

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¹ Yakima Basin Watershed Plan, Management of Groundwater Resources, Ch.4, at 4-1 (1-6-03, adopted 2005). INDEX No. I 1.

² Bachman, M., M. Ely, J. Vaccaro. Approaches for Assessing Groundwater Availability Under Competing Demands and Climate Change. American Geophysical Union (Fall 2008). INDEX No. II A 1.

³ Yakama Nation, U.S. Bureau of Reclamation, Department of Ecology, Memorandum of Agreement (1999). INDEX No. II A 2.

⁴ University of Washington, Climate Impacts Group, Vano, J.A., et al., Climate Change Impacts on Water Management and Irrigated Agriculture in the Yakima River Basin, Washington State, USA (Final Draft 2/10/09), <http://cses.washington.edu/cig/files/waccia/ch3yakima.pdf>. INDEX No. II A 3.

⁵ Winter et. al, Ground Water and Surface Water: A Single Resource (USGS 2006), pp. 4-5; Dep't of Ecology, Draft Report of Technical Advisory Committee on the Capture of Surface Water by Wells at 9 (1998). INDEX No. II B 1.

⁶ Department of Ecology, Pearson, H.E., Hydrology of the Upper Yakima River Basin, Washington, Water-Supply Bulletin No. 52 at p. 34 (1985); INDEX No. II B 2. Department of Ecology, map of unconsolidated sediments and glacial till of Upper Kittitas Valley (2009).

⁷ See Kinnison & Sceva, Effects of hydraulic and geologic factors on streamflow of the Yakima River Basin, Washington (USGPO 1963); U.S. Army Corps of Engineers, Yakima Valley Regional Water Management Study, Vol. I (Summary); Vol. III (Water budget), and Vol. IV (Geology and ground water), Seattle, WA (1978); Pacific Northwest River Basins Commission, Columbia North Pacific

Comprehensive Framework Study of Water & Related Lands, "Water Resources," Vancouver, WA (1970).

⁸ See U.S. Geologic Survey, Yakima River Basin, <http://wa.water.usgs.gov/projects/yakimagw/publications.htm> (studies incorporated herein by reference).

⁹ RCW 90.44.020, .030; *Postema v. PCHB*, 142 Wash.2d 68, 11 P.3d 726 (2000); *Hubbard v. Ecology*, 86 Wn App. 199, 936 P.2d 27 (1997) and *Rettkowski v. Ecology*, 122 Wn. 2d 219, 858 P.2d 232 (1993).

¹⁰ Vaccaro, J.J. & T.D. Olsen, Estimates of Monthly Ground-water Recharge to the Yakima River Basin Aquifer System, Washington, 1960-2001, for Current Land-use and Land-cover conditions, USGS OFR 2007-1238. INDEX No. II B 3.

¹¹ Vaccaro, J. J. & K.J. Maloy, Thermal Profiling of Long River Reaches to Characterize Ground-water Discharge and Preferred Salmonid Habitat, USGS SIR 2006-5136 at 3. INDEX No. II B 4.

¹² *Ecology v. Acquavella*, Yakima County Superior Court No. 77-2-01484-5.

¹³ *Kittitas Reclamation Dist. v. Sunnyside Valley Irrigation Dist.*, Civil Action No. 21 (E.D.Wash.S.Div. 1-31-45).

¹⁴ Yakima Watershed Plan, Ch.2 Existing Conditions (1-6-03), Table 2-2, p. 2-7. INDEX No II C 1.

¹⁵ *Ecology v. Acquavella*, Yakima Cty. Sup. Ct. No. 77-2-01484-5, Order Limiting Post-1905 Diversions During Periods of Water Shortage (June 10, 2004). INDEX No II C 2. *Id.*, Rev. Order Limiting Post-1905 Diversions During Periods of Water Shortage (March 2005); INDEX No II C 3. *Id.*, Revised Order re: Motion to Limit Treaty Water Right For Fish to Natural Flow and Abatement of Non-Proratable Water Rights (6-16-96) at p.3.

¹⁶ Department of Ecology curtailment notification letter (6-19-04). INDEX No II C 4.

¹⁷ *Ecology v. Acquavella, supra*, Third Report by Department of Ecology ReCompliance with Order on Show Cause to Limit Post-1905 Water Rights for the 2001 Irrigation Season (8-24-01). INDEX No II C 5.

¹⁸ City of Roslyn White Paper, Water & Growth Challenges (draft 12-18-08); INDEX No II C 6. City of Roslyn Water Rights, Fiscal Impacts. INDEX No II C 7. CELP & Aqua Permanente endorse and adopt by reference all comments and documents submitted by the City of Roslyn regarding this rule proceeding and for the Sept. 2007 AP/CELP petition to withdraw the basin.

¹⁹ David Lester, "Summer Camps Seek Solution to Water Rights Question," Yakima Herald (7-14-08)/

²⁰ U.S. Bureau of Reclamation, Groundwater Claim, June 29, 1998. INDEX No II C 8.

²¹ *Id.*

²² Yakima Basin Watershed Assessment, Sect. 2.4 & 3.5.1 (2001).

²³ Yakama Nation, U.S. Bureau of Reclamation, Department of Ecology, Memorandum of Agreement (1999). INDEX No II C 10.

²⁴ Department of Ecology, "Appealed ground water permits with settlements," in Information Package for Legislative Consultation and Public Hearing (12-14-99).

²⁵ Dept. of Ecology, "Watershed Planning and Implementation," (7-22-08), available at http://www.ecy.wa.gov/quality/2008_schedule.htm. INDEX No II D 1.

²⁶ *Id.*

²⁷ Yakima Steelhead Recovery Plan, Yakima Basin Fish & Wildlife Recovery Board, Review Draft (3-24-08); 71 26052 Fed. Reg. (5-3-06); INDEX No II E 1. Supplement to Draft Yakima Subbasin Salmon Recovery Plan, NOAA. INDEX No II E 2.

²⁸ Tuck, Robert L., Impact of Irrigation Development on Anadromous Fish in the Yakima River Basin, Washington 23 (May 1995) (unpublished M.S. thesis, Central Washington University). INDEX No II E 3.

²⁹ *Ecology v. Acquavella, supra*, Partial Summary Judgment Entered as Final Judgment (11-29-90); affirmed, *State Dept., of Ecology v. Yakima Reservation Irrigation District*, 121 Wash.2d 257, 287, 850 P.2d 1306, 1323 (April 22, 1993).

³⁰ Pub. L. No. 103-434 Sect. 1205, 108 Stat. 4550; *Ecology v. Acquavella, supra*, Supplemental Report of the Court for the Yakama Nation, (6-21-96); Final Order Re: Treaty Reserved Water Rights at Usual and Accustomed Fishing Places (3-1-95).

³¹ *Id.* at Pub. L. No. 103-434, Section 1205(A).

³² Yakima Watershed Plan, Legal Requirements for Instream Flows, Sect. 3.4, (1-29-01). INDEX No II E 4.

³³ 50 C.F.R. § 223.102 (2008); 51 Fed. Reg. 14517 (3-25-99); 71 Fed. Reg. 834 (1-5-06); 50 C.F.R. 17, 63 Fed. Reg. 31647, 31674 (6-10-98)

³⁴ 50 C.F.R. § 224.101 (2008).

³⁵ *Ecology v. Acquavella*, *supra*, Flushing Flow Order (4-13-95). INDEX No II E 5.

³⁶ Columbia Basin Fish & Wildlife Authority, Status of Fish & Wildlife Resources in the Columbia River Basin, Yakima Subbasin, <http://www.cbfwa.org/sotr/geographic.cfm?provinceid=5&subbasinid=30>.

³⁷ U.S. Bureau of Reclamation, <http://www.usbr.gov/dataweb/html/yakima.html>.

³⁸ U.S. Bureau of Reclamation, News Release, Tenaway [sic] River Salmon Restoration Project Shows Remarkable Results as Fish Counts Increase (1-6-03),

<http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=12401>; see also Washington Water Trust, Teanaway River Project, <http://www.thewatertrust.org/projects/teanaway-river>; Columbia Basin Water Transactions Program, In Washington, Salmon Return as Long-Term Leases Restore Water to the Teanaway (2006), <http://www.cbwtp.org/jsp/cbwtp/stories/stories.jsp?year=2006>.

³⁹ Washington Water Trust, Taneum Creek Project, <http://www.thewatertrust.org/projects/taneum-creek-restoration>.

⁴⁰ Yakima Basin Watershed Plan, Ch. 4, pg 4-3. INDEX No II F 1-1.

⁴¹ Yakima Basin Watershed Plan, Management of Groundwater Resources, See Ch.4, at 4-3, 4-4, (1-6-03, adopted 2005).

⁴² *Id.*

⁴³ Board of County Commissioners, County of Kittitas Resolution Acknowledging the Intent of Kittitas to "Opt Out" of the Yakima River Basin Watershed Plan, Resolution 2005-100. INDEX No II F 1-2.

⁴⁴ Central Washington Real Estate Services, Vacant Parcel Inventory (4-07). INDEX No II F 1-3.

⁴⁵ Notices of intent are located on Ecology's database at https://fortress.wa.gov/ecy/wrx/wrx/wcl/query_pages/base_page.asp; Kittitas County Exempt Well Map (8-17-07).

⁴⁶ Short Plat Impact Map for Lower Kittitas County (11-6-06); Upper County Cumulative Impacts Map (11-27-06).

⁴⁷ *Kittitas County Conservation Committee v. Kittitas County*, EWGMHB No. 07-1-0015, Final Decision Order at pp. 26-31 (3-28-08).

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ *Kittitas County Conservation Committee v. Kittitas County*, EWGMHB No. 07-1-0004c (8-20-07).

⁵¹ *Kittitas County Conservation Committee v. Kittitas County*, EWGMHB No. 07-1-0004c (2-4-09).

⁵² RCW 19.27.097 and 57.17.110.

⁵³ See Attorney General Opinion (AGO) 1992 No. 17 ("[A]ny applicant for a building permit who claims that the building's water will come from surface or ground waters of the state, other than from a public water system, must prove that he has a right to take such water [including a permit-exempt well." *Id.*). INDEX No II F 2-1.

⁵⁴ *Department of Ecology v. Campbell & Gwinn, LLC*, 146 Wn.2d 1, 12, 43 P.3d 4,10 (2002).

⁵⁵ *Id.*

⁵⁶ Climate Impacts Group, Pacific NW Water Resources: <http://www.cses.washington.edu/cig/pnwc/pnwwater.shtml>

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ Mote, P. & A. Hamlet & E. Salathe, Has Spring Snowpack declined in the Washington Cascades? Hydrology and Earth System Sciences, 12, 193-206 (2008) INDEX No II G 1.

⁶¹ Hamlet, Alan F., Effects of Climate Change on Water Resources in the Pacific Northwest: Impacts and Policy Implications, JISAO Climate Impacts Group, University of Washington (7-3-01) INDEX No II G 2.

⁶² Climate Impacts Group, Pacific NW Water Resources: <http://www.cses.washington.edu/cig/pnwc/pnwwater.shtml>

⁶³ Climate Impacts Group, Climate Impacts on Pacific Northwest Salmon, <http://www.cses.washington.edu/cig/pnwc/pnwsalmon.shtml>

⁶⁴ Climate Impacts Group, Pacific NW Water Resources: <http://www.cses.washington.edu/cig/pnwc/pnwwater.shtml>

⁶⁵ Hamlet, *supra*.

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- ⁶⁶ U.S. Geological Survey, Technical Memorandum #8, Impacts of Climate Change on Groundwater Resources: A Literature Review, (12-13-07)
- ⁶⁷ Vano, et al., *supra*.
- ⁶⁸ Washington Environmental Council, American Rivers, & Futurewise, Comment Letter on Petition (11-2-07). INDEX No III 1.
- ⁶⁹ Yakama Nation Comment Letter on Petition (11-2-07). INDEX No III 2.
- ⁷⁰ U.S. Bureau of Reclamation, Comment Letter to Ecology on Petition (11-1-07) INDEX No III 3.
- ⁷¹ Roza Irrigation District, Comment Letter to Ecology on Petition (10-28-07) INDEX No III 4.
- ⁷² Department of Ecology, Letter to Aqua Permanente & CELP denying petition (1-9-07) INDEX No III 5.
- ⁷³ Department of Ecology and Kittitas County, Agreement-in-Principle to Develop a Memorandum of Agreement (11-7-07) INDEX No III 6.
- ⁷⁴ Center for Environmental Law & Policy, Letter to Derek Sandison (11-26-07) INDEX No III 7.
- ⁷⁵ *Id.*
- ⁷⁶ Department of Ecology & Kittitas County, Draft Memorandum of Agreement (3-8-08) INDEX No III 8.
- ⁷⁷ Hearing video, Department of Ecology hearing on AP/CELP petition, TVW archive video, available at <http://www.tvw.org/media/mediaplayer.cfm?evid=2008030143&CFID=2314021&CFTOKEN=3377f096e2bb69b8-4110F1C5-3048-349E-4EB9ACAABC31665D&bhcp=1> (last visited 2-19-09).
- ⁷⁸ CELP and Aqua Permanente, Comment Letter to Department of Ecology re Draft MOA (4-2-08). INDEX No III 9.
- ⁷⁹ Washington Environmental Council, Comment Letter to Kittitas County & Department of Ecology re draft MOA (4-2-08) INDEX No III 10.
- ⁸⁰ *Id.*
- ⁸¹ Yakama Nation, Comment Letter to Department of Ecology re draft MOA (4-2-08). INDEX No III 11. CELP and AP endorse and incorporate by reference the comments of the Yakama Nation regarding WAC 173-539A.
- ⁸² Department of Ecology & Kittitas County, Final Memorandum of Agreement (4-4-08) INDEX No III 12.
- ⁸³ John L. Scott Real Estate, Fact & Trends, Upper Kittitas County (Jan. 2009); "All you wanted to know about the Cle Elum Real Estate Market." INDEX No III 13.