

The Methow Valley Citizens' Council

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Perry Huston, Planning Director
123 5th Ave. North, Suite 130
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Sent via e-mail to: phuston@co.okanogan.wa.us

June 16, 2014

**RE: Comments on the Okanogan County Comprehensive Plan
4/28/14 Review Edition, Interim Zoning and zoning code
amendments Chapter 17.06A Rural 1 District (R1), Chapter 17.06B
Rural 5 District (R5), Chapter 17.06C Rural 20 District (R20), and
Chapter 17.21 District Use Chart**

Dear Director Huston:

Thank you for the opportunity to comment on the 2014 Comprehensive Plan and Map. These comments are submitted on behalf of the Methow Valley Citizens' Council, which works to protect the Methow Valley's natural environment and rural character through planning and

conservation of the quality of our water, air and wildlife.

The development of the County's Comprehensive Plan cannot be inconsistent with the Planning Enabling Act, which under RCW 36.70.330 requires that the Comprehensive Plan include the following:

(1) A land use element which designates the proposed general distribution and general location and extent of the uses of land for agriculture, housing, commerce, industry, recreation, education, public buildings and lands, and other categories of public and private use of land, including a statement of the standards of population density and building intensity recommended for the various areas in the jurisdiction and estimates of future population growth in the area covered by the comprehensive plan, all correlated with the land use element of the comprehensive plan. The land use element shall also provide for protection of the quality and quantity of groundwater used for public water supplies and shall review drainage, flooding, and storm water run-off in the area and nearby jurisdictions and provide guidance for corrective actions to mitigate or cleanse those discharges that pollute Puget Sound or waters entering Puget Sound;

(2) A circulation element consisting of the general location, alignment and extent of major

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thoroughfares, major transportation routes, trunk utility lines, and major terminal facilities, all of which shall be correlated with the land use element of the comprehensive plan;

(3) Any supporting maps, diagrams, charts, descriptive material and reports necessary to explain and supplement the above elements.

The County is also required, under the Growth Management Act described in RCW 36.70A.170(1), to designate resource lands—including agricultural, forest and mineral resource lands as well as critical areas.

We find the current draft of the Comprehensive Plan continues to fall short of complying with these requirements. The issues we raised in earlier comments remain, and we have new concerns.

The 2014 Comprehensive Plan and Interim Zoning do change much of what is now Minimum Requirement District with one acre minimum lots to Rural 5 zoning, with a base density of one home per five acres, which is an improvement compared to current zoning. The Plan also indicates that the Methow Review District zoning will not change and will be included in the Plan as a More Completely Planned Area (MMCPA). However, this latest plan revision raises new issues.

The Plan, as written, together with its maps, is difficult to read and understand. It has been confusing, even to professional land use planners. There are numerous errors and contradictions that need to be corrected. Some of these are highlighted in the following comments, which we wish to add to comments previously submitted on earlier drafts of the Comprehensive Plan. Our previous comments and attachments are incorporated by reference with comments and attachments being submitted today.

We thank you once again for this opportunity to respond to the proposed 2014 Plan. If you have any questions about our comments or the attachments we have provided, please contact me. Our organization is more than willing to help the County improve the Comprehensive Plan in any way we can.

Sincerely,



Maggie Coon
Chair, Methow Valley Citizens' Council

The Methow Valley Citizens' Council

General Comments

1. The vision statement and planning objectives outlined in the Plan focus on protecting property rights but fail to explain the County's strategy for managing future growth and complying with state-mandated planning laws.

We find the vision and planning objectives described on pages 5 and 6 to have been stripped of real meaning reflecting almost none of the input that resulted from earlier work by citizen advisory groups (see attached file, MVCC 2011 Plan Comments). It does not speak to serious concerns about the impacts of growth on water resources raised in letters submitted by the Department of Ecology, the Methow Watershed Council and others and many other issues of concern to the community. What we have now boils down to a set of statements about protecting property rights. This does not qualify as a vision statement.

In general, it is difficult to discern a coherent planning concept in the proposed Plan. Although Plan goals are referred to in the text, there is no set of goals labeled as such. The proposed Comprehensive Plan tells us little about how it will use land use planning, zoning and other regulatory powers the County possesses to manage growth while also meeting statutory requirements—such as protecting the quality and quantity of groundwater used for public water supplies.

2. The statement about “development-related servitude” under General Planning Objectives is misplaced and would appear to intend to impose new and potentially costly restrictions on the County's ability to enforce state and local laws.

The following statement found on page 6 is odd as well as oddly placed and is not a planning objective:

“...with respect to any requirement for an easement, dedication or other development-related servitude imposed on lands during a permit review, such requirements shall not be imposed unless the County can demonstrate in written findings based on site-specific circumstances that such conditions are reasonably necessary as a direct result of the proposed development or plat to which the dedication of land or easement is to apply and roughly proportional to problems associated with the development under review.”

Please explain what “development-related servitude” is, what the broadly defined statement is getting at and why it's placed under “General Planning Objectives.” It seems to be trying to place what could be a costly new set of requirements on the County that could hinder its efforts to apply and abide by state and local land use regulations. This statement doesn't belong here and should be removed.

3. The Plan ignores documented water resource limitations and fails to use or recognize zoning as a means to manage water resources and meet its state-mandated

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obligation to “protect the quality and quantity of groundwater used for public water supplies.”

We commented extensively in earlier submissions regarding concerns about the impacts of the proposed Plan on the County's groundwater resources. Our comments referenced scientific documentation indicating that the County's most productive aquifers are located within the unconsolidated glacial and alluvial deposits located in valley bottoms and side benches throughout the County—precisely beneath areas the County plans for the most intensive development.

We indicated concern about planned growth exceeding the capacities of water resources and depleting aquifers. We submitted documentation and comments from others, including the Department of Ecology and the Methow Watershed Council, substantiating our concerns. (See attached files, MVCC 2013 Plan Comments and Hydro Part 3 Methow Watershed Council documents submitted to Okanogan County). We add new concerns about the impact of ignoring our water supply limits and the impact on property values when water is fully appropriated—especially in the Lower Methow.

The Methow Watershed Council has warned there is no water for 1,092 existing undeveloped lots in the Lower Methow Reach and there would be more than 20,000 lots without water under existing zoning, which the proposed Plan changes little. The Council has warned, “property values and development potential in the undeveloped lots...will be adversely impacted once Department of Ecology determines that water resources have been ‘fully appropriated.’” (See attached “Hydro 3 attachment - WRIA 48 Watershed Planning Information for Okanogan County Planning Commission,” p.1.)

We have previously noted and are submitting additional expert testimony (see attached files, Hydro Part 1, 2 and 3) indicating the County's aquifers are unconfined water table aquifers, which are highly susceptible to contamination. We recommended these areas be considered critical aquifer recharge areas in our comments on the County's proposed Critical Areas Ordinance (see attached file, MVCC CAO comments). Evidence we submitted described the risks of groundwater contamination from septic systems—indicating that development densities of one home per acre and even one home per three to five acres can pollute groundwater.

We are equally concerned about commercial and industrial uses being allowed over highly susceptible aquifers. As listed in the amended Chapter 17.21 District Use Chart, the new Rural 1, 5 and 20 zones allow commercial and industrial uses with a high potential for polluting groundwater.¹ Allowing uses such as petroleum service stations, compost

¹ In addition to single-family homes and multi-family apartment buildings, the following are among the uses permitted in the Rural 1, 5 and 20 zones: compost manufacturers, air cargo terminals, aircraft hangars, aircraft sales, repair, and service, aircraft salvage, airstrips, commercial, auto parking lots or garages, auto rental services, auto sales, banks, exercise clubs, indoor swimming pools, food stores, maintenance shops, warehouses, gravel pits less than three acres in size, halls, stadiums, auditoriums, hospitals, laundromats, manufactured home sales

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manufacturers, or light manufacturing almost anywhere in the County, especially over water table aquifers, risks contaminating our sole source of public water supplies.

4. The Plan's land use descriptions are confusing and its maps contradictory. Based on the figure labeled "Map 1- Comprehensive Plan Overlay," arguments could be made to support sweeping changes in the Methow Review District.

Map 1 is difficult to interpret because the names of land use designations in the text don't match the map legend. These should be more consistent.² In addition, Map 1 and the figure labeled "Okanogan County Current Land Use Map 2" are contradictory. This ambiguity could arguably lead to incremental zoning changes in the Methow Review District, through developer or property owner rezone requests.

For example, areas shown on Map 2 in the Methow Review District as uplands with a twenty acre base density are shown as Resource with a five acre base density as well as Rural on Map 1. Densities in the Rural designation are not specified in the Plan, but we assume it would mean one-acre lots (because elsewhere in the County the Rural designation has been given one acre zoning.)

We are concerned it would be possible to make an argument, as part of a proposed rezone for example, that designations shown on Map 1 represent the "official" comprehensive land use plan for the Methow Review District. Someone wanting smaller lots might say that the Comprehensive Plan supports the rezone of 20 acre lots into five or one acre lots.

Map 2 is described in the Plan's text (page 8) as previously identified areas to which a "finer grain" of land use planning is appropriate and "illustrates the current designations, which have been reviewed by the County and which further implement the goals and policies of this Plan," but which "the planning agency may recommend changes to..." This is entirely confusing. Map 2 is the current zoning map, not a land use map, and includes the Minimum Requirement District designated in the 1964 Comprehensive Plan. It is not clear which parts of Map 2 are to be considered part of the new official Comprehensive Plan land use map.

facilities, light manufacturing, marinas, meat packing plants, medical and dental clinics, mini-storage warehouses, petroleum service stations, professional office buildings, quarries and borrow pits less than three acres in size, restaurants, cafes, and "etc.," retail stores or gift shops, portable commercial sawmills, and wholesale establishments.

² Based on descriptions on pages 6-7 of the Plan, we have assumed the following:

- "Rural Resource/Recreation Lands (Public lands) are labeled "Resource Recreation" on the map and include all public lands.
- "Rural Resource/Low Density Lands (Privately owned lands)" are labeled "Resource" on the map. The plan text states a base density of five acres in these areas.
- "Rural/High Density Lands" are labeled "Rural" on the map. No base density is indicated.

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The following statement, on page 21 under Compatible Uses, creates further confusion:

“In addition, Methow Review District, Agricultural districts and neighborhood commercial districts necessary to serve rural populations are permitted within the Rural Resource/Low Density designated areas.”

The Rural Resource/Low Density designated areas, according to the Plan text, have a base density of five acres. But the Methow Review District has extensive areas of 20 acre zoning.

Clearly, if the County does not intend to change the land use and zoning in the Methow Review District (as stated on page 20 of the Plan and indicated on the figure labeled “Okanogan County Interim-Zone Map 4) the significant contradictions between the text and Map 1 and 2 need to be fixed. Similar contradictions need to be clarified with respect to the Barnholt Loop and Molson Overlay.

The Comprehensive Plan Map dated 10/14/10 (formerly available on the County's website) is clearer and less ambiguous with respect to the Methow Review District, and is generally superior to Map 1 as a land use map.

5. The Plan could undermine the long-term viability of agriculture in Okanogan County and appears to eliminate agriculture as a permitted use in areas now being actively farmed.

We are greatly concerned and perplexed by the following statement on page 21 under “Compatible Uses,” referring to areas labeled “Rural” and shown in yellow on Map 1:

“In addition, all of the other uses and activities identified in Chapter 17.21, except agriculture, are properly located in in the Rural/High Density designated area.”

We find it hard to believe the County really intends to discourage agriculture in areas designated Rural. The Rural areas shown in yellow on the land use map (Map 1) include a majority of what is now being actively farmed in the County. If agricultural uses are not allowed in these areas, existing orchards and alfalfa fields will be nonconforming uses and expansion of agriculture will be difficult or impossible.

However, proposed Interim Zoning Map 4 contradicts the Plan. It shows these areas zoned Rural 1, which under proposed amendments to Chapter 17.21, the District Use chart, permits one acre lots, multifamily homes at 4 to 5 dwelling units per acre, a variety of commercial and industrial uses and a full range of agricultural uses—all the uses currently allowed in the Minimum Requirement District. The contradiction between what is said in the Plan's text and outlined in the District Use Chart muddies the County's intentions and needs to be fixed.

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Under the Growth Management Act, Okanogan County was required to designate agricultural lands of long-term commercial significance by September 1, 1991. It continues to fail to do so. The negative impacts to agriculture and the local economy from the spread of subdivisions and suburban development into actively producing farms and orchards were discussed at length in comments submitted earlier. Most significantly, the continued failure to designate and protect agricultural lands will hurt the local economy, threatening the County's major source of employment. (See attached files MVCC 2011 Comp Plan Comments and Futurewise 2013 Comp Plan Comments.)

We disagree with arguments for not providing agriculture zoning presented on pages 7-9 of Environmental Checklist Attachment 1.³ In particular we disagree with the conclusion that "no additional conservation designations are required to conserve a critical mass necessary to support the (agriculture) industry." The Rural 1 zoning placed over what are now active commercial agricultural uses creates pressure for conversion to residential use.

We don't believe it's necessary to restrict uses to agriculture in these areas. We do believe, at a minimum, areas such as the orchards north of Brewster and Pateros should be designated for lot sizes in the 20 to 40 acre range to reduce conversion pressure.

6. Housing densities in areas zoned Rural 1 or 5 promote suburban levels of development and a mix of incompatible uses throughout much of the County, encouraging costly sprawl, straining public services and potentially making residential areas less safe and desirable.

According to land use Map 1, private land now designated Minimum Requirement District is designated Rural or Resource. Outside of the Methow Review District, Resource designated areas are zoned Rural 5, allowing five-acre lots. Rural designated land is zoned Rural 1, allowing one-acre lots. Rural 20 zoning appears to be exclusively assigned to public lands designated as Resource Recreation.

Multifamily housing is allowed at densities of 9600 square feet per acre—the equivalent of four to five homes per acre in all three zones. A four-unit apartment building could be built on a one-acre lot, or a 22-unit apartment building on five acres, assuming the health department requirements for onsite waste disposal systems can be met.

The land use and Rural 1 and 5 zoning designations are misnamed and misapplied. Development on lots of one acre, and even five acres, with the possibility of multifamily housing is suburban not rural development. This level of development will require new urban services such as public water systems, sewers and upgraded roads throughout much of the County. The proposed zoning will promote a "sprawling" growth pattern shown to be inefficient and costly to support with necessary public services. This growth pattern also

³ Appended to the SEPA Determination of Non-Significance on the Comprehensive Plan published by the County on May 14, 2014.

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tends to increase the price of housing and raise local property taxes. The excessive densities and high growth potential represented by the Rural zoning far exceeds what is necessary, based on forecast population increases for the County.

Planned densities of one acre or more should be recognized as “suburban” and concentrated near existing town centers where services are available. The County should reduce the extent of areas zoned Rural 1 and Rural 5, designate more Rural 20 zoning and consider creating a 40-acre minimum lot size zone in areas currently in agriculture or forest use. It should eliminate multifamily development, other than housing for farm workers, in all three Rural zones.

The Rural zones also allow commercial and industrial uses that are incompatible with residential use. Traffic, noise, smells, air and groundwater pollution, visual clutter are among the things to be concerned about when commercial and industrial uses are close to residential areas. Under the proposed Plan and interim zoning, this could happen almost anywhere in the County outside the Methow Review District. Most residents would be upset to find a marijuana grow operation, a compost manufacturer, light manufacturing plant, airstrip, or meat packing plant on the lot next to door. Residential areas would be less safe and desirable places to live, which in turn would diminish property values. The list of permitted and conditioned uses should be revised and more discrete areas suitable for commercial and industrial uses identified in the Plan.

7. The Plan has eliminated public input and leaves little assurance plan updates will occur. The Lower Methow Valley, where water resources are over-allocated, should be a high priority More Completely Planned (MMCPA) area incorporating earlier input from citizens groups.

We contend that the Okanogan County Commissioners violate the intent of SEPA by incrementally eliminating public input that has occurred, even input acquired by County-appointed facilitators.⁴

The County appropriately started early in the process of revising of this now 50-year old Comprehensive Plan by appointing the Lower Valley Advisory Group (LVAG) to work on gathering input for the Lower Methow Valley planning. This is an area that has experienced a large increase in subdivision during the past decade and also encompasses a large portion of the “Lower Reach” of the Methow Valley, which is projected to have extreme water shortages in the future if mitigation measures are not put into place. (See comment 3 above.) The group came up with recommendations over the two years they met, including

⁴ The SEPA Handbook states the following in Section 3.1: “Including the public early in the EIS process is key to identifying public issues, establishing communication lines, and facilitating trust. Taking time up-front to plan how to involve the public and being responsive to the public’s needs as the process proceeds can result in a more complete and accurate document and a more satisfied public. Early involvement can also avoid later pitfalls and unnecessary delays.”

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proposals to reduce zoning densities. An agreement was reached and approved by the Okanogan County Planning Commission to add most of this area to the adjoining Methow Review District, now a proposed MCPA, which had provisions to prevent excessive population densities.

The LVAG was joined after one year by ten other neighborhood groups convened by the County, several with County-appointed facilitators. The vision statements, goals and recommendations from the neighborhood groups were included in the first Comprehensive Plan draft. In the next draft, they were moved to the Appendix. In the following draft, the groups were simply mentioned by geographic area, with their recommendations omitted. In the current draft, neither the groups nor their input is mentioned.

The Lower Methow Valley is an area of special concern and the County should make it a high priority to complete a MCPA there. The proposed Plan and zoning make effectively no change to this area, which remains designated for one-acre lots, and there is no effort to address the projected water shortages.

In addition, previous drafts of the Plan contained provisions for citizens, towns, and cities to request Plan amendments on an annual basis, during certain months of the year (Docketing). Plan review was also scheduled for every five years. These provisions have been eliminated in the proposed Plan and should be put back.

8. The Circulation Element of the Plan fails to show how areas planned for higher density development will be supported by the County's road network and where roads will need to be improved. It fails to reflect or provide for the true public investment costs of implementing the Plan.

Under RCW 36.70.330 (2), a comprehensive plan must include: "A circulation element consisting of the general location, alignment and extent of major thoroughfares, major transportation routes, trunk utility lines, and major terminal facilities, all of which shall be correlated with the land use element of the comprehensive plan."

The Plan doesn't show or explain how the proposed land use and road networks are correlated. The figure labeled Okanogan County Transportation and Essential Public Facilities Map 3 only shows the existing road network, not road improvements necessary to support development outlined on the land use map, Map 1, and Interim Zoning, Map 4.

The Plan should identify and plan for the necessary future capital investments needed to make road improvements to support development, based on the "functional classification system" described on pages 30 and 31. Because many of the areas proposed for Rural 1 zoning on Map 4 are currently served by unpaved or otherwise inadequate roads, a high level of capital investment may be needed to support development in these areas.

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Finally, there are confusing inconsistencies between Map 3 and the road classifications shown on its legend and the road classifications discussed in the text. They do not match up. We also find inconsistencies between the road criteria for the Rural designation described in the Plan and areas designated Rural on the Map 1.

9. Map 3 Identifies “Group A Wells” and “Well Head Protection,” but there is nothing in the text defining the designations or indicating what is proposed. These water resources are important to protect.

We find no discussion or description in the Plan clarifying what the designations on Map 3 mean or encompass. Does the County intend to do anything to protect these essential public facilities? Simply including them on the map does nothing to meet the County's obligation to protect “the quality and quantity of groundwater used for public water supplies,” as required under RCW 36.70.330.

It's important to regulate development in wellhead protection zones to prevent contamination of important public water supply sources. We recommend these be mapped as critical aquifer recharge areas together with appropriate development regulations in the proposed Critical Areas Ordinance.

10. The Comprehensive Plan relies upon plans and regulations that are not yet adopted.

The Plan makes reference to yet-to-be adopted plans and regulations that will provide environmental protections, including the updated Shoreline Master Program which is years behind schedule, the adoption of a Critical Areas Ordinance for which the County has missed its update deadline, resource protection codes, protections for historic and cultural sites, and Sub Area Plans⁵ for the Upper Methow Valley⁶ and the Middle Methow Valley⁷.

The Upper and Middle Methow plans are to be adopted after the Comprehensive Plan, and are included in the Plan appendices. The two plans are supposed to show that sufficient Resource Lands have been designated in the Comprehensive Plan (see page 16). However, the County has not set a target date for adoption of the plans.

The county has spent seven years revising the Comprehensive Plan and has still not updated the the Upper and Middle Methow plans, in spite of extensive community input given years ago.⁸ What are the chances that the plans will be adopted in a timely fashion?

⁵ Now called “More Completely Planned Area” plans (MCPA).

⁶ Sub Unit A, 1976 Methow Valley Plan

⁷ Sub units B, C, and D, 1976 Methow Valley Plan

⁸ The County convened a neighborhood group for the Middle Methow in 2008 for the purpose of input to the Comp Plan for that area (to update the Methow Valley Citizens Council Valley Plan of 1976.) However, the goals and policies were not used to update the document now included in the Comprehensive Plan as the

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Although the County calls these two More Completely Planned Areas currently “updated,” the plans still refer to developments that were abandoned many years ago, such as the Arrowleaf development.

Additional comments

Lines 95-97: The statement that water resources on public lands supply the needs of the county for water gives an incomplete and inaccurate picture of where Okanogan County’s water resources for public water supplies are found. See comment #3 above.

Lines 139-145: Map 2 doesn’t show existing land use as implied here. Map 2 shows the existing zoning.

Lines 166-174: Regarding “official controls will cover everything.” Please define and enumerate which official controls are meant here.

Lines 292: Please clarify what the density bonus is for.

Lines 295-296: Any effort to reissue lost water rights could hasten reaching the end of our water supplies, leaving more private land without being able to be supplied by a well. See comment 3 above.

Pages 16-17: The agriculture and forest designation criteria are unclear, though some rational is included in the DNS attachment. Please include the criteria in the Planning document. See also comment 5 above.

Lines 453-456: The policy on mines is vague. It would appear mining could occur anywhere in rural or resource designation lands with a conditional use permit. Please clarify.

Lines 504-511: The zoning, as mapped, is inconsistent with this language.

Line 546: This is confusing. What two rural designations are being referred to? Please clarify.

Lines 551-556: Please fill in the blank reference.

Attachments

The following digital files, referenced in this document, are being submitted as attachments:

Methow Valley MCPA, and all record of their meetings was eventually dropped from the Comprehensive Plan, with not even a reference in this draft (see comment 7 above.)

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Futurewise 2013 Plan Comments

Hydro Part 1 – Hydro testimony on Methow aquifers

Hydro Part 2 – Figures 4A and 4B aquifer recharge areas

Hydro Part 3 – Methow Watershed Council documents submitted to Okanogan County

MVCC 2011 Plan Comments

MVCC 2013 Plan Comments

MVCC CAO Comments



June 21, 2013

Okanogan County Planning Commission
Okanogan County Office of Planning and Development
123 Fifth Avenue North, Suite 130
Okanogan, Washington 98840

Dear Planning Commissioners:

Subject: Comments on the Okanogan County Comprehensive Plan – Final
Draft dated May 16, 2013 & Okanogan County Land Use Designation
Map – Draft

Sent via email to: planning@co.okanogan.wa.us and via U.S. Mail

Thank you for the opportunity to comment on the update of the Okanogan County Comprehensive Plan. While we appreciate and support that Okanogan County is updating its comprehensive plan, we are very concerned that the county is failing to properly designate agricultural lands and forest lands of long-term commercial significance as required by RCW 36.70A.170(1). We are also concerned that the comprehensive plan does not meet the minimum requirements of the County Planning Enabling Act, chapter 36.70 RCW. We urge the county to meet these minimum standards and to go beyond them to meet the expectations of county residents.

Futurewise is working throughout Washington State to create livable communities, protect our working farmlands, forests, and waterways, and ensure a better quality of life for present and future generations. We work with communities to implement effective land use planning and policies that prevent waste and stop sprawl, provide efficient transportation choices, create affordable housing and strong local businesses, and ensure healthy natural systems. We are creating a better quality of life in Washington State together. We have members across Washington State including Okanogan County.

Comments on Chapter 1: The Okanogan County Comprehensive Plan

The Vision Statement should recognize the important role of agriculture in the county economy. Please see page 5 of the Revised Final Draft 05/16/13

The Washington State Employment Security Department has documented that the “[a]griculture is a very important sector for Okanogan County, which mainly consists of various tree fruits and wheat.”¹ Agriculture is Okanogan County’s largest employer,

¹ Mark A. Berreth, *Okanogan County Profile* p. 1 of 5 (Washington State Employment Security Department: Updated May 2012) accessed on June 20, 2013 at: <https://fortress.wa.gov/esd/employmentdata/reports-publications/regional-reports/county-profiles/okanogan-county-profile#overview> and enclosed with this letter.

providing jobs to 16 percent of county residents.² “In 2007, agriculture, forestry, fishing and hunting paid an annual average of \$35,305 ...”³ This was a higher annual wage than those in the construction industry, although not as high as manufacturing workers who earned an average of \$37,302.⁴ Many of these manufacturing workers process agricultural and forest products.

Given the central role of agriculture in the county economy and the need to protect these jobs, the Vision should include protecting the agricultural industry and its land base and the jobs and incomes those lands generate.

Water Rights. Please see page 13 of the Revised Final Draft 05/16/13

We are concerned that the “water rights” section does not recognize that within the Methow Watershed, Water Resource Inventory Area (WRIA) 48, and Okanogan Watershed, WRIA 49, “most if not all of the available water has already been allocated.”⁵ Given this lack of available water, the water necessary to serve the large expanses of rural residential land the comprehensive plan provides for will come at the expense of existing water right holders. This is inconsistent with the comprehensive plan’s stated objective of protecting first in time, first in right water rights. The comprehensive plan should be made internally consistent by sizing rural development to match the available water resources. This is required by RCW 36.70.330(1) which provides in relevant part that “[t]he land use element shall also provide for protection of the quality and quantity of groundwater used for public water supplies”

Chapter 2: Existing Conditions

We appreciate that the table of land use designations on page 14 is now based on the current comprehensive plan. The table is helpful.

Consider adding a table of existing land uses. See page 14 of the Revised Final Draft 05/16/13

In addition to the table of land use designations, it would also be helpful to include information actual land use in Okanogan County. The Forest Service has prepared

² Marcy Stamper, *County to use public land base to satisfy state call for agriculture, resource lands* Methow Valley News Online (09-28-2010 | Volume: 108 | Issue: 19) last accessed on June 20, 2013 at: <http://www.methowvalleynews.com/story.php?id=4298> and.

³ T. Baba Moussa, *Okanogan County Profile* p. 5 of 6 (Washington State Employment Security Department: January 2009) enclosed with Futurewise’s April 27, 2011 letter to the Board of Commissioners for Okanogan County.

⁴ *Id.*

⁵ State of Washington Department of Ecology Water Resources Program, *Focus on Water Availability for the Methow Watershed, WRIA 48* p. 2 (Publication Number: 11-11-052, Revised August 2012) accessed on June 20, 2013 at: <https://fortress.wa.gov/ecy/publications/summarypages/1111052.html> and enclosed in the email with this letter; State of Washington Department of Ecology Water Resources Program, *Focus on Water Availability for the Okanogan Watershed, WRIA 49* p. 2 (Publication Number: 11-11-053, Revised August 2012) accessed on June 20, 2013 at: <https://fortress.wa.gov/ecy/publications/summarypages/1111053.html> and enclosed in the email with this letter.

estimates of land use on nonfederal land in Okanogan County for 1976, 1994, and 2006 based on the digital interpretation of aerial photographs. That data is enclosed in Appendix A of this letter and a copy of the report from which Appendix A was extracted is enclosed with the paper original of this letter. As you can see in the table, between 1976 and 2006, there have been small, but significant decreases in area of wildland forest and wildland range land outside of federal lands. There was a small increase in intensive agricultural between 1976 and 1994 and that category has been stable since. There were major increases in low density residential development between 1976 and 2006. There was a significant increase in urban development between 1976 and 1994 with urban growth stable since then.

The Figure 1: Historical Population Data 1960-2000 and Table 1: Historical Population For Growth Management and Other Purposes on pages 14 and 15 should be updated to include the currently available 2010 and 2012 population

Figure 1 shows the county population through 2005, despite its title. Table 1 shows the county's population through 2000. We recommend that the figure and table be updated to include the currently available 2010 and 2012 population totals for the county. This data is available at the State of Washington Office of Financial Management website:

<http://www.ofm.wa.gov/pop/default.asp>

Chapter 3: Land Use - Resource Lands

Okanogan County, along with all counties and cities in Washington State, was required to designate agricultural lands of long-term commercial significance by September 1, 1991.⁶ We urge the county to fulfill these duties now, before the 22nd anniversary of this deadline arrives.

We are concerned that this chapter is inconsistent the requirements for designating natural resource lands. Those concerns and a GMA compliant method of designating natural resource lands are spelled out in the following sections.

Growth Management Act Requirements for Designating Agricultural Lands of Long-Term Commercial Significance are not incorporated into the county criteria on page 17

The Washington State Supreme Court has held that there is a three part definition of agricultural lands of long-term commercial significance. As the Supreme Court has held:

¶ 17 In sum, based on the plain language of the GMA and its interpretation in *Benaroya I*, we hold that agricultural land is land: (a) not already characterized by urban growth (b) that is primarily devoted to the commercial production of agricultural products enumerated in RCW 36.70A.030(2), including land in areas used or capable of being used for

⁶ RCW 36.70A.170.

production based on land characteristics, *and* (c) that has long-term commercial significance for agricultural production, as indicated by soil, growing capacity, productivity, and whether it is near population areas or vulnerable to more intense uses.⁷

The county's criteria on page 17 are inconsistent with the supreme court's holding. For example, the county's first criterion combines characterized by urban growth with urban zoning, but zoning is not actual urban growth. The supreme court holding requires that the land to be not already characterized by urban growth, not that it be zoned for urban growth. The criteria also do not include consideration of the growing capacity and productivity of soils as the supreme court's decision requires. We recommend that the criteria be revised to reflect these requirements.

RCW 36.70A.050 directed the agency that is now the State of Washington Department of Commerce to adopt minimum guidelines for the classification and designation of agriculture, forest, and mineral lands. "The GMA provides that these '*minimum* guidelines' apply to all jurisdictions, but also 'shall allow for regional differences that exist in Washington state. The intent of these guidelines is to assist counties and cities in designating the classification of' ..." agriculture, forest, and mineral lands of long-term commercial significance.⁸ We recommend that Okanogan County follow the approach in the minimum guidelines for designating agricultural lands of long-term commercial significance. This approach has the advantage of complying with state law, including the *Lewis County* decision.

The Approach Recommended in the Minimum Guidelines

The Washington State Department of Commerce's minimum guidelines for agricultural lands recommend the following process for designating agricultural lands.

1. Identify lands currently used or capable of being used for agricultural production. See WAC 365-190-050(3)(b).

One source of the land areas used for the production of agricultural products is much of Okanogan County outside the Colville Indian Reservation is *Land Ownership Change and the Ranching Economy in the Okanogan Valley and Eastern Okanogan County* "Map 2: Private Parcels by Taxable Land Use Code (Agricultural and Other), Study Area" on page 19 of the report.⁹

⁷ *Lewis County v. Western Washington Growth Management Hearings Bd.*, 157 Wn.2d 488, 502, 139 P.3d 1096, 1103 (2006).

⁸ *Manke Lumber Co., Inc. v. Diehl*, 91 Wn. App. 793, 805, 959 P.2d 1173, 1180 (1998).

⁹ Julia Haggerty and Patty Gude, *Land Ownership Change and the Ranching Economy in the Okanogan Valley and Eastern Okanogan County*, Washington p. 19 (Headwaters Economics, Bozeman, Montana: Nov. 12, 2008). Accessed most recently on June 21, 2013 at: http://headwaterseconomics.org/wphw/wp-content/uploads/HeadwatersEconomics_OkanoganLandStudy.pdf and enclosed with the paper original of Futurewise's April 27, 2011 letter to the Board of Commissioners for Okanogan County.

The Washington State Department of Natural Resources maintains a collection of aerial photographs that can be provided either in hard copies or as digital data. You can find out more at DNR's Photo and Map Services website:

http://www.dnr.wa.gov/BusinessPermits/Topics/Maps/Pages/photo_and_map_products_and_services.aspx The county can also use web based applications to identify agricultural land in current use such as Google Earth at: <http://www.google.com/earth/index.html>

For identifying the location of cropland, the Washington State Department of Agriculture has a 2012 Crop Distribution Geodatabase that identifies those sections, generally 640 acre squares, of land that have crops growing in 2012 and characteristics of those crops. The 2012 Crop Distribution Geodatabase can be downloaded at:

<http://agr.wa.gov/PestFert/NatResources/AgLandUse.aspx> and a printout of the web based version of the 2012 Crop Distribution Geodatabase is enclosed with the paper version of this letter and in separate emails. For more information please contact: Perry Beale, Senior Crop Mapping Specialist Washington State Department of Agriculture, telephone (360) 902-2065 or e-mail: pbeale@agr.wa.gov

In considering the crop distribution data, it is important to note that the in 2007, cropland made up just 10.5 percent of the land in Okanogan County farms and ranches.¹⁰ So cropland data cannot be exclusively used to identify the land currently in agriculture.

Additional sources of data on the location of land areas used for the production of agricultural products are the Okanogan County Watershed Plans. The *Level 1 Watershed Technical Assessment Final Report: Okanogan River Watershed Resource Inventory Area 49* found that:

There are about 80,668 acres of land water-righted for irrigation in WRIA 49, according to the Ecology WRATS/GWIS database. As discussed previously, it is undocumented –and unlikely – that all water rights are fully employed. The County Assessor's parcel database designates a total of 55,321 acres for an agricultural use of some sort. The 1999 Okanogan LFA identified a total of 101,930 acres of crop land in the Okanogan Basin, of which 50 percent (about 51,000 acres) was estimated to be irrigated. This value would agree reasonably well with the County Assessor's data.¹¹

¹⁰ United States Department of Agriculture, National Agricultural Statistics Service, *2007 Census of Agriculture, Washington State and County Data Volume 1 Geographic Area Series • Part 47* Chapter 2: County Level Data, Table 8. Farms, Land in Farms, Value of Land and Buildings, and Land Use: 2007 and 2002 p. 293 (February 2009). Accessed on June 21, 2013 at:

http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1_Chapter_2_County_Level/Washington/st53_2_008_008.pdf. A copy of the *2007 Census of Agriculture, Washington State and County Data Volume 1 Geographic Area Series • Part 47* was enclosed with the paper original of Futurewise's April 27, 2011 letter to the Board of Commissioners for Okanogan County.

¹¹ ENTRIX, Inc., *Level 1 Watershed Technical Assessment Final Report: Okanogan River Watershed Resource Inventory Area 49* p. 3-19 (Okanogan Watershed Planning Unit: Sept. 2006). Accessed most recently on June

WAC 365-190-050(3)(b)(ii) recommends that the United States Department of Agriculture's land capability classification system be used to determine whether land is used or capable of being used for agricultural production. This system is summarized in United States Department of Agriculture's Field Office Technical Guide on page 7 of 9 of Section 2 – Natural Resources Information "1. Soils" enclosed with Futurewise's April 27, 2011 letter to the Board of Commissioners for Okanogan County and accessed most recently on June 21, 2013 at:

<http://efotg.sc.egov.usda.gov/references/public/WA/cropland.pdf> We recommend using land capability classes 1 through 7 in identifying land capable of being used for agricultural production.

Geographical information system data layers and soils data, including the land capability classes, can be downloaded for free from United States Department of Agriculture Natural Resource Conservation Service Web Soil Survey webpage at:

<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>

2. Deduct lands already characterized by urban growth. See WAC 365-190-050(3)(a).

Land Ownership Change and the Ranching Economy in the Okanogan Valley and Eastern Okanogan County "Figure 7: Structure Development Series, Study Area" identifies long-term development trends through 2008 for Okanogan County.¹² These areas can also be identified using the aerial photographs discussed above and the county's records for vested development. Consistent with the Washington Supreme Court's *Quadrant Corp.* decision,¹³ we recommend that existing and vested development with a density of one dwelling unit per acre or greater and the land immediately adjacent to these areas and suitable for urban development be deducted.

3. Determine which of the remaining lands have long term commercial significance. See WAC 365-190-050(3)(c).

After identifying the lands that are being used and are capable of being used for agricultural production and after deducted those lands that are already characterized by urban growth, the county should determine which of the remaining lands have long-term commercial significance. The Growth Management Act, in RCW 36.70A.030(10), defines

21, 2013 at:

http://www.okanogancd.org/sites/default/files/programs/owp/24_Technical%20Assessment.pdf and enclosed with the paper original of Futurewise's April 27, 2011 letter to the Board of Commissioners for Okanogan County. According to the Okanogan Conservation District's Okanogan Watershed Plan webpage the "Okanogan County Commissioners approved the plan as presented in April 2010." A copy of this webpage was enclosed with the paper original of Futurewise's April 27, 2011 letter to the Board of Commissioners for Okanogan County.

¹² Julia Haggerty and Patty Gude, *Land Ownership Change and the Ranching Economy in the Okanogan Valley and Eastern Okanogan County*, Washington p. 21 (Headwaters Economics, Bozeman, Montana: Nov. 12, 2008).

¹³ *Quadrant Corp. v. State Growth Management Hearings Bd.*, 154 Wn.2d 224, 233 – 41, 110 P.3d 1132, 1137 – 41 (2005).

“long-term commercial significance” to include “the growing capacity, productivity, and soil composition of the land for long-term commercial production, in consideration with the land’s proximity to population areas, and the possibility of more intense uses of the land.” So the county is required to consider these factors. WAC 365-190-050(3)(c) includes eleven factors that relate to the statutory factors and other considerations. Each of those factors is identified below. We recommend that these factors be considered together as a whole.

“(i) The classification of prime and unique farmland soils as mapped by the Natural Resources Conservation Service[.]” WAC 365-190-050(3)(c)(i).

Enclosed with Futurewise’s April 27, 2011 letter to the Board of Commissioners for Okanogan County are lists of the prime and unique farmlands soils in Okanogan County. The soil survey divides the county in four areas, so we provided the lists for all four areas. To help the county evaluate the significance of those soils, we are also enclosed with the April 27, 2011 letter lists of the acreage in each of the soils in the county. All of these lists were downloaded from the United States Department of Agriculture Natural Resource Conservation Service. These lists can be used with the soil GIS data layers that can be downloaded at the Web Soil Survey webpage.

“(ii) The availability of public facilities, including roads used in transporting agricultural products[.]” WAC 365-190-050(3)(c)(ii).

State Route (SR) 97, which runs through Okanogan County from the Canadian border to Chelan County and beyond is one of the major livestock transport routes in the state.¹⁴ Hay is shipped throughout Washington State, and Okanogan County hay is shipped to Washington State destinations.¹⁵

The county could also use data from the cities and its own records to indentify public facilities, such as sewer lines, that would indicate that an area would likely convert to other more intense uses.

“(iii) Tax status, including whether lands are enrolled under the current use tax assessment under chapter 84.34 RCW and whether the optional

¹⁴ Stephanie Meenach, Eric L. Jessup, & Kenneth L. Casavant, *Transportation and Marketing Needs for the Washington State Livestock Industry* p. 12 (Washington State University, School of Economic Sciences, Strategic Freight Transportation Analysis (SFTA) Research Report #12: November 2004). Accessed most recently on June 21, 2013 at: http://www.sfta.wsu.edu/research/reports/research_paper.htm and enclosed with the paper original of Futurewise’s April 27, 2011 letter to the Board of Commissioners for Okanogan County.

¹⁵ Stephanie Meenach, Eric L. Jessup, & Kenneth L. Casavant, *Transportation Characteristics and Needs of the Washington Hay Industry: Producers and Processors* p. 10 (Washington State University, School of Economic Sciences, SFTA Research Report #11: November 2004). Accessed most recently on June 21, 2013: http://www.sfta.wsu.edu/research/reports/research_paper.htm and enclosed with the paper original of Futurewise’s April 27, 2011 letter to the Board of Commissioners for Okanogan County.

public benefit rating system is used locally, and whether there is the ability to purchase or transfer land development rights[.]” WAC 365-190-050(3)(c)(iii).

Land Ownership Change and the Ranching Economy in the Okanogan Valley and Eastern Okanogan County “Map 2: Private Parcels by Taxable Land Use Code (Agricultural and Other), Study Area” on page 19 of the report identifies the land classified by Okanogan County Assessor the in the “Agriculture” land use tax code.¹⁶ The county could use data from the County Assessor Office to identify those properties in a current use taxation program. Okanogan County had 541,794 acres in the Farm and Agriculture Current Use Taxation Program in the 2010 tax year.¹⁷

“(iv) The availability of public services[.]” WAC 365-190-050(3)(c)(iv).

The county could also use data from the cities and its own records to indentify public services that would indicate that an area would likely convert to other more intense uses. This criterion needs to distinguish between those public services that agricultural areas need, such as fire districts, sheriff services and emergency medical services, and those services that support more intense uses such as urban governmental services like sewer extensions and water systems designed to serve intense uses.¹⁸

“(v) Relationship or proximity to urban growth areas[.]” WAC 365-190-050(3)(c)(v).

The county could use its data on the location of city expansion areas to identify them. They are shown on the draft “Land Use Designation” Map.

“(vi) Predominant parcel size[.]” WAC 365-190-050(3)(c)(vi).

This criterion seeks to identify whether an area has predominate parcel sizes that can be efficiently used for agriculture over the long-term. *Land Ownership Change and the Ranching Economy in the Okanogan Valley and Eastern Okanogan County* “Map 4: Agricultural Holdings by Size Category, Study Area” identifies the agricultural land in Okanogan County in very large ownerships, holdings 160 acres and larger.¹⁹ This shows

¹⁶ Julia Haggerty and Patty Gude, *Land Ownership Change and the Ranching Economy in the Okanogan Valley and Eastern Okanogan County*, Washington p. 19 (Headwaters Economics, Bozeman, Montana: Nov. 12, 2008).

¹⁷ Washington State Department of Revenue, *Current Use Assessments: True and Fair Value Assessments in 2009 due in 2010: Current Use Detail*. Enclosed with the enclosed with the paper original of Futurewise’s April 27, 2011 letter to the Board of Commissioners for Okanogan County.

¹⁸ RCW 36.70A.030(18) defines “[u]rban governmental services’ or ‘urban services’ [to] include those public services and public facilities at an intensity historically and typically provided in cities, specifically including storm and sanitary sewer systems, domestic water systems, street cleaning services, fire and police protection services, public transit services, and other public utilities associated with urban areas and normally not associated with rural areas.”

¹⁹ Julia Haggerty and Patty Gude, *Land Ownership Change and the Ranching Economy in the Okanogan Valley and Eastern Okanogan County*, Washington p. 23 (Headwaters Economics, Bozeman, Montana: Nov. 12, 2008).

extensive areas of large land holdings. The county could also use data from the County Assessor Office to identify the predominate parcel sizes in those lands that may qualify as agricultural lands of long-term commercial significance, such as lots larger than 20 acres, which was the proposed agricultural minimum lot size. It is important to recognize, as *Land Ownership Change and the Ranching Economy in the Okanogan Valley and Eastern Okanogan County* does that farms and ranches are made up of multiple parcels and that small parcels may be included in agricultural areas because it is not unusual to create a small lot for a house for one of the family members that own or work on a farm or ranch. It is also important to recognize that some forms of agriculture, such as intensively farmed organic farms, often use small parcels. So we recommend using a predominate parcel size of ten and twenty acres and not excluding smaller parcels when mixed in with predominately larger parcels.

“(vii) Land use settlement patterns and their compatibility with agricultural practices[.]” WAC 365-190-050(3)(c)(vii).

This criterion seeks to identify patterns of urban and rural development that may interfere with agricultural activities long term. *Land Ownership Change and the Ranching Economy in the Okanogan Valley and Eastern Okanogan County* “Figure 7: Structure Development Series, Study Area” identifies settlement patterns, although some of the buildings show would be farm and ranch homes.²⁰ Aerial photographs can also be used to identify settlements.

“(viii) Intensity of nearby land uses[.]” WAC 365-190-050(3)(c)(viii).

This criterion seeks to identify areas of intense uses that may interfere with agricultural activities long term. *Land Ownership Change and the Ranching Economy in the Okanogan Valley and Eastern Okanogan County* “Figure 7: Structure Development Series, Study Area” shows the intensity of development over time.²¹ Aerial photographs can also be used to identify these areas.

“(ix) History of land development permits issued nearby[.]” WAC 365-190-050(3)(c)(ix).

Land Ownership Change and the Ranching Economy in the Okanogan Valley and Eastern Okanogan County “Figure 7: Structure Development Series, Study Area” shows residential and commercial building permits over time, although some are for farm and ranch dwellings.²² County building permit records can also be consulted. This criterion seeks to identify areas where permits have been issued for types and levels of development that are inconsistent with long-term agricultural uses.

²⁰ *Id.* at p. 21.

²¹ *Id.*

²² *Id.*

“(x) Land values under alternative uses[.]” WAC 365-190-050(3)(c)(x).

Land Ownership Change and the Ranching Economy in the Okanogan Valley and Eastern Okanogan County includes information on prices for ranch land the ranch land buyers.²³ In 1993 through 2008, “Traditional Ranchers” were the largest purchaser of ranchland.²⁴ County real estate data can be used to determine land values under alternatives uses. However, caution must be used in applying this criterion. The Washington State Supreme Court has noted that uses other than agriculture will always be more profitable so that this type of criterion cannot be controlling in determining whether or not land has long-term commercial significance.²⁵

“(xi) Proximity to markets[.]” WAC 365-190-050(3)(c)(xi).

Okanogan County has good access to livestock and hay markets. “Livestock are shipped to three main locations in Washington once leaving producer operations; feed lots, other farms, and slaughter facilities.”²⁶ Livestock arrive at feedlot and producer operations from all over Washington State.²⁷ Producers received 39.05 percent of their livestock from within 50 miles.²⁸ The balance, over 60 percent, arrives from 50 miles to greater than 100 miles.²⁹ State Route (SR) 97, which runs through Okanogan County is one of the major livestock transport routes in the state.³⁰ Hay is shipped throughout Washington State, and Okanogan County hay is shipped to Washington State destinations.³¹ Stockyards are located in Toppenish and Davenport.³²

4. Designing agricultural land sufficient to maintain and enhance the agricultural industry. See WAC 365-190-050(5).

The Growth Management Act establishes as a goal, in RCW 36.70A.020(8), to “[m]aintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries.” To help implement this goal, WAC 365-190-050(5) provides that “[w]hen applying the criteria in subsection (3)(c) of this section [the long-term significance criteria discussed above], the process should result in designating an amount of

²³ *Id.* pp. 25 – 30.

²⁴ *Id.* at p. 28.

²⁵ *City of Redmond v. Central Puget Sound Growth Management Hearings Bd.*, 136 Wn.2d 38, 52 – 53, 959 P.2d 1091, 1097 (1998).

²⁶ Stephanie Meenach, Eric L. Jessup, & Kenneth L. Casavant, *Transportation and Marketing Needs for the Washington State Livestock Industry* p. 6 (Washington State University, School of Economic Sciences, Strategic Freight Transportation Analysis (SFTA) Research Report #12: November 2004).

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.* at p. 12.

³¹ Stephanie Meenach, Eric L. Jessup, & Kenneth L. Casavant, *Transportation Characteristics and Needs of the Washington Hay Industry: Producers and Processors* p. 10 (Washington State University, School of Economic Sciences, SFTA Research Report #11: November 2004).

³² Julia Haggerty and Patty Gude, *Land Ownership Change and the Ranching Economy in the Okanogan Valley and Eastern Okanogan County, Washington* p. 15 (Headwaters Economics, Bozeman, Montana: Nov. 12, 2008).

agricultural resource lands sufficient to maintain and enhance the economic viability of the agricultural industry in the county over the long term; and to retain supporting agricultural businesses, such as processors, farm suppliers, and equipment maintenance and repair facilities.” The *Washington Agriculture Strategic Plan 2020 and Beyond* makes the case that if we are going to maintain our agricultural industry in Washington State we need to maintain our existing land base.³³ So in designating its agricultural lands of long-term commercial significance, Okanogan County should also seek to maintain its farming and ranching land base to maintain and enhance the agricultural industry.

Failing to adequately designate agricultural lands of long-term commercial significance will harm the Okanogan County economy and budget

As we have documented, “[a]griculture is a very important sector for Okanogan County, which mainly consists of various tree fruits and wheat.”³⁴ Agriculture is Okanogan County’s largest employer, providing jobs to 16 percent of county residents.³⁵ “In 2007, agriculture, forestry, fishing and hunting paid an annual average of \$35,305 ...”³⁶ This economic data shows that agriculture in Okanogan County has long-term commercial significance.

The Washington State Department of Agriculture’s recently completed *Washington Agriculture Strategic Plan 2020 and Beyond* documents to need to conserve agricultural lands to maintain the agricultural industry and the jobs and incomes the industry provides.³⁷ Given our current economic problems, not protecting such an important part of the state and Okanogan County economies is a bad idea.

Allowing the conversion of Okanogan County’s farm and ranch land is also a bad idea for the Okanogan County budget. As the *Washington Agriculture Strategic Plan 2020 and Beyond* documents,

For each \$1 paid in taxes by farm and forest lands in that [Skagit] county, those lands received back about 51 cents in services, contributing a 49 cent subsidy for the rest of the taxpayers in the county. For every \$1 paid in taxes by residential properties, those properties received \$1.25 in public services.³⁸

³³ Washington State Department of Agriculture, *Washington Agriculture Strategic Plan 2020 and Beyond* pp. 50 – 55 (2009). Last accessed on June 21, 2013 at: <http://agr.wa.gov/FoF/> and the cited pages enclosed with the paper original of Futurewise’s April 27, 2011 letter to the Board of Commissioners for Okanogan County.

³⁴ Mark A. Berreth, *Okanogan County Profile* p. 1 of 5 (Washington State Employment Security Department: Updated May 2012).

³⁵ Marcy Stamper, *County to use public land base to satisfy state call for agriculture, resource lands* Methow Valley News Online (09-28-2010 | Volume: 108 | Issue: 19).

³⁶ T. Baba Moussa, *Okanogan County Profile* p. 5 of 6 (Washington State Employment Security Department: January 2009).

³⁷ Washington State Department of Agriculture, *Washington Agriculture Strategic Plan 2020 and Beyond* pp. 50 – 52 (2009).

³⁸ *Id.* at p. 53.

Converting farmland and forest land to residential development, assuming there are buyers for such land, will blow hole in the Okanogan County general fund budget. It will also harm the county's largest industry and the county residents the industry and related businesses employ.

Comparing the *Land Use Designation Map Draft* with the Washington State Department of Agriculture's 2012 Crop Distribution map, a copy of which is enclosed with the paper original of this letter and in separate emails, shows that most of the crop land and orchards in the Okanogan Valley, the side valleys, along Columbia River, and in the Methow Valley are not designated as agricultural lands of long-term commercial significance. This shows that the county's criteria and their application are flawed. We recommend using the approach from the minimum guidelines summarized above.

Failing to include standards of population density and building intensity violates RCW 36.70.330(1) for the Agriculture, Forest, and Mineral Resource Lands designations

RCW 36.70.330(1) requires that the county's land use element must include "a statement of the standards of population density and building intensity recommended for the various areas in the jurisdiction and estimates of future population growth in the area covered by the comprehensive plan" For the Agricultural Resource lands designation there are no density standards and the policies on lots sizes on page 18 of the comprehensive plan all relate to how developable the property is, not to the protection of agricultural land which is the purpose of the designation. We recommend that the comprehensive plan include a 40 acre minimum lot size to protect the agricultural land.

It is the same for the Forest Resource lands designation on pages 20 and 21. Parcels smaller than 40 acres have much lower timber harvest rates and are more likely to be converted to residential land uses.³⁹ Parcels smaller than 50 acres have higher than average costs for preparing timber sales, harvesting trees, and reforesting the site.⁴⁰ So we recommend that the maximum density for forest land be one dwelling unit per 50 acres.

³⁹ Eric J. Gustafson & Craig Loehle, *Effects of Parcelization and Land Divestiture on Forest Sustainability in Simulated Forest Landscapes*, 236 FOREST ECOLOGY and MANAGEMENT 305, 313 (2006). Accessed most recently on June 21, 2013 at: http://nrs.fs.fed.us/pubs/jrnl/2006/nrs_2006_gustafson_001.pdf and enclosed with the paper original of Futurewise's April 27, 2011 letter to the Board of Commissioners for Okanogan County. Forest Ecology and Management is a refereed scientific journal, see the Forest Ecology and Management webpage enclosed with the paper original of Futurewise's April 27, 2011 letter to the Board of Commissioners for Okanogan County and available at: <http://www.elsevier.com/journals/forest-ecology-and-management/0378-1127/guide-for-authors>

⁴⁰ R. Neil Sampson, *Implication for Forest Production in Responses to "America's Family Forest Owners"* 102 JOURNAL OF FORESTRY 4, 12 (October/November 2004). Enclosed with the paper original of Futurewise's April 27, 2011 letter to the Board of Commissioners for Okanogan County. The Journal of Forestry is a peer reviewed scientific journal. See the Journal of Forestry Guide for Authors webpage available at: <http://www.safnet.org/publications/jof/guideforauthors.cfm> and enclosed with the paper original of Futurewise's April 27, 2011 letter to the Board of Commissioners for Okanogan County.

The Mineral Resource Lands policies on page 23 have the same defect. To protect these important resource lands we recommend a 20 acre minimum lot size.

Growth Management Act Requirements for Designating Forest Lands of Long-Term Commercial Significance

There are three required criteria for designating forest land of long-term commercial significance:

1. The land is “not already characterized by urban growth”⁴¹
2. “The land is primarily devoted to growing trees for long-term commercial timber production on land that can be economically and practically managed for such production, including Christmas trees subject to the excise tax imposed under RCW 84.33.100 through 84.33.140”⁴²
3. “[A]nd that has long-term commercial significance.”⁴³

Like the Agricultural Lands criteria, the “Forest Lands of Long Term Commercial Significance” criteria on page 19 improperly include “urban zoning” in the not already characterized by urban growth criterion. They also do not address the “economically and practically managed” requirement. The land use map also fails to designate important forest lands.⁴⁴ Enclosed with this letter is the paper *The Nineteenth Annual Two-Day Conference on Washington’s Growth Management Act: Goals 8 & 9: Natural Resource Lands and Recreation and Open Space: How We Are Doing, State of the Law, and Helpful Improvements*. This paper provides more detail on designating forest land of long-term commercial significance.

A recent report by the College of Forest Resources of the University of Washington documents the need to protect “anchor forests” and the private forest land near them to maintain the state’s forest products industry, including the high paying jobs the industry supports.⁴⁵ The University of Washington study identifies many parcels in Okanogan

⁴¹ RCW 36.70A.170(1)(b).

⁴² RCW 36.70A.030(8); *Manke Lumber Co., Inc. v. Diehl*, 91 Wn. App. 793, 805, 959 P.2d 1173, 1179 – 80 (1998).

⁴³ *Id.*

⁴⁴ *Detail Maps of High Conversion Risk, High Value Private Forestland Near Anchor Forests in Washington – North Central and Northeast*. These maps were accessed most recently on June 21, 2013 at: <http://www.ruraltech.org/projects/wrl/sfr/maps/index.asp> and enclosed with Futurewise’s April 27, 2011 letter to the Board of Commissioners for Okanogan County attached to the *Retention of High-Valued Forest Lands at Risk of Conversion to Non-Forest Uses in Washington State* Final Report.

⁴⁵ College of Forest Resources, University of Washington, *Retention of High-Valued Forest Lands at Risk of Conversion to Non-Forest Uses in Washington State* Final Report pp. 14 – 15 (Prepared for the Washington State Legislature and Washington Department of Natural Resources: March 25, 2009). Accessed most recently on June 21, 2013 at: <http://www.ruraltech.org/projects/wrl/sfr/pdf/RetentionReport.pdf> and enclosed with the paper original of Futurewise’s April 27, 2011 letter to the Board of Commissioners for Okanogan County.

County as at risk of conversion.⁴⁶ This puts forest products jobs at significant risk.⁴⁷ Properly designating and protecting these lands will protect the land base and the jobs.

Chapter 4: Land Use - Rural Lands

RCW 36.70.330(1) requires that “[t]he land use element shall also provide for protection of the quality and quantity of groundwater used for public water supplies” But there are no policies or other provisions to protect groundwater.⁴⁸

In addition, policies in the rural element will pollute groundwater. There is no longer any minimum lots size or density in the Rural Lands Chapter. Marylynn Yates, in a peer reviewed scientific journal, analyzed data and cases of ground water pollution from septic tanks. She concluded that septic tanks are major contributors of waste water, septic tanks are the most frequently reported cause of ground water contamination, and the most important factor influencing ground water contamination from septic tanks is the density of the systems.⁴⁹ Lot sizes associated with ground water contamination cases ranged from less than a quarter acre to three acres.⁵⁰ More recent studies support these conclusions. For example, an “observational study identified septic system density as a risk factor for sporadic cases of viral and bacterial diarrhea in central Wisconsin children.”⁵¹ The greater the density of septic tanks the greater the likelihood of diarrheal disease.⁵² And the highest septic tank densities were one septic tank per 11 acres.⁵³ A study of the potential for nitrate pollution of ground water in Cedar Valley, Iron County, Utah lead to a recommendation that the minimum lot size for septic systems should be five areas in one

⁴⁶ *Id.* at pp. 8 – 14 & *Detail Maps of High Conversion Risk, High Value Private Forestland Near Anchor Forests in Washington – North Central and Northeast.*

⁴⁷ *Id.* at pp. 18 –19.

⁴⁸ Revised Final Draft 05/16/13 pp. 24 – 26.

⁴⁹ Marylynn V. Yates, *Septic Tank Density and Ground-Water Contamination* 23 GROUND WATER 586, p. 590 (1985). Accessed most recently on June 21, 2013 at: <http://info.ngwa.org/gwol/pdf/852537546.PDF> and enclosed with the paper original of this letter. Ground Water is a peer reviewed scientific journal. See the Ground Water Peer Review enclosed with the paper original of this letter and accessed on June 21, 2013: <http://www.ngwa.org/Professional-Resources/publications/GW/Pages/Ground-Water-Peer-Review.aspx>

⁵⁰ Marylynn V. Yates, *Septic Tank Density and Ground-Water Contamination* 23 GROUND WATER 586, p. 590 (1985).

⁵¹ Mark A. Borchartd, Po-Huang Chyou, Edna O. DeVries, and Edward A. Belongia, *Septic System Density and Infectious Diarrhea in a Defined Population of Children* 111 ENVIRONMENTAL HEALTH PERSPECTIVES 742, p. 745 (2003). Accessed most recently on June 21, 2013 at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1241485/pdf/ehp0111-000742.pdf> and enclosed with the paper original of this letter. Environmental Health Perspectives is a peer reviewed scientific journal. See the Environmental Health Perspectives Journal Information accessed on March 31, 2011 at: <http://ehp.niehs.nih.gov/journal-information/> and enclosed with the paper original of this letter.

⁵² Mark A. Borchartd, Po-Huang Chyou, Edna O. DeVries, and Edward A. Belongia, *Septic System Density and Infectious Diarrhea in a Defined Population of Children* 111 ENVIRONMENTAL HEALTH PERSPECTIVES 742, pp. 745 – 47 (2003).

⁵³ *Id.* at 747.

part of the valley and 15 acres in three other parts.⁵⁴ So lots allowed by the Rural Chapter will likely pollute the groundwater drinking water sources.

Adverse impacts will also occur because the proposed densities are not matched to the available ground water resources. This is particularly important because a significant number of Okanogan County's subbasins and streams are already overappropriated.⁵⁵ The Washington State Department of Ecology has also concluded that "most if not all of the available water has already been allocated" in Water Resource Inventory Areas (WRIAs) 48 and 49, the Methow and Okanogan River Watersheds.⁵⁶

The proposed comprehensive plan's decision not to designate and protect private agricultural lands could increase demand for water as the agricultural lands are converted to residential use.⁵⁷ This would make these water shortages even worse. The land use element, including Chapter 4, must be revised to protect the quality and quantity of groundwater as RCW 36.70.330(1) requires.

RCW 36.70.330(1) requires that the county's land use element must include "a statement of the standards of population density and building intensity recommended for the various areas in the jurisdiction and estimates of future population growth in the area covered by the comprehensive plan" The Rural Chapter does not include any population densities and building intensities. Again, this violates state law.

Chapter 8: Circulation Element. Please see pages 34 – 38 of the Revised Final Draft 05/16/13

The circulation element is a required comprehensive plan element and important to maintain the county's economy.⁵⁸ We appreciate that the Okanogan County has prepared a transportation element, however it is unclear if it meets the requirements for a circulation element and if it is part of the comprehensive plan. The Appendixes referenced on page 38, for example, are not included in the version of the comprehensive plan available on the county website. We recommend that an element complying with RCW 36.70.330(2) be included with the comprehensive plan.

⁵⁴ Mike Lowe, Janae Wallace, and Walid Sabbah, and Jason L. Kneedy, *Science-Based Land-Use Planning Tools to Help Protect Ground-Water Quality, Cedar Valley, Iron County, Utah Special Study* 134 pp. 27 – 28 (Utah Geological Survey, a Division of Utah Department of Natural Resources: 2010). Most recently accessed on June 21, 2013 at: <http://geology.utah.gov/online/ss/ss-134/ss-134text.pdf> and enclosed with the paper original of this letter.

⁵⁵ ENTRIX, Inc., *Level 1 Watershed Technical Assessment Final Report: Okanogan River Watershed Resource Inventory Area 49* p. ES-3 (Okanogan Watershed Planning Unit: Sept. 2006).

⁵⁶ State of Washington Department of Ecology Water Resources Program, *Focus on Water Availability for the Methow Watershed, WRIA 48* p. 2 (Publication Number: 11-11-052, Revised August 2012); State of Washington Department of Ecology Water Resources Program, *Focus on Water Availability for the Okanogan Watershed, WRIA 49* p. 2 (Publication Number: 11-11-053, Revised August 2012)

⁵⁷ ENTRIX, Inc., *Level 1 Watershed Technical Assessment Final Report: Okanogan River Watershed Resource Inventory Area 49* p. ES-3 (Okanogan Watershed Planning Unit: Sept. 2006).

⁵⁸ RCW 36.70.330(2).

Chapter 9: Essential Public Facilities. Please see page 39 of the Revised Final Draft 05/16/13

RCW 36.70.547 provides in relevant part that “[e]very county, city, and town in which there is located a general aviation airport that is operated for the benefit of the general public, whether publicly owned or privately owned public use, shall, through its comprehensive plan and development regulations, discourage the siting of incompatible uses adjacent to such general aviation airport.” Chapter 9 on page 39 states that “[t]he Comprehensive Plan creates policy designed to guide zoning and other development regulation to protect airports from incompatible land uses both on-site and on adjacent lands as encouraged by the Revised Code of Washington and required Federal Regulation.” However, the comprehensive plan, other than on pages 39 and 61, contains no mention of airports. Pages 39 and 61 do not discourage the siting of incompatible use as RCW 36.70.547 requires.

Further, the Okanogan County Land Use Designation Map – Draft designates the Winthrop / Methow Valley State Airport and Anderson Field as Rural.⁵⁹ The proposed Comprehensive Plan on page 25 provides that “[r]esidential uses are consistent with the rural designation.” However, residential uses are not compatible with certain areas near airports.⁶⁰ We recommend the county consult the enclosed *Airports and Compatible Land Use: Volume One An Introduction and Overview for Decision-Makers* and include policies and comprehensive plan designations for the airports in Okanogan County that are consistent with those recommendations.

Thank you for considering our comments. If you require additional information please contact me at telephone 206-343-0681 and email tim@futurewise.org

Sincerely,

⁵⁹ Washington State Department of Transportation Aviation Division, *Washington State Airport Reference Guide* p. 14 & p. 134 (Sept. 2007) accessed on June 20, 2013 at: <http://www.wsdot.wa.gov/NR/rdonlyres/8AC7D85B-F2EE-4751-9621-5979708F553B/0/AirportReferenceGuide.pdf> The Washington State Airport Reference Guide pages for each airport in Okanogan County are enclosed in the email with this letter.

⁶⁰ Washington State Department of Transportation Aviation Division, *Airports and Compatible Land Use: Volume One An Introduction and Overview for Decision-Makers* pp. 40 – 41 (Revised February 1999) accessed on June 20, 2013 at: <http://www.wsdot.wa.gov/NR/rdonlyres/5983B7EF-5061-48FF-8829-1359F783CD10/0/AirportsLandUse.pdf> and enclosed with email with this letter.

A handwritten signature in blue ink, consisting of two large, stylized, overlapping loops that resemble the letter 'S'.

Tim Trohimovich, AICP
Director of Planning & Law

Enclosures

Appendix A

Area of Nonfederal Land In Okanogan County by Use in 1976, 1993, and 2006

Use Category	1976		1994		2006		Numeric Change 76-94		Numeric Change 94-2006	
	Thousand Acres	Percent	Thousand Acres	Percent	Thousand Acres	Percent	Thousand Acres	Percent	Thousand Acres	Percent
Wildland forest	943	50.1%	930	49.4%	926	49.3%	-13	-1.4%	-4	-0.4%
Wildland range	654	34.8%	639	34.0%	632	33.6%	-15	-2.3%	-7	-1.1%
Mixed range/agriculture	49	2.6%	50	2.7%	50	2.7%	1	2.0%	0	0.0%
Intensive agriculture	206	11.0%	209	11.1%	209	11.1%	3	1.5%	0	0.0%
Low-density residential	21	1.1%	45	2.4%	55	2.9%	24	114.3%	10	22.2%
Urban	5	0.3%	6	0.3%	6	0.3%	1	20.0%	0	0.0%
Other	1	0.1%	1	0.1%	1	0.1%	0	0.0%	0	0.0%
Total	1,880	100.0%	1,880	100.0%	1,880	100.0%	0	0.0%	0	0.0%

Source: Andrew N. Gray, David L. Azuma, Gary J. Lettman,; Joel L. Thompson, Neil. McKay, *Changes in Land Use and Housing on Resource Lands In Washington State, 1976–2006* p. 12 (Gen. Tech. Rep. PNW-GTR-881, U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, Portland, OR: 2013). Accessed on June 21, 2013 at:

<http://treesearch.fs.fed.us/pubs/42975>. A copy of this report is enclosed with the paper original of this letter.



Northwest Land & Water, Inc. • 6556 37th Avenue NE • Seattle, Washington 98115

May 6, 2014

Maggie Coon, President
Methow Valley Citizens' Council
Twisp, Washington

Re: Review of Okanogan County documents regarding water quantity and water quality

Dear Ms. Coon:

At the request of your organization, I have reviewed the Okanogan County documents that were provided to me and have summarized my opinions with regard to aquifer recharge areas, water quantity, and water quality in the attached document (Expert Testimony of Laura Strauss, Hydrogeologist). I have provided the scientific basis upon which I have made my opinions. I hope that my review helps you to better understand subject areas in which the Okanogan County documents need improvement in order to provide adequate information to achieve the objectives identified within the legal framework that requires the documents to be prepared.

Respectfully, **Northwest Land & Water, Inc.**

Laura J. Strauss LG, LHg Principal Hydrogeologist

Expert Testimony of Laura Strauss, Hydrogeologist

1 Qualifications and Experience

I am a licensed hydrogeologist in Washington State (license #1002) and have been practicing as a consultant in hydrogeology since receiving my Master's degree in 1986 and in Washington since 1991. Much of the work I have done involves understanding and characterizing the hydrogeology of watersheds for the purpose of providing a scientific basis for planners and stakeholders to make decisions to work towards sustainable ground water supply while protecting surface water flows.

2 Materials Considered in Preparing this Expert Report

I reviewed the following Okanogan County documents:

- Comprehensive Plan of Okanogan County, Final Draft, 5/16/2013 (**Comp Plan**)
- Draft Environmental Impact Statement, Revisions to the Okanogan County Comprehensive Plan, 5/16/2013 (**DEIS**)
- Critical Areas Regulations, Draft 3/19/2012 (**CAO**)

In addition to these documents, I reviewed the following hydrological reports, specific to the Methow Valley, prepared by the United States Geological Survey (USGS), the Methow Basin Planning Unit, Aspect Consulting and Golder and Associates:

- Hydrogeology of the Unconsolidated Sediments, Water Quality, and Groundwater/Surface-water Exchanges in the Methow River Basin, Okanogan County, Washington (USGS, 2005)
- Methow Basin (WRIA 48) Watershed Plan (Methow Basin Planning Unit, 2005)
- Final Detailed Implementation Plan/Methow River Basin (WRIA 48), (MWC 2009)
- Water Withdrawal Study (Aspect, 2011a)
- Instream Flow Reservation Tracking Database (Aspect, 2011b)
- DRAFT MEMO, Evaluation of Reservation Quantities Established by Chapter 173-548 WAC under Current and Potential Future Build-out Scenarios (Aspect, 2011c)

In addition to these, I reviewed letters and comments responding to the County's documents. These include comments prepared by the Methow Valley Citizens' Council, the Department of Ecology, Futurewise, the Center for Environmental Law and Policy (CELP) and others.

The purpose of the following testimony is to offer my opinions regarding inaccuracies and omissions regarding groundwater resources in documents I reviewed. I was also asked to consider a series of questions put to me by the Methow Valley Citizens' Council regarding groundwater resources, aquifer recharge areas and the issue of groundwater quantity and quality in the Methow River basin of Okanogan County.

3 Summary of Expert Opinions

3.1 General comment on County documents

It is my opinion that the documents I reviewed (the proposed Comp Plan and CAO) fail to meet what I understand state mandated requirements to be, in terms of using best available science to identify and protect the quality and quantity of groundwater used for potable water.¹ This includes failure to identify or acknowledge in either the Comp Plan or CAO the known aquifers in the Methow Valley, which have been described and mapped by hydrogeologists in published documents. It also includes failure to acknowledge hydrogeologic studies conducted for the Methow Watershed Council that indicate there is not enough water in parts of the Methow Valley to support the planned growth and zoning.

3.2 Principal Sources of Potable Water in the Methow Valley

A large number of hydrogeological studies have been conducted in the Methow Valley. They indicate that the principal source of potable water in the Methow Valley is from aquifers located in lowland benches and valley bottoms within the basin. The aquifers are composed of highly permeable, unconsolidated materials deposited by rivers and glaciers over bedrock.

In general, the Methow Valley aquifers are unconfined, meaning there is no impermeable layer (aquitar) above them. Such aquifers are water table aquifers. Water table aquifers tend to be more susceptible to contamination than aquifers with a confining layer above because there is very little to intercept contamination. It is possible for contaminants from land use activities and septic discharge to move directly into the aquifer.

The water table aquifers in the Methow Valley are underlain by bedrock deposits, which are known to yield little water and are not considered a significant source of domestic water supply. This means residents in the Methow Valley have a high dependence on the water table aquifers.

A map showing aquifer recharge areas in the Methow Valley is included here (see Methow Basin Aquifer Recharge Areas, Figure 4A and 4B² in the attachments). The recharge areas indicated are coterminous with the water table aquifers.

3.3 Critical Aquifer Recharge Areas

Contrary to assertions made in County's proposed CAO, there is, in my opinion, sufficient scientific information available to identify aquifer recharge areas and to

¹ The Planning Enabling Act, under RCW 36.70.330 (1) states the following: "The land use element (of the Comprehensive Plan) shall also provide for the protection of the quality and quantity of groundwater used for public water supplies..."

² Methow Basin (WRIA 48) Watershed Plan page 31.

classify *critical* aquifer recharge areas.³ Indeed, as noted above, aquifer recharge areas have already been identified in the Methow Valley.

Classifying critical recharge areas⁴ involves identifying the following: 1) aquifers used or suitable for potable water and their associated recharge areas, 2) aquifer recharge areas *susceptible* to groundwater contamination based hydrogeological conditions, and 3) aquifer recharge areas *vulnerable* to contamination based on existing and proposed land uses. The combination of these factors is the basis for classifying critical aquifer recharge areas.

In my opinion, it would not be unreasonable for the County to consider the areal extent of the water table aquifers in the Methow Valley (the recharge areas shown in Figures 4A and 4A) as critical aquifer recharge areas. My opinion is based on the following: 1) the importance of the water table aquifers as a source of potable water, 2) the generally high contamination susceptibility of water table aquifers, and 3) the potential for groundwater-polluting development as planned in the County's proposed Comp Plan that directly overlies the primary aquifer and includes septic systems and other permitted uses in areas zoned for one acre lots.

Additional scientific investigation could be done to further delineate and evaluate critical aquifer recharge areas, and is advisable over the long term. But the aquifer information currently available and described here is sufficient to inform decisions made by the County regarding land use, zoning and critical area regulations.

3.4 Water Quantity

The County documents do not acknowledge the important findings of recent hydrological studies conducted by Aspect Consulting for the Methow Watershed Council.⁵ Report findings indicate there is not enough groundwater to support additional further subdivision of land in what it outlines as the Lower Methow sub-basin. According to a report submitted to County by the Methow Watershed Council⁶ and analysis of data included in the Aspect report⁵, draft estimates indicate that without any further subdivision, there is not enough water for 1,092 existing lots to drill a well in the Lower Methow without threatening to exceed the 2 cfs reservation. If developed to its full zoned potential (which includes substantial areas of one acre zoning), the gap between water available and potential demand is

³ The Washington Administrative Code (WAC) Chapter 365-190 uses the following definition "Areas with a critical recharging effect on aquifers used for potable water are areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water."

⁴ Outlined in the [Critical Aquifer Recharge Areas Guidance Document](#), published by the Department of Ecology.

⁵ *Water Withdrawal Study* and the *Instream Flow Reservation Tracking Database WRIA 48*

⁶ Methow Watershed Council. WRIA 48 Watershed Planning Information for the Okanogan County Planning Commission, July 9, 2013. (Included in the attachments.)

dramatic—with up to 24,313 lots not able to withdraw water without threatening to exceed the 2 cfs reservation.

The potential to exceed groundwater capacity is high in the Lower Methow. It would be reasonable for the County to modify zoning in order to reduce potential groundwater withdrawals in these areas. Salient information from the 2011 Aspect reports is described in later sections of this document to substantiate this opinion.

3.5 Water Quality

It should be a matter of concern that the proposed Comp Plan could allow extensive development that relies on septic systems on small lots where the Methow Valley aquifers are located and primary recharge occurs. High-density septic systems on small lots, especially in the one-acre range, have been shown to be a significant source of groundwater contamination in similar hydrogeologic settings. They pose an even greater threat where aquifers, such as the water table aquifers in the Methow, tend to have high hydrogeologic susceptibility. Groundwater contamination from anthropogenic sources has already been documented in the Methow Valley (Konrad, 2003).

3.6 Steps the County Could Take

The Methow Valley's aquifers and principal sources of public water supplies have been identified. Its recharge areas have been mapped. We know that the aquifers generally have a high susceptibility to contamination. The County needs only to identify potential sources of contamination, which should include areas where septic systems are concentrated.

In my opinion there is sufficient information to designate critical aquifer recharge areas in the Methow Valley. I would further say, based on Department of Ecology guidelines, that the alluvial deposits which coincide with the recharge areas shown on Figures 4A and 4B, could be considered critical recharge areas.

The Lower Methow sub-basin deserves special attention, due to indications the sub-basin is over-allocated. The potential for concentrations of septic systems and a wide range of commercial and industrial uses, which are allowed under both current and proposed zoning, also poses a higher threat of contamination from multiple sources than elsewhere in the valley. Further subdivision should be limited here, new guidelines for septic drainfield construction to reduce nitrates considered, and special regulation of commercial and industrial development instituted in this area.

4 Detailed Discussion of Expert Opinions

The following provides further discussion and substantiation of opinions presented in the above section as summary statements.

4.1 Recharge areas

A significant body of work has been done on the hydrogeology of the Methow Valley. In my opinion, this work is sufficient to identify aquifer recharge areas and classify critical recharge areas for the purposes of land use planning. This section presents the relevant studies, briefly describes the hydrogeology and aquifers, the criteria for classifying critical recharge areas, and outlines how the County could classify critical recharge areas in the Methow River valley.

4.1.1 Hydrogeologic Studies

A comprehensive list of relevant documents for the Methow Valley is available online through the Methow Watershed Council's website and included in the bibliography and reference sections of the series of studies produced by the Council and Aspect Consulting. None of this work has been cited or used in the critical aquifer recharge area section of the County's proposed Comp Plan or CAO. Two reports are particularly important and relevant to understanding recharge areas in the Methow River Basin and are described below and used in subsequent sections:

1. Hydrogeology of the Unconsolidated Sediments, Water Quality, and Groundwater/Surface-Water Exchanges in the Methow River Basin, Okanogan County, Washington, by *Christopher P. Konrad, Brian W. Drost, and Richard J. Wagner, USGS Water Resources Investigation Report 03-4244, August 4 2005*
2. Methow Basin (WRIA 48) Watershed Plan (Methow Basin Planning Unit, June 20 2005)

The above referenced USGS report describes the hydrogeology in the Methow basin. The study reviewed well logs for thousands of wells and compiled well log data for 488 wells. The report describes:

- the occurrence of aquifers,
- groundwater and surface water quality, and
- the relationship between surface water and groundwater.

The USGS report described the spatial extent, depth, and lithology of the unconsolidated sediments that form the hydrogeologic framework for the shallow groundwater system, which is the primary groundwater resource in the Methow basin.

The USGS report indicates that the majority of groundwater wells are completed in the shallow unconsolidated deposits aquifer. More specifically,

“the unconsolidated sediments directly beneath the main Methow River valley form the most productive aquifers where the ground water is closely connected to the flow in the Methow River. The median value for static depth to ground water in 184 wells from June through August 2001 was 27 ft below land surface, with a range from 1.2 to 218 ft.”(Konrad, 2005, pg 14)

These are the principal aquifers from which existing potable supplies are drawn (Konrad, 2005 pg 2); they are underlain by bedrock deposits that are known to yield little water and are not considered to provide substantial yield to wells. The extent of the unconsolidated aquifers is reflected on the figures included in the attachments, Methow Basin Aquifer Recharge Areas, Figure 4A and 4B.

4.1.2 Summary of Aquifer Description

The principal potable water supply in the Methow Valley is from aquifers located in lowland benches and valley bottoms within the basin. The aquifers comprise highly permeable sand and gravel deposited by rivers and glaciers – referred to as alluvium and glacial outwash deposits on the surficial geology map (Stoffel, et al, 1991). In general, the groundwater in these aquifers is unconfined and the aquifers are characterized as water table aquifers. While locally the aquifers may be semi-confined (where layers of limited extent, fine-grained sediment occur between land surface and groundwater), regionally Methow Valley aquifers may be considered to be largely unconfined. Such unconfined aquifers are, by definition, water table aquifers. Water table aquifers tend to have a higher susceptibility to contamination due to the fact that there is very little to intercept contamination from land-use activities. Water table aquifers that occur at shallow depths are more susceptible to contamination than deeper water table aquifers.

The recharge areas shown on Figures 4A and 4B are coterminous with the shallow alluvial aquifers. Precipitation incident on these areas recharges the underlying aquifers. In addition the aquifers are recharged by infiltration from surface water sources including the Methow and Twisp rivers and underflow from adjacent bedrock. While the bedrock is not a viable water supply for wells, regionally it may provide water to the shallow alluvial aquifers. The volume of water contained in the aquifers is a function of volume of the alluvial deposits comprising the aquifer, the porosity, and the groundwater elevation.

4.1.3 Guidance document for classifying critical recharge

The Department of Ecology’s Critical Recharge Area Guidance Document indicates that best available science should be used to identify critical recharge areas and describes the methods to identify Critical Aquifer Recharge Areas (Section 4, p 26). Basic steps involved are the following:

- 1) identify the principle aquifers used for potable water supplies,
- 2) analyze susceptibility of aquifers to contamination, based on hydrogeologic characteristics, and
- 3) identify existing and potential sources of aquifer contamination.

The combination of susceptibility and contamination potential are used to classify the relative vulnerability of the aquifer which forms the basis for identifying “critical” recharge areas.

4.1.4 The County Should Classify Critical Recharge Areas

It is evident from the USGS report and Figures 4A and 4B that science is available to identify recharge areas. The County should use available studies to identify critical aquifer recharge areas, using the methods described Ecology’s guidance document.

The first step in this process has been essentially completed for the Methow Valley. The aquifers that are principal sources of potable water and aquifer recharge areas have been identified. With nominal additional research and mapping, there is sufficient information to identify relative hydrogeologic sensitivity.

Step 2 of the basic steps, is to identify aquifers used for water supplies that are highly susceptible to contamination. Susceptibility is a function of factors outlined in both the Critical Areas Assistance Handbook and the Critical Aquifer Recharge Areas Guidance Document, published by the Department of Ecology.

Based on these guidelines and on my review of the available science, I believe it is reasonable for the County to consider the aquifer recharge areas identified on Figures 4A and 4B in the attachments as having a high potential susceptibility to contamination due to the relatively shallow depth to the water table and the very permeable subsurface material that would transport contaminants from the surface or near-surface directly to the aquifer.

Due to the susceptibility of the aquifer and the crucial nature of its groundwater supply, it would be reasonable for the recharge areas shown in Figures 4a and 4b to represent critical aquifer recharge areas. Alternatively, the County could use Figures 4a and 4b to identify and rank sub-areas within the recharge areas that have the greatest hydrologic susceptibility and would be the most critical to protect. For example, these might include areas where water table levels are the shallowest and areas within proximity of surface waters and Class A public water supply wells.

4.2 Water Quantity

This section presents a brief discussion of the regulations governing streamflow in the Methow River, a brief description of the relationship between groundwater water and streamflow, a summary of work done to quantify groundwater withdrawal and associated concerns, and steps the County could take to address water quantity concerns.

4.2.1 State Regulations on Streamflow in the Methow River

The Instream Flow Rule (Rule) for the Methow River was established in 1976 as Chapter 173-548 of the Washington Administrative Code (WAC). The Rule established a reservation of 2 cubic feet per second (cfs) of water in each of seven reaches of the Methow River watershed for future single domestic and stock water uses. The 2 cfs reservation in each reach is expressed as a reduction in stream flow associated with the consumptive use of aggregate instantaneous withdrawals authorized under the rule.

4.2.2 Groundwater Withdrawal and Associated Concerns

The hydrogeological firm, Aspect Consulting, was contracted by Methow Watershed Council to do a series of reports, funded by the Department of Ecology, on water use and water withdrawal in the Methow watershed. Results of these studies indicate a need for concern regarding over-allocation of groundwater.

4.2.2.1 Groundwater Withdrawal Studies

Reports done by Aspect in 2011, *Water Withdrawal Study* and the *Instream Flow Reservation Tracking Database WRIA 48*, indicate that if full build-out of current zoning (which in many areas allows division of land into one acre lots) occurs, water use from exempt wells in the Lower Methow would dramatically exceed the 2 cfs per sub-basin reserved for domestic or stock water use, especially during low flow when daily pumping reflects maximum water use.⁷ Salient information from the 2011 Aspect reports is described below:

Aspect Consulting conducted a series of rigorous studies in the Methow Valley that quantified the existing number of exempt wells in each sub-basin, estimated pumping rate for exempt wells and water consumption use for domestic use. Aspect defined the boundaries of each sub-basin,

⁷ The Instream Flow Rule (Rule) for the Methow River was established in 1976 as Chapter 173-548 of the Washington Administrative Code (WAC). The Rule established a reservation of 2 cubic feet per second (cfs) of water in each of seven reaches of the Methow River watershed for future single domestic and stock water uses. The 2 cfs reservation in each reach is expressed as a reduction in stream flow associated with the consumptive use of aggregate instantaneous withdrawals authorized under the rule.

and then, compiling data from many sources, counted developed parcels for each sub-basin and assumed an exempt well in each parcel that was designated developed and not served by a public system. Studies also estimated the maximum number of exempt wells that would occur at full build-out on existing lots and full build-out on lots that could be created under existing zoning regulations.

The *Water Withdrawal Study WRIA 48* (Aspect, 2011a, page 4) reports that average annual consumptive use for exempt wells was calculated to be 205 gpd and maximum consumptive use was calculated to be 725 gpd per residence served by an exempt well.

The *Instream Flow Reservation Tracking Database WRIA 48* (Aspect, 2011b) summarizes in Table 8 the estimated number of exempt wells in each sub-basin subject to the instream flow rule assuming full build-out; Table 9 summarizes Estimated Exempt Well Parcels Subject to the Instream Flow Rule at Build-out with Current Parcel Size (Reduced Build-out); and Table 10 summarizes Estimated Exempt Well Parcels Subject to the Instream Flow Rule at Full Build-out - Assuming No Additional Development within Closed Basins.

Comparison of exempt well water use to instream flow appropriation

The appropriation for exempt wells of 2 cubic feet per second (cfs) per sub-basin is equivalent to 1,292,544 gallons per day (gpd) for the combined 7 sub-basins that comprise the Methow watershed. Assuming the average annual consumptive use of 205 gpd, 6,305 exempt wells would use the equivalent of 2 cfs; assuming the maximum consumptive use of 725 gpd, 1783 exempt wells would use the equivalent of 2 cfs.

Table 8 (Aspect, 2011) indicates that 25,834 exempt wells could occur in the Lower Methow sub-basin if full build-out occurs, assuming the zoning as of 2011 (which is the current zoning). Full build-out represents the upper limit for the maximum number of exempt wells. While it is unlikely that full build-out will occur, it is clear from these estimates that water use from exempt wells in the Lower Methow would exceed the 2 cfs appropriated for exempt wells.

Table 1, prepared for this letter, summarizes the water use for the estimated number of exempt wells summarized in Tables 7, 8, 9, and 10 in the Instream Flow Reservation Tracking Database report (Aspect, 2011) for the four different exempt well water use estimates reported in the Water Withdrawal Study (Aspect, 2011). Table 1 shows the effect of the different assumptions for per well water use on the total exempt-well water use for each sub-basin. Table 1 indicates that the Lower Methow sub-basin would be over-allocated with respect to the instream flow

reservation of 2 cfs for all conditions of build-out and assumptions for water use except for full build-out under existing parcel size configuration for which over-allocation would occur for the maximum annual pumping and maximum consumptive water use but would not occur for the lower estimates of water withdrawal and consumptive use. Similarly, the Upper Methow sub-basin would be over-allocated for conditions of full build-out assuming current zoning and the larger estimate for water withdrawal and consumptive use.

4.2.2.2 Concern regarding water quantity

Draft estimates indicate that even without further subdivision of current parcels in the Lower Methow sub-basin 1092 lots would not be able to draw water from the aquifers without threatening to exceed the 2 cfs reservation for exempt wells that is identified for each sub-basin in the instream flow rule for the Methow River (Letter from Methow Watershed Council, 2011). Water use by sub-basin, summarized in Table 1, indicates in red the build-out conditions for which water withdrawal would exceed the 2 cfs reservation. These data support the statement made in the Methow Watershed Council letter (2011) regarding 1092 lots with respect to full buildout under *current parcel size*; Table 1 also indicates that if full buildout occurred under current zoning (current parcels subdivided according to current zoning rules) 24,313 lots in the Lower Methow sub-basin would not be able to draw groundwater without threatening to exceed the 2 cfs reservation (assuming 710 gpd consumptive use). Exceedance of 2 cfs from any of the sub-basins could reduce streamflow in the Methow river below the minimum required under chapter 173-548 WAC (Methow Watershed Council, 2013). Maintaining minimum streamflow is necessary to sustain anadromous fish populations.

4.2.3 Steps the County Could Take to Address Water Quantity Concerns

In my opinion, the County Comp Plan should include steps it will take to manage future growth in the face of increasing demands on limited water resources.

4.2.3.1 Identify specific areas of concern

The Upper and Lower Methow sub-basins of the Methow basin are clearly areas of greater concern because the likelihood that exempt well withdrawal will exceed the 2 cfs reservation is greatest within these sub-basins (Table 1). Based on studies by Aspect Consulting for the Methow Watershed Council, possibly the Upper Methow and most certainly the Lower 1Methow reaches are over-allocated for water with respect to WAC 173-548. (Hatcher, 2011)

Development in the Lower Methow deserves special attention. The alluvial deposits within this sub-basin should be designated a critical

aquifer recharge area (Figure 4B) If, as indicated in recent studies by Aspect Consulting, there is not enough water in the aquifers to supply the number of lots that *currently exist*, further subdivision of land would be unwise until a plan to resolve the forecast water shortages has been developed.

4.2.3.2 Modify zoning regulations

Allowing continued subdivision of land under the current zoning would exacerbate the problem. An estimated potential of 24,313 lots could be created if all property is subdivided to its zoned potential, but would not be able to drill a well.

The County could modify the zoning rules to prevent or minimize subdivision of existing parcels to reduce the potential number of exempt wells and thus reduce impact on groundwater resources and stream flow.

4.2.3.3 Concentrate development in areas served by municipal supply

Concentrating future residential, commercial and industrial growth in areas where water is supplied by municipal wells with limited water rights while simultaneously allowing low-density residential and agricultural uses in lowland areas of the valley where aquifers are located, would provide stronger safeguards to groundwater resources than the proposed Comp Plan offers.

4.2.3.4 Other steps

Limiting development density over aquifers may not be enough to protect groundwater resources, nor is it the only means to do so. Water conservation and regulatory measures to prevent contamination from residential, commercial, industrial and agricultural sources may be necessary over the long run.

4.3 Water Quality

In my opinion, it is a matter of concern that the proposed Plan could allow extensive development that relies on septic systems on small lots (in the one acre range) where the aquifers are located and primary recharge occurs. High-density septic systems (on small lots) have been shown to be a significant source of groundwater contamination and pose an even greater threat where aquifers, such as the water table aquifers in the Methow, tend to have high hydrogeologic susceptibility.

It is my opinion, based on the USGS report of water quality in the Methow Basin (Konrad, 2003) and the many USGS reports regarding nitrate contamination (in shallow groundwater in the vicinity of La Pine, Oregon), the County documents do not adequately address potential concerns of water quality.

This section presents a summary of the risk of nitrate contamination from septic systems in similar water table aquifers, the hydrogeology that is relevant to water quality concern, relevant reports on the hydrogeology, and steps that the County could take to address concern for groundwater and surface water quality.

4.3.1 Risk of nitrate contamination from septic discharge

Increased residential development outside of municipal service areas (sewered) would not only increase exempt wells and affect issues of water quantity, but the associated increase in septic system density could impact groundwater quality. The strong hydraulic continuity with the Methow River indicates that groundwater contamination from septic discharge could also impact surface water quality. Nitrate is the primary contaminant of concern from septic discharge. Ideally, the nitrate released into septic drainfields is taken up by plants and removed from the water. However, in practice, the nitrate commonly infiltrates below the root zone to the underlying water table before the nitrate is removed or sufficiently reduced.

Not only is elevated nitrate in groundwater harmful to those who drink it, when it discharges to surface water it impacts riparian habitat. Elevated nitrate can cause increased algae growth which results in decreased dissolved oxygen which is harmful to most animals and disruptive to an aquatic ecosystem.

4.3.2 Hydrogeology

The alluvial aquifer in the Methow River valley is susceptible to contamination from surface activities and septic discharge because the depth to the water table is shallow, the subsurface deposits are permeable and allow relatively fast travel time to the groundwater. These conditions provide much less opportunity for contaminants to be removed by adsorption to sediment.

4.3.3 Relevant reports

The USGS report (Konrad, 2005) indicates that the majority of groundwater wells are completed in the shallow unconsolidated deposit aquifers (or water table aquifers.) More specifically, *the unconsolidated sediments directly beneath the main Methow River valley form the most productive aquifers where the ground water is closely connected to the flow in the Methow River. The median value for static depth to ground water in 184 wells from June through August 2001 was 27 ft below land surface, with a range from 1.2 to 218 ft.*

The report also finds evidence of groundwater contamination: *“nitrate concentrations were greater than 3 mg/L in five groundwater samples and may be an indicator of anthropogenic sources of contamination.”* This indicates there is a legitimate concern for contamination from a high density of septic systems. (Konrad, 2005 pg 25)

Elevated concentration of nitrate in groundwater in La Pine, Oregon from

septic discharge is well documented and studied (Williams, et al, 2007). La Pine, Oregon, is in the Deschutes basin, east of the Cascade Mountains and has a similar climate as parts of Okanogan County. Groundwater from a shallow unconsolidated deposit aquifer supplies water to the residents of La Pine and discharges to the Deschutes River or tributaries to the Deschutes. Elevated nitrate concentration in shallow groundwater from septic drain fields has been discharging into the aquifer for decades but has taken a while to show up in many wells because of slow groundwater flow rate. The USGS reports indicate that 58% of lots are less than 1 acre and 82 % are less than 2 acres.⁸

4.3.4 Steps to address potential water quality concerns

4.3.4.1 Identify sources of aquifer contamination

Classification of critical aquifer recharge areas is an important step to protect groundwater quality. As discussed above, the guidelines outlined in the Critical Aquifer Recharge Areas Guidance Document published by the Department of Ecology describe the science necessary to identify critical aquifer recharge areas and were summarized in three basic steps:

- 1) identify the principle aquifers used for potable water supplies,
- 2) analyze susceptibility of aquifers to contamination, based on hydrogeologic characteristics,
- 3) identify existing and potential sources of aquifer contamination

As discussed in the section on critical recharge areas, step 1 has essentially been completed, and with nominal additional research and mapping, there is sufficient information to identify relative hydrogeologic sensitivity for step 2.

The County should complete the final task, which County planning staff would have the expertise to do—identify and map the risk of contamination from existing and potential future land uses.

4.3.4.2 Restrict parcel subdivision

Okanogan County has an opportunity to prevent impact to groundwater quality by learning from the LaPine study that suggests that zoning of 1-acre parcels may have allowed the density of septic discharge that resulted in nitrate contamination. Zoning regulations that restrict or minimize subdivision of current parcels would reduce risk to water quantity, as discussed above. It would also reduce septic system density and potential groundwater contamination from nitrate.

⁸ USGS reports regarding nitrate contamination in aquifers in the vicinity of La Pine, Oregon are found at http://or.water.usgs.gov/proj/or186/new_site/reports.html

4.3.4.3 Concentrate development in sewerred areas

Concentrating future residential, commercial and industrial growth in sewerred areas (where water is supplied by municipal wells) while simultaneously allowing low-density residential and agricultural uses in lowland areas of the valley where aquifers are located, would reduce risk of contamination from septic drainfields .

4.3.4.4 Septic drainfield regulations and guidelines

The County could provide new guidelines and criteria for septic drainfield construction, installation, and maintenance to reduce nitrate input to the groundwater.

4.3.4.5 Zoning and regulations for other sources of contamination

Zoning regulations should specifically restrict and/or regulate development in critical recharge areas that would be a source for other potential contamination identified in step 3 (described above).

5 Reference Documents

Aspect Consulting, 2011. Water Withdrawal Study, Water Resources Inventory Area 48, Twisp, Washington, Project 080180-003 May 10, 2011 Draft

Aspect Consulting, 2011. Instream Flow Reservation Tracking Database, Water Resources Inventory Area 48, Project 080180-003, May 11, 2011 Draft

Aspect Consulting, 2011. DRAFT of Reservation Quantities Established by Chapter 173-548 WAC under Current and Potential Future Build-out Scenarios.

Department of Ecology, 2005. Critical Aquifer Recharge Areas, Guidance Document, Publication Number 05-10-028.

Konrad, C. P., B.W. Drost and R. J. Wagner, 2005. Hydrogeology of the Unconsolidated Sediments, Water Quality, and Groundwater/Surface-Water Exchanges in the Methow River Basin, Okanogan County, Washington, *USGS Water Resources Investigation Report 03-4244*.

Methow Watershed Council, 2009. Final Detailed Implementation Plan/Methow River Basin (WRIA 48).

Methow Watershed Council, 2011. Letter to Okanogan County Commission, June 14, 2011 signed by Greg Knott.

Methow Watershed Council, 2013. *WRIA 48 Water Planning Information for the Okanogan County Planning Commission*, July 9, 2013.
Recommendations from the Methow Watershed Council Instream Flow Rule Revision Committee, Drafted by Hans Smith, Instream Flow Rule Revision Committee Chair

Stoffel, K. L., et al, 1991. Geologic Map of Washington – Northeast Quadrant. Washington Division of Geology and Earth Resources Geologic map G-39, Washington State Department of Natural Resources.

Williams, J.S., D.S. Morgan, S.R. Hinkle, 2007. Questions and Answers About the Effects of Septic Systems on Water Quality in the La Pine Area, Oregon. USGS Fact Sheet 2007-3103, prepared in cooperation with Deschutes County and Oregon Department of Environmental Quality.

6 Curriculum Vitae



Resume for Laura Strauss, PG, LG, LHg

Years of Experience: 26

Laura Strauss has technical experience in many areas related to water resource planning and hydrologic impact analysis:

Education:

*M.S. Hydrology, 1986
University of Arizona*

*B.A. Geology / Environmental Studies, 1983
University of California,
Santa Barbara*

- ▶ Hydraulic continuity analysis
- ▶ Groundwater flow modeling
- ▶ Aquifer storage and recovery feasibility
- ▶ Groundwater recharge analysis
- ▶ Environmental isotope hydrogeochemistry
- ▶ Water quality analysis
- ▶ Water rights investigations
- ▶ Aquifer testing and analysis

Professional Registration:

*Registered Geologist,
Arizona*

*Licensed Geologist /
Licensed Hydrogeologist,
Washington*

Ms. Strauss skillfully identifies project goals, objectives, and key issues. She moves fluidly between the big picture and the details of technical analysis.

Major Areas of Expertise:

Aqueous geochemistry

*Isotope sampling and
analysis*

Geochemical modeling

*Groundwater flow
modeling*

*Artificial recharge
assessment*

Database development

Aquifer test analysis

*Environmental impact
analysis*

*Geographic Information
Systems*

Ms. Strauss uses her proficiency in computer applications to seamlessly manage data, bringing it in and out of analytical computer applications, to convey results in a meaningful and useful way. She has used various models to conduct groundwater flow modeling: analytical element models (*GFlow2000*), and finite difference models for saturated (*MODFLOW*) and unsaturated (*VS2D*) groundwater conditions. She uses various geochemistry applications to characterize groundwater and to understand the geochemical reaction paths. She is proficient with geographic information systems (GIS) and databases to manage and analyze large and varied water quality, hydrogeologic and land-use data sets. Through merging her *GIS*, *CAD*, and database skills, Laura has developed 3-D hydrogeologic models using *View-Log*, an application that manages, displays, and creates subsurface visualization images (e.g. cross-sections).

In addition, she specializes in the analysis of isotopic data. Laura has designed programs for sampling isotopes of carbon, hydrogen, and oxygen, and has used her knowledge to evaluate groundwater flow and recharge–discharge patterns. This expertise has often been an integral, cost-effective way to understand hydraulic relationships that were not apparent using traditional methods.

Representative Project Experience

West Plains (WRIA 54) & Lower Hangman Creek Watershed (WRIA 56) Hydrogeologic Characterization. This project was an extension of a hydrogeologic characterization conducted for the middle- and upper-Hangman Creek watershed. It involved construction of monitoring wells in the West Plains and Lower Hangman. A conceptual model of the West Plains was developed using hydro-

Resume for Laura Strauss, PG, LG, LHg

Summary of non-standard software commonly used to conduct analytical office work:

ArcGIS

MODFLOW

MODSURFACT

MODPATH

GFLOW2000

VS2D

Groundwater Vistas

AQTESOLV

AutoCAD

MS Access

ViewLog

NETPATH

PHREEQE

Rockware Suite

Summary of software and other equipment commonly used to conduct field work:

Pressure Transducers and dataloggers:

Geokon

Campbell Scientific

INW

geologic cross sections, analysis of groundwater geochemistry, age dates, water levels, and flow directions.

Hydrogeologic Framework for the Goldsborough Creek Sub-Basin & Johns Creek Vicinity. Developed a framework for a 90 square mile area. This work entailed constructing 33 working cross section from 385 well logs. Hydrogeologic unit layers were converted to model layers that are currently be used by Ecology to assist with water management decisions.

Spokane County Conservation District – Hangman Creek Watershed (WRIA 56) Hydrogeologic Study. Planned field testing and analyzed hydrogeologic, geochemical, and water level data for Columbia River Basalt Group aquifers and connected creeks to develop a conceptual model of the groundwater and surface water flow system. The conceptual model was developed using 100s of wells and constructed using 10s of cross sections in a visualization program called *Viewlog*. Geochemistry (stable isotopes) and age-dating (tritium, C14) were used to identify distinct aquifers and their connection to creeks. An exempt water use build-out analysis was also completed to identify areas of expected future water demand.

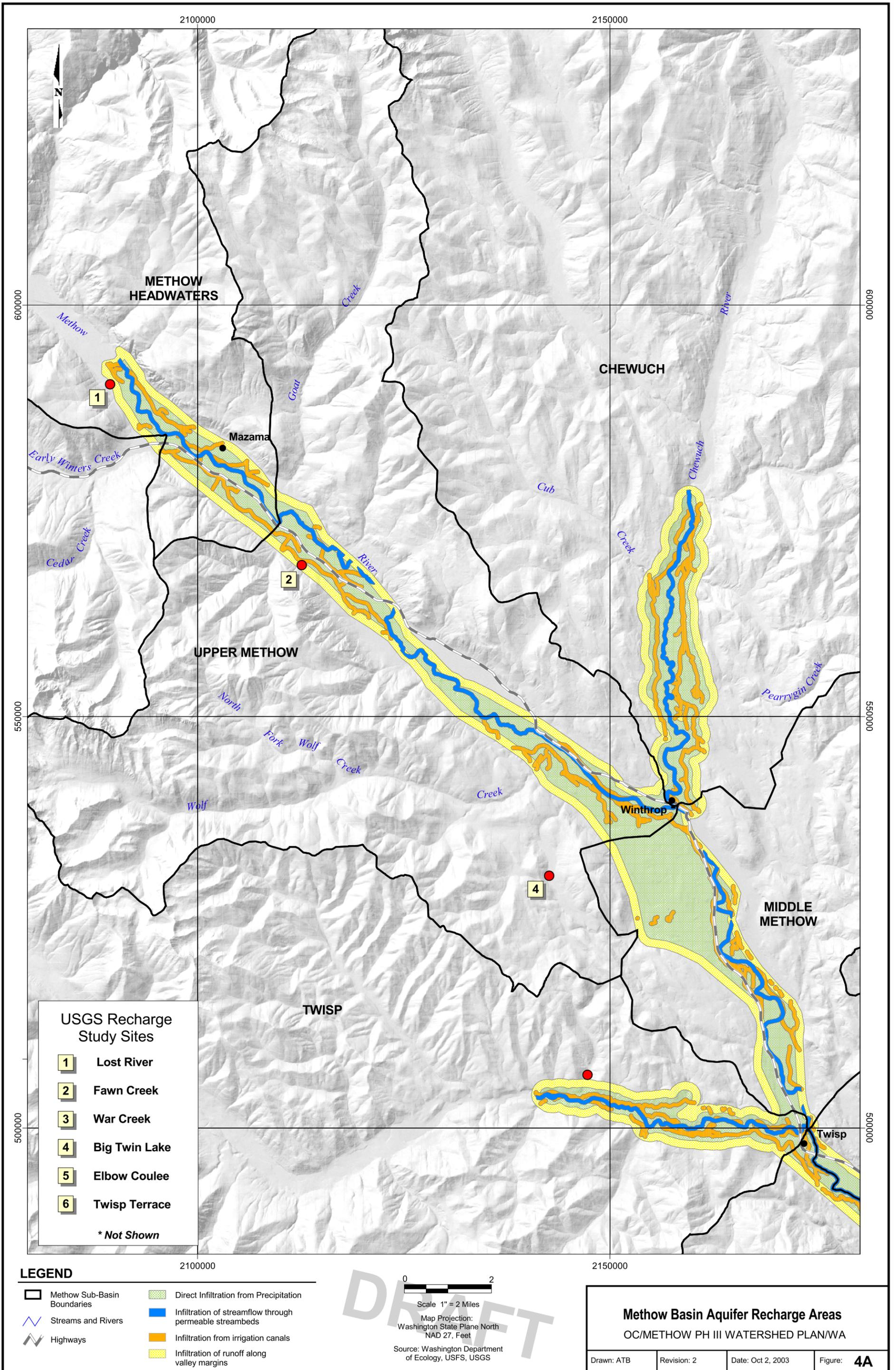
Upper Deschutes Basin Groundwater Modeling. Modeled the effects on the surface water and groundwater flow system in the upper Deschutes Basin, Oregon, due to pumping from a proposed destination resort. The study entailed using the MODFLOW model constructed for the basin by the USGS. The stratigraphy of the study area is dominated by basalt flows. The study included summarizing groundwater level data, evaluating ground-water level trends, and summarizing streamflow data.

WRIA 14 Hydrogeologic Characterization. Conducted a hydrogeologic characterization of a 60-square-mile study area using *Viewlog* to develop a three-dimensional conceptual model to construct cross-sections and to assist in selecting wells for a multi-aquifer monitoring network. The study included collecting samples for analysis of routine chemistry and stable isotopes; data was evaluated to better understand the dynamics of the groundwater flow system. This study resulted in data for water resource decisions in the watershed.

Groundwater Age / Flow Analysis. Analyzed radiocarbon, tritium, stable isotope, and major ion data collected for different projects in Washington. The data was used to constrain possible interpretations of the flow dynamics and develop a conceptual flow. This tool was used for groundwater flow systems in basalt aquifer systems in eastern Washington.

7 Attachments

- Methow Basin Aquifer Recharge Areas, Figure 4A and 4B
- Methow Watershed Council. WRIA 48 Watershed Planning Information for the Okanogan County Planning Commission, July 9, 2013.
- Methow Watershed Council Letter to Okanogan County Commission, June 14, 2011 letter



USGS Recharge Study Sites

1	Lost River
2	Fawn Creek
3	War Creek
4	Big Twin Lake
5	Elbow Coulee
6	Twisp Terrace
* Not Shown	

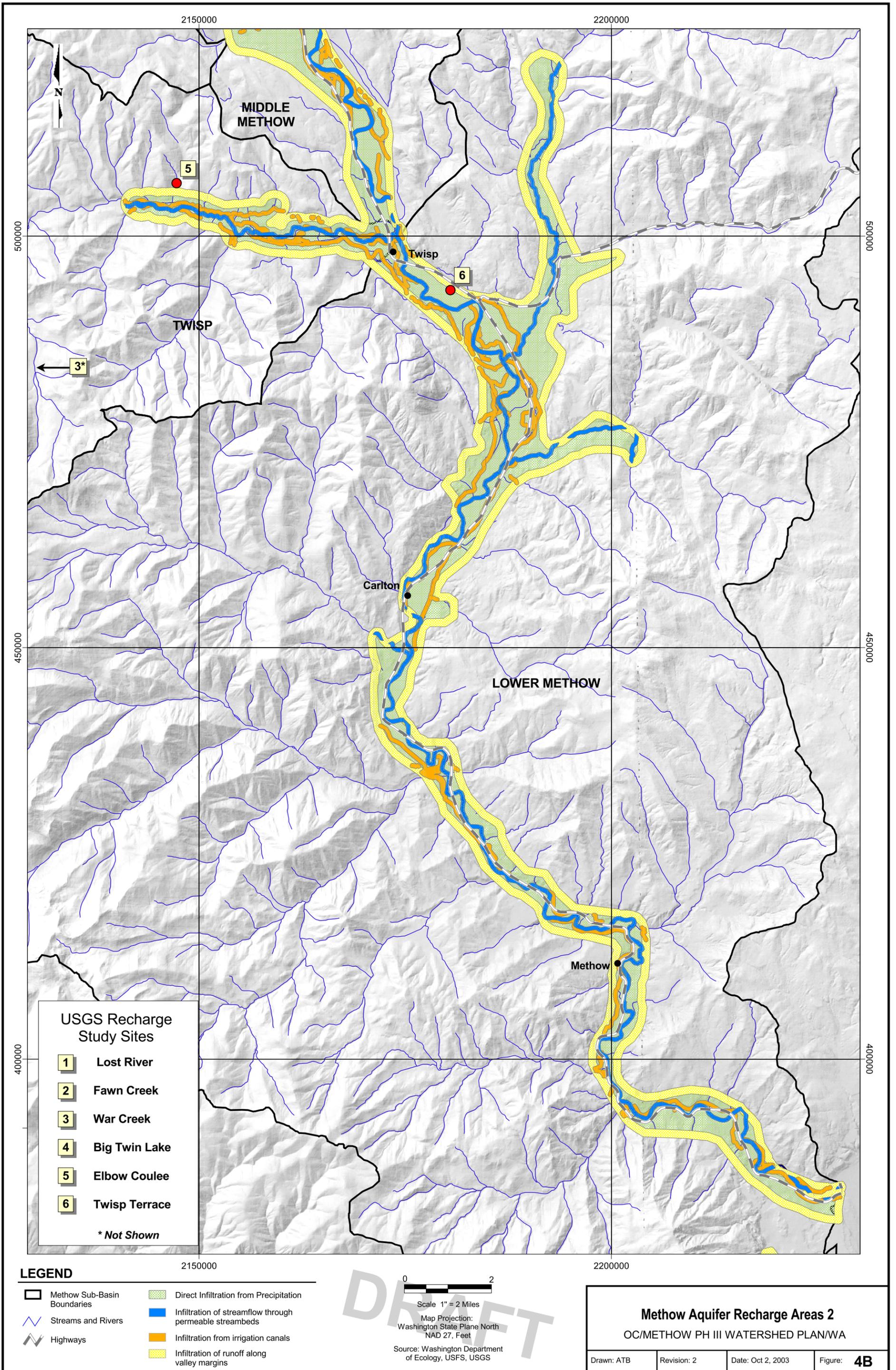
LEGEND

Methow Sub-Basin Boundaries	Direct Infiltration from Precipitation
Streams and Rivers	Infiltration of streamflow through permeable streambeds
Highways	Infiltration from irrigation canals
	Infiltration of runoff along valley margins

Scale 1" = 2 Miles
 Map Projection: Washington State Plane North NAD 27, Feet
 Source: Washington Department of Ecology, USFS, USGS

Methow Basin Aquifer Recharge Areas
 OC/METHOW PH III WATERSHED PLAN/WA

Drawn: ATB	Revision: 2	Date: Oct 2, 2003	Figure: 4A
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WRIA 48 Watershed Planning Information for the Okanogan County Planning Commission

July 9, 2013

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Recommendations from the Methow Watershed Council Instream Flow Rule Revision Committee

Drafted by Hans Smith, Instream Flow Rule Revision Committee Chair

Briefing Summary

- Recent comments received by Okanogan County on the current draft Comprehensive Plan rightfully point out a need to better address consistency with the County approved 2005 Methow Watershed Management Plan and water availability issues stemming from the legislatively adopted 1976 Methow Watershed Instream Flow Rule.
- Technical studies recently completed by the Methow Watershed Council indicate that the 2 CFS reserves established for single family permit exempt use under the 1976 Methow Watershed Instream Flow Rule are insufficient to meet the water demand associated with full build out of single family permit exempt wells in two regulated reaches of the Methow River.
- The studies produced by the Methow Watershed Council will inform future decisions by the Washington State Department of Ecology to determine the availability of water for new development in the Methow Watershed moving forward.
- Property values and land use potential in the undeveloped lots of the deficient regulated reaches will be adversely impacted once Ecology determines that the 2 CFS reserve of that reach has been fully appropriated.
- An effective strategy for ensuring water availability for all currently developable parcels is revising the Methow Watershed Instream Flow Rule as prescribed through the 2005 Methow Watershed Management Plan.
- Revising the Methow Watershed Instream Flow Rule is also a key strategy in ensuring adequate water supplies exist to support growth within municipalities in the Methow Watershed. Current municipal supplies are vastly deficient.
- Lack of consistency between the Comprehensive Plan and the approved 2005 Methow Watershed Management Plan will impede the potential that Instream Flow Rule revision can ever be accomplished.
- This issue has previously been brought forward to the County by the Methow Watershed Council, as is exemplified by the April 2011 letter (attached) sent to the County Commissioners by the Methow Watershed Council.

Overview of Attached Content

Strengthening the ties between the County's Comprehensive Plan and proposed revisions to the Methow Basin (WRIA 48) Instream Flow Rule is of critical importance to the economic and development future of the Methow Valley and Okanogan County. At risk is the ability of local citizens to affect water resource decision making through the watershed planning process, the likelihood that revisions to the WRIA 48 Instream Flow Rule will ever be accomplished, and the likelihood that the Methow Basin will experience state imposed development moratoriums based on legal water availability. Please see the attached letter provided to the Okanogan County Commissioners in April 2011 with regard to these issues.

The 2005 Methow Basin Watershed Plan and the recent technical studies completed by the Methow Watershed Council provide the best available information on legal water availability for future development in the Methow Watershed. The Methow Watershed Plan is a critical planning document adopted by the County Board of Commissioners to guide water resource decision making in the Methow Valley where the possibility of water scarcity has become a major economic and development issue since the legislative adoption of the WRIA 48 Instream Flow Rule in 1976 and other historic regulatory actions. Since 2005, the Methow Watershed Council has been working to enact the recommendations of the County's 2005 Methow Watershed Plan to ensure adequate water supplies exist to support sustainable growth and economic development. Chief among the Watershed Council's concerns is providing water to towns that never acquired or have lost adequate water rights to supply future growth, and avoiding state imposed development moratoriums on undeveloped lots based on exceeding surface water withdrawal limits designated in the Instream Flow Rule reserves.

What follows for the Planning Commission's convenience is:

1. A short chronology of pertinent policy making, plan adoption, and technical studies that, taken together, help to explain the importance of the 2005 Methow Basin Watershed Plan, and why the Methow Watershed Council's work should be considered for further referencing within the Comprehensive Plan.
2. Suggestions on more detailed language that could be included in the Comprehensive Plan to reiterate the guiding resource goals and objectives stated in the 2005 Methow Basin Plan and to encapsulate the current understanding of water resource availability according to the Watershed Council technical studies.

It is hoped that by providing this information, the Okanogan County Planning Commission will take steps to insert adequate language into the draft Comprehensive Plan to ensure coordination of land use planning with water resource planning, which is critically needed to protect future development opportunities in the Methow Valley.

Chronology of important water resource planning policies, plans, and technical studies:

- The Methow Basin Instream Flow Rule was adopted by the State Legislature in 1976 (<https://fortress.wa.gov/ecy/publications/publications/wac173548.pdf>).
 - The Rule dramatically limited the availability of future water appropriations for most types of consumptive beneficial uses.
 - The Rule created 2 CFS reserves in seven reaches of the Methow Basin, with priority to supply new single domestic exempt wells (this has supplied all new growth to date since 1976 in the Methow Valley with the exception of existing Town Municipal Rights, which are dwindling in Twisp and Winthrop).

- In 1997, the Town of Twisp lost a 570 acre foot water right through a Washington State Supreme Court Ruling, resulting in a situation where the Town could not supply adequate water with its existing water rights portfolio to meet annual demand for roughly ten years (in 2005 the town declared a multi-year development moratorium due to the deficiency). This deficiency remains a severe restriction on development in the Town of Twisp today.

- In 1999, Okanogan County citizens in the Methow Valley undertook the watershed planning process as prescribed in RCW 90.82. Pursuant to RCW 90.82, the “Methow Basin Planning Unit” was created by Okanogan County, the Town of Twisp, and the Methow Valley Irrigation District as Initiating Governments. The Planning Unit immediately set about developing a Watershed Management Plan for the Methow Basin for adoption by the County, Ecology, and local jurisdictions to guide water resource policy decision making.
 - One specific outcome of this process was a decision that revisions to the Instream Flow rule were necessary so that water availability could be better optimized based on economic need and growth trends and be consistent with land use planning objectives.

- In 2005, the Methow Basin Watershed Plan was completed by the Planning Unit and adopted by resolution by the Okanogan County Board of Commissioners after going through a thorough public review process (<http://www.methowwatershed.com/methowwatershedplan.html>).
 - The primary purpose of the 2005 Plan was to assess current water supply and use and to develop strategies to increase water supplies in the management area to provide for future out of stream uses while satisfying minimum in-stream flows for fish.
 - Based on recommendations in the 2005 Plan, Instream Flow Rule modification became a major focus of the Planning Unit. Along with ensuring adequate water supply for agriculture and towns, redefining access to the 2 CFS reserves to gain water rights to municipalities and prevent state imposed development moratoriums on undeveloped lots were major priorities of the Plan.
 - Ecology and the Watershed Council set about determining what data gaps needed to be filled in order for Rule Revision objectives to be accomplished.

- In 2005 the Methow Basin Planning Unit became the Methow Watershed Council, but retained all of the watershed planning requirements and responsibilities of the Planning Unit.
 - Okanogan County, the Town of Twisp, and MVID continued to serve as the three initiating governments of the Watershed Council
 - The Town of Twisp became the lead entity supporting Planning Unit administration.

Chronology of important water resource planning policies, plans, and technical studies:

- Consistent with the Watershed Planning Act, from 2005 to 2009 the Watershed Planning Unit created and adopted the Detailed Implementation Plan which provides further detail on how major objectives contained in the 2005 Watershed Plan would be achieved, including providing more detail on the range of studies needed to accomplish rule revision (<http://www.methowwatershed.com/methowwatershedplan.html>).
 - Principal among the information gaps identified was a need to quantify the amount of reserve water currently allocated to exempt wells installed after rule adoption in 1976 and creating a reserve tracking system to understand reserve positions as development continues.
- In 2011, Aspect Consulting LLC, as a consultant to the Methow Watershed Council, completed the Methow Basin Water Withdrawal Study and the Instream Flow Reservation Tracking Database which provided new comprehensive information on water withdrawal rates associated with exempt domestic wells in the Methow Valley and provided the first ever assessment of the 2 CFS reserves position by reach as of May 2011 (<http://www.methowwatershed.com/methowwatershedplan.html>).
 - The results of these studies indicate that:
 - With future build-out assuming no new parcels and existing parcel size regulations, the Lower Methow reach (Town of Twisp to Pateros) would exceed its reserve, leaving 1,092 presently existing parcels out of a total of 2,913 presently existing parcels unable to be supplied by a permit-exempt well.
 - Assuming full build-out of all possible parcels, the Upper Methow and Lower Methow would exceed their reserves. The Upper Methow would have 127 parcels unable to be supplied by permit-exempt wells out of a total of 1,948 possible parcels. The Lower Methow would have 24,313 parcels out of a total of 26,133 possible parcels unable to be supplied by permit-exempt wells.
- In April 2011, the Methow Watershed Council provided a letter to the Okanogan County Board of Commissioners detailing the recent completion of these studies and suggesting the County take into account the study results while undergoing the process to update the County's Comprehensive Plan (see attached).
- As stated in the April 2011 letter, which about brings us up to date:

“At present, land use planning and water management planning in the Methow are on separate tracks and we believe that it would serve both our interests to bring our parallel tracks closer together. We suggest that you develop the Okanogan County Comprehensive Plan (Comp Plan) only after due consideration of our information on current water use and anticipated future permit-exempt domestic and stock use based on existing lot sizes so that it supports zoning and development review processes responsive to this information. We feel that it would be counterproductive to propose, now or in the future, a Comp Plan which results in an overallocation of permit-exempt use under WAC 173-548, the rule that currently restricts total permit-exempt groundwater withdrawals in any of 7 reaches to 2 c.f.s (898 gals/min).”

Suggested language that could be included in the Updated Comprehensive Plan:

- DESCRIPTION OF PROCESS

- At present, Lines 112 to 116 state that “The work of watershed councils is on-going. These plans will be reviewed for consistency with the Comprehensive Plan. They will be adopted by ordinance in separate processes”.
 - Obviously, this statement is factually incorrect and ignores the approval of the 2005 Methow Basin Watershed Plan by Okanogan County and Ecology.
 - Suggested replacement language starting on Line 114:

The work of watershed councils is on-going. The Methow Watershed Plan approved by Okanogan County Commissioners in 2005 represents the best statement of the public’s will on water resource management in that part of Okanogan County. It is the intent of this Comprehensive Plan to provide consistency with the resource and policy goals and objectives embodied in the Methow Basin Watershed Plan. Watershed plans in other Water Resource Inventory Areas in Okanogan County will be reviewed for consistency with the Comprehensive Plan as they are drafted and will be approved in separate processes”.

- PLANNING OBJECTIVES

- After line 225, insert the following:

Water resource availability will be a major planning focus for Okanogan County given the critical connection between water resources and economic development. In the Methow Watershed, where water availability is presently constrained by the 1976 WRIA 48 Instream Flow Rule, Okanogan County will continue to consult with the Methow Watershed Council to accomplish the goals and objectives set forth in the 2005 Methow Basin Watershed Plan and to ensure land use designations contained in this Comprehensive Plan are consistent with water resource planning objectives as defined by the residents of the Methow Watershed.

- PRIVATE PROPERTY AND WATER RIGHTS

- 331 – Water Rights
- After Line 351 include the following:

This Comprehensive Plan recognizes that water availability limitations exist for new appropriations in the Methow Basin per Chapter 173-548 of the Washington Administrative Code. As such, the County will continue to work with the Methow Watershed Council to accomplish the goals and objectives set forth in the 2005 Methow Basin Watershed Plan, which seeks to maintain and possibly increase water availability for new beneficial uses while also maintaining adequate instream flows for environmental resources. Aligning land use planning to compliment the revisions of WAC Chapter 173-548 as

Suggested language that could be included in the Updated Comprehensive Plan:

embodied in the 2005 Methow Basin Watershed Plan will help increase the availability of appropriable water in Okanogan County and is a major County objective.

- Chapter 3 - RESOURCE LANDS - AGRICULTURAL LANDS OF LONG TERM SIGNIFICANCE – All Types

- DENSITY –

- Insert the following bullet:

- Availability of legally appropriable water in consideration of legislatively established Water Resource Programs (such as those established in WAC Chapter 173-548).

- Chapter 4 – LAND USE OF RURAL LANDS

- PURPOSE –

- Change the complete paragraph starting at line 664 to read as:

The ability of lands in the rural designation to support density and permitted/conditional uses will be affected by other bodies of required regulation such as Critical Areas Ordinance, Shoreline Master Program, and legislatively established Water Resource Programs. This must be taken into account when the adequacy of land in the rural designation is reviewed.

- DENSITY –

- Insert the following bullet:

- Availability of legally appropriable water in consideration of legislatively established Water Resource Programs

- Chapter 5 – UNINCORPORATED TOWNS AND NEIGHBORHOOD COMMERCIAL CENTERS LAND USE

- PURPOSE –

- Add after line 722:

The ability of lands in the unincorporated towns and neighborhood commercial centers designation to support density and permitted/conditional uses will be affected by other bodies of required regulation such as Critical Areas Ordinance, Shoreline Master Program, and legislatively established Water Resource Programs. This must be taken into account when the adequacy of land in the unincorporated towns and neighborhood commercial centers designation is reviewed.

- FUTURE NEIGHBORHOOD COMMERCIAL CENTERS

- Alter the paragraph on starting at line 756 to read:

Proposals for new neighborhood commercial centers should be reviewed in accordance with the designation criteria, other bodies of required regulation such as Critical Areas Ordinance, Shoreline Master Program, and legislatively established Water Resource Programs, and general planning objectives found previously stated in this section.

Methow Watershed Council

The RiverBank Building, Ste 101
206 Glove Street, PO Box 278
Twisp, Washington 98856
509.997.0640 x266
www.methowwatershed.com

12 April 2011

Okanogan County Commission
123 Fifth Avenue North, Room 150
Okanogan, Washington 98840

Re: Okanogan Comprehensive Plan and watershed planning

Dear Commissioners:

Land use planning and water management planning are closely linked. The Methow Watershed Council (MWC) over the past decade has collected and compiled an extensive amount of information about past and present water uses in the Methow Watershed and is presently developing a process to estimate future demands on our water supply. One situation we are trying to analyze is if and when water adequacy will necessarily dictate the intensity of future development in the Methow. It is our belief that the comprehensive plan must be responsive to this data. Obviously the level of development permitted in the comprehensive plan and subsequent zone code will greatly affect when water supply becomes an issue. Conversely, where areas in the watershed are already under greater pressure in terms of water supply there is little reason to designate those areas to support more intense development.

At present, land use planning and water management planning in the Methow are on separate tracks and we believe that it would serve both our interests to bring our parallel tracks closer together. We suggest that you develop the Okanogan County Comprehensive Plan (Comp Plan) only after due consideration of our information on current water use and anticipated future permit-exempt domestic and stock use based on existing lot sizes so that it supports zoning and development review processes responsive to this information. We feel that it would be counterproductive to propose, now or in the future, a Comp Plan which results in an over-allocation of permit-exempt use under WAC 173-548, the rule that currently restricts total permit-exempt groundwater withdrawals in any of 7 reaches to 2 c.f.s (898 gals/min).

The MWC recently developed a database incorporating current parcel size regulations, individual parcel information, metered water use data, and other relevant information, obtained primarily from Okanogan County, in our development of a water use tracking system. We are using this information as we propose revisions to WAC 173-548. As a result, we now have the capability to estimate the effects of current parcel size regulations and possible Comp Plan parcel size revisions on our available water supply as defined by WAC 173-548.

Recently, the MWC received a DRAFT *Instream Flow Reservation Tracking Database* report prepared at our request. Each stage of the tracking database development was closely reviewed by our Technical Subcommittee and approved by the full Council, including the rationales and assumptions applied to the data to arrive at estimates of current and future permit-exempt water use. Three scenarios estimating maximum consumptive permit-exempt use were presented: current (existing) conditions, future build-out assuming no change in the number of existing parcels under existing parcel size regulations, and future build-out assuming all possible parcels were developed (i.e. by further subdivision) to the maximum extent allowable under existing parcel size regulations. All scenarios assumed a maximum monthly average consumptive use of 710 gallons/day (gpd) per parcel. This maximum consumptive use is expected to occur in July, when irrigation demands (outdoor uses) are highest.

Under current conditions, all seven reaches defined by RCW 173-548¹ have water remaining in their reserve, ranging from 100% (Early Winters) to 48% (Lower Methow).

With future build-out assuming no new parcels and existing parcel size regulations, 6 reaches would have water remaining in their reserves. The Lower Methow would exceed its reserve, leaving 1,092 presently existing parcels out of a total of 2,913 presently existing parcels unable to be supplied by a permit-exempt well.

Assuming full build-out of all possible parcels, 5 reaches would have water remaining in their reserve. The Upper Methow and Lower Methow would exceed their reserves. The Upper Methow would have 127 parcels unable to be supplied by permit-exempt wells out of a total of 1,948 possible parcels. The Lower Methow would have 24,313 parcels out of a total of 26,133 possible parcels unable to be supplied by permit-exempt wells.

After taking into consideration the fact that these are DRAFT estimates of water use based on conservative assumptions which could over-estimate water use, the MWC still feels that they are accurate enough to conclude that, under existing parcel size regulations, possibly the Upper Methow and almost certainly the Lower Methow reaches are over-allocated for water with respect to WAC 173-548. This applies to the Lower Methow even if no further subdivision of existing parcels is allowed.

As partners in planning for sustainable growth, also known as smart growth, we think it would serve residents in the Methow Watershed if our work informs your land use planning and results in a revised Comp Plan and a revised WAC 173-548 that work together to ensure an adequate future water supply in the Methow.

A copy of this DRAFT report has been provided to your representative on the MWC and has been forwarded to the Washington State Department of Ecology for their review and comment. After your review, if you have any questions or wish to pursue more detailed discussions about our tracking database and these DRAFT results, please feel free to contact us.

¹ *Headwaters, Early Winters, Upper Methow, Chewuch, Middle Methow, Twisp River, Lower Methow*

Sincerely,

The Methow Watershed Council

For the Council

Greg Knott – Methow Watershed Council Chair

¹ *Headwaters, Early Winters, Upper Methow, Chewuch, Middle Methow, Twisp River, Lower Methow*

DRAFT MEMORANDUM

Project No.: 080180

May 13, 2011

To: Methow Watershed Council – WRIA 48

From: **Joseph N. Morrice, LHG**
Senior Hydrogeologist

William M. Sullivan, LHG
Project Hydrogeologist

Timothy J. Flynn, LHG, CGWP
Principal Hydrogeologist

Re: **DRAFT Evaluation of Reservation Quantities Established by Chapter 173-548 WAC under Current and Potential Future Buildout Scenarios**

The Instream Flow Rule (Rule) for the Methow River was established in December 1976 as Chapter 173-548 of the Washington Administrative Code (WAC). The Rule established a reservation of 2 cubic feet per second (cfs) of water in each of seven stream management reaches (reaches) of the Methow River watershed for future single domestic and stock water uses (Figure 1). The 2 cfs reservation in each reach is expressed as a reduction in streamflow associated with the consumptive use of aggregate instantaneous withdrawals authorized under the Rule.

This memorandum presents:

- A summary of results of the *Water Withdrawal Study* (Aspect, 2011a) and *Instream Flow Reservation Tracking Database* (Aspect, 2011b);
- Estimated quantities of water currently remaining in the reservation for each reach, accounting for existing developed residential parcels subject to the Rule; and
- Estimated quantities of water that would be utilized and remaining reservation in each reach under two future buildout scenarios.

Summary of Water Withdrawal and Buildout Analyses

Consumptive Water Withdrawals

The *Water Withdrawal Study* estimated total and consumptive use associated with a typical residence served by a water right permit-exempt well (exempt well) in the Methow River Watershed. Because the reservation establishes maximum allowable instantaneous consumptive impacts (total withdrawal minus return flow) to surface water flows in each of the reaches, the maximum month consumptive use rate is of most relevance for allocating exempt well withdrawals under the reservation.

The estimated maximum month consumptive water use rate (expressed as gallons per day) established in the *Water Withdrawal Study* is 710 gallons per day (gpd) or about 0.0011 cfs per residence served by an exempt well. This maximum consumptive use is expected to occur in July.

May 13, 2011

when irrigation demands (outdoor uses) are highest. This value includes estimated year-round, indoor consumptive use of 30 gpd, July irrigation consumptive use of 650 gpd for irrigation of 0.1 acres, and stock water consumptive use of 30 gpd. Although there is likely considerable variation in individual exempt well use, the use of a single value for maximum month use is justified when considering the averaging effect of a large number of exempt wells geographically distributed throughout the watershed.

Current Development and Buildout Scenarios

The *Instream Flow Reservation Tracking Database* report presented estimates of the current number of residential parcels subject to the Rule (i.e., parcels served by permit exempt wells and developed after adoption of the Rule), and the potential number of parcels that could be developed in each reach under two different future buildout scenarios. A total of 2,730 currently developed parcels subject to the Rule were identified in that report. The total number of parcels and parcels per reach subject to the Rule are summarized on Table 1.

The **first buildout scenario** (Full Buildout) assumes that all developable parcels will be subdivided and developed as residential parcels to the greatest extent allowed by current zoning regulations. These assumptions result in a total of more than 32,000 residential parcels in the watershed, with about 80 percent located in the Lower Methow reach. The disproportionate number of developable parcels in the Lower Methow in this scenario is due to the relatively small minimum parcel size allowable under existing zoning in much of this reach; current parcel configurations in the Lower Methow are generally well in excess of the minimum parcel sizes. The estimated number of residential parcels under this scenario is unrealistically high, and this should be thought of as an absolute worst case scenario of future development and associated water demands on the reservations.

For example, a parcel that is subdivided and developed with more than six residential lots would likely require a water right from Ecology and would not be allowed to rely on exempt wells. As such, development of many parcels in the watershed, especially in the Lower Methow where relatively large existing parcels could theoretically be subdivided into a large number of small parcels, would require some source of water other than the reservation and would not be debited to the reservation.

The **second buildout scenario** (Buildout without Parcel Subdivision) assumes that all existing developable parcels are developed with a single residence, but without subdividing the parcel. This provides a point of comparison to the Full Buildout scenario, and likely represents a more realistic estimate of future buildout. Of note, the Lower Methow reach is most sensitive to the different assumptions of the Full Buildout and Buildout without Parcel Subdivision scenarios. For the Lower Methow reach, the increase in the number of parcels from the Buildout without Parcel Subdivision scenario to the Full Buildout scenario is nearly a factor of nine; for the other reaches, the increase is less than a factor of two.

Although it is difficult to predict future land use, development, and population growth in the watershed, it is expected that maximum future buildout in all but the Lower Methow reach should fall somewhere between the two buildout scenarios. For the Lower Methow reach future buildout of parcels relying on the reservation is expected to be closer to the Buildout without Parcel Subdivision

May 13, 2011

scenario than the Full Buildout scenario, due to restrictions on developing large numbers of parcels under the water right permit exemptions.

Evaluation of Current Conditions

Table 1 shows, for each reach, the estimated number of developed residential parcels currently subject to the Rule, aggregate maximum month consumptive use (calculated as the per parcel consumptive use times the number of parcels in the reach), and water remaining in the reservation (equal to the initial two cfs reservation minus the aggregate use). Under current conditions, all the reaches have water remaining in the respective reservations. The minimum remaining reservation is the Lower Methow reach, which has allocated slightly more than half the original reservation.

Evaluation of Full Buildout Conditions

Table 2 shows, for each reach, the estimated number of residential parcels subject to the Rule under the Full Buildout scenario, aggregate maximum month consumptive water use rate, and remaining water or shortfall of water in the reservation. Also shown are the number of additional residential parcels that could be accommodated after buildout, or if a negative value, the number of residential parcels that would need some source of water supply other than the reservation.

Under this worst case buildout assumption, all reaches except Upper Methow and Lower Methow would have sufficient water in the reservations to meet future water demands. Excess water in all reaches (i.e., water not required to meet future growth under the Full Buildout condition) totals about 5 cfs or enough water to serve about 4,560 additional residences. The Upper Methow reach would have a shortage of 0.14 cfs, or about 127 residences that would need a source of water other than the reservation. The Lower Methow reach would have a shortage of nearly 27 cfs, or more than 24,000 residences that would need some source of water other than the reservation.

These are considered absolute maximum buildout conditions, and likely provide an unrealistic estimate of future development in the Lower Methow reach. Because of the conservative assumptions, these estimates provide a degree of certainty that the reservations are more than adequate to accommodate the maximum possible growth in five of the reaches, and over 90 percent of the possible growth in the Upper Methow reach.

Evaluation of Buildout without Parcel Subdivision Conditions

Table 3 summarizes the estimated number of residential parcels subject to the Rule under the Buildout without Parcel Subdivision scenario, consumptive water use, remaining water or shortfall of water in the reservation, and the number of additional residential parcels that could be accommodated after buildout. Under this scenario all reaches, except the Lower Methow, would have sufficient water to meet future water demands. Excess reservation water in these six reaches (excluding the Lower Methow) totals about 7.2 cfs, or enough water to serve about 6,580 additional residences. The Lower Methow reach would have a shortage of about 1.2 cfs, or nearly 1,100 residential parcels that would need some source of water other than the reservation.

May 13, 2011

References

- Aspect Consulting, LLC (Aspect), 2011a, Draft Water Withdrawal Study, Water Resource Inventory Area 48, Twisp, Washington, Prepared for Methow Watershed Council, May 10, 2011.
- Aspect Consulting, LLC (Aspect), 2011b, Draft Instream Flow Reservation Tracking Database, Water Resource Inventory Area 48, Prepared for Methow Watershed Council, May 11, 2011.

Limitations

Work for this project was performed and this memorandum prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. It is intended for the exclusive use of Methow Watershed Council for specific application to the referenced property. This memorandum does not represent a legal opinion. No other warranty, expressed or implied, is made.

Attachments

- Table 1 – Estimated Maximum Consumptive Use Rate under the Reservation, Current Conditions
- Table 2 – Estimated Maximum Consumptive Use Rate under the Reservation, at Full Buildout Conditions under Current Zoning
- Table 3 – Estimated Maximum Consumptive Use Rate under the Reservation, Buildout without Parcel Subdivision Conditions under Current Parcel Size
- Figure 1 – Methow Watershed and Reach Boundaries

W:\080180 WRIA 48\Deliverables\Eval of Reservation Quantities\WRIA 48 Reservation Memon draft rev.doc

Table 1 - Estimated Maximum Consumptive Use Rate under the Reservation, Current Conditions¹

WRIA 48 Water Withdrawal Study Project No. 080180

DRAFT

Stream Management Reach	Estimated Developed Residential Parcels Currently Subject to the Rule	Estimated Maximum Month Consumptive Use Rate per Parcel (gpd)	Aggregate Maximum Month Consumptive Use Rate (gpd)	Aggregate Maximum Month Consumptive Use Rate Instantaneous (cfs)	Remaining Reservation (cfs)
Headwaters	220	710	156,200	0.24	1.76
Early Winters	0	710	0	0.00	2.00
Upper Methow	467	710	331,570	0.51	1.49
Chewuch	415	710	294,650	0.46	1.54
Middle Methow	406	710	288,260	0.45	1.55
Twisp River	263	710	186,730	0.29	1.71
Lower Methow	959	710	680,890	1.05	0.95
TOTAL	2,730	---	1,938,300	3.00	11.00

Notes:

Chapter 173-548 of the Washington Administrative Code (WAC) establishes reservation a 2 cfs of water per stream management reach for future single domestic and stock water uses.

Maximum month consumptive use is from the *Water Withdrawal Study* (Aspect, 2011a) and accounts for indoor, irrigation, and stock water uses.

Estimated developed parcels subject to the Instream Flow Rule are from the *Instream Flow Reservation Tracking Database* (Aspect, 2011b).

gpd - gallons per day

cfs - cubic feet per second

¹ Parcels with exempt wells that serve water only for stock (without home) are not included.

Table 2 - Estimated Maximum Consumptive Use Rate under the Reservation, at Full Buildout Conditions under Current Zoning

WRIA 48 Water Withdrawal Study Project No. 080180

DRAFT

Stream Management Reach	Estimated Residential Parcels at Full Buildout Subject to the Rule	Estimated Maximum Month Consumptive Use Rate per Parcel (gpd)	Aggregate Maximum Month Consumptive Use Rate (gpd)	Aggregate Maximum Month Consumptive Use Rate Instantaneous (cfs)	Remaining Reservation after Buildout (cfs)	Parcels that could be Served with Remaining Reservation after Buildout
Headwaters	953	710	676,630	1.05	0.95	865
Early Winters	4	710	2,840	0.004	1.996	1,817
Upper Methow	1,948	710	1,383,080	2.14	(0.14)	(127)
Chewuch	1,291	710	916,610	1.42	0.58	528
Middle Methow	1,618	710	1,148,780	1.78	0.22	200
Twisp River	678	710	481,380	0.74	1.26	1,147
Lower Methow	26,133	710	18,554,430	28.71	(26.71)	(24,313)
TOTAL	32,625	---	23,163,750	35.84	(21.84)	(19,883)

Notes:

Chapter 173-548 of the Washington Administrative Code (WAC) establishes reservation a 2 cfs of water per stream management reach for future single domestic and stock water uses.

Maximum month consumptive use is from the *Water Withdrawal Study* (Aspect, 2011a) and accounts for indoor, irrigation, and stock water uses.

Estimated number of parcels at full buildout subject to the Instream Flow Rule are from the *Instream Flow Reservation Tracking Database* (Aspect, 2011b).

Full buildout assumes all developable parcels will be subdivided and developed to the greatest extent allowed by zoning regulations.

A negative remaining reservation value indicates that the existing reservation is not sufficient to meet water demands at buildout.

A negative value for parcels that could be served with the remaining reservation is the number of parcels that would not have access to the reservation at buildout.

gpd - gallons per day

cfs - cubic feet per second

Table 3 - Estimated Maximum Consumptive Use Rate under the Reservation, Buildout without Parcel Subdivision Conditions under Current Parcel Size

DRAFT

WRIA 48 Water Withdrawal Study Project No. 080180

Stream Management Reach	Estimated Residential Parcels at Reduced Buildout Subject to the Rule	Estimated Maximum Month Consumptive Use Rate per Parcel (gpd)	Aggregate Maximum Month Consumptive Use Rate (gpd)	Aggregate Maximum Month Consumptive Use Rate Instantaneous (cfs)	Remaining Reservation after Buildout (cfs)	Parcels that could be Served with Remaining Reservation after Buildout
Headwaters	697	710	494,870	0.77	1.23	1,120
Early Winters	4	710	2,840	0.004	1.996	1,817
Upper Methow	1,069	710	758,990	1.17	0.83	756
Chewuch	937	710	665,270	1.03	0.97	883
Middle Methow	1,131	710	803,010	1.24	0.76	692
Twisp River	512	710	363,520	0.56	1.44	1,311
Lower Methow	2,913	710	2,068,230	3.20	(1.20)	(1,092)
TOTAL	7,263	---	5,156,730	7.97	6.03	5,487

Notes:

Chapter 173-548 of the Washington Administrative Code (WAC) establishes a reservation of 2 cfs of water per stream management reach for future single domestic and stock water uses.

Maximum month consumptive use is from the *Water Withdrawal Study* (Aspect, 2011a) and accounts for indoor, irrigation, and stock water uses.

Estimated number of parcels at reduced buildout subject to the Instream Flow Rule are from the *Instream Flow Reservation Tracking Database* (Aspect, 2011b).

Reduced buildout assumes all existing developable parcels are developed with one residence, without subdividing them.

A negative remaining reservation value indicates that the existing reservation is not sufficient to meet water demands at buildout.

A negative value for parcels that could be served with the remaining reservation is the number of parcels that would not have access to the reservation at buildout.

gpd - gallons per day

cfs - cubic feet per second

COPY

Methow Watershed Council

The RiverBank Building, Ste 101
206 Glover Street, PO Box 278
Twisp, Washington 98856
509.997.0640 x266
www.methowwatershed.com

June 14, 2011

Okanogan County Commission
123 Fifth Avenue North, Room 150
Okanogan, Washington 98840

Re: Okanogan Comprehensive Plan and watershed planning

Dear Commissioners:

Land use planning and water management planning are closely linked. Over the past decade, the Methow Watershed Council (MWC) has collected and compiled an extensive amount of information about past and present water uses in the Methow Watershed and is presently developing a process to estimate future demands on our water supply. The MWC is seeking to analyze if and when water adequacy will determine the intensity of future development in the Methow. The MWC takes the position that the comprehensive plan must be responsive to this data. It is clear that the level of development permitted in the comprehensive plan and subsequent zone code will greatly affect when water supply becomes an issue. Conversely, where areas in the watershed are already showing increasing demand in terms of water supply there is little reason to designate those areas to support more intense development.

At present, land use planning and water management planning in the Methow are on separate tracks and we believe that it would serve our mutual interests to bring these tracks closer together. The MWC suggests that you develop the Okanogan County Comprehensive Plan (Comp Plan) only after due consideration of our information on current water use and anticipated future permit-exempt domestic and stock use based on existing lot sizes so that it supports zoning and development review processes responsive to this information. It would be counterproductive to propose, now or in the future, a Comp Plan which results in an over-allocation of permit-exempt use under WAC 173-548, the rule that currently restricts total permit-exempt groundwater withdrawals post 1977 in any of 7 reaches to 2 c.f.s (898 gals/min. To our knowledge there is no additional, non interruptible, water available above the amounts allowed in WAC 173-548.).

The MWC recently developed a database incorporating current parcel size regulations, individual parcel information, metered water use data, and other relevant information, obtained primarily from Okanogan County, in our development of a water use tracking system. We are

using this information as we recommend revisions to WAC 173-548. As a result, the MWC now has the capability to estimate the effects of current parcel size regulations and possible Comp Plan parcel size revisions on the Methow's available water supply as defined by WAC 173-548.

Recently, the MWC received a DRAFT *Instream Flow Reservation Tracking Database* report prepared at our request. Each stage of the tracking database development was closely reviewed by our Technical Subcommittee and approved by the full MWC. The report includes the rationales and assumptions applied to the data to arrive at estimates of current and future permit-exempt water use. Three scenarios estimating maximum consumptive permit-exempt use were presented: current (existing) conditions, future build-out assuming no change in the number of existing parcels under existing parcel size regulations, and lastly future build-out assuming all possible parcels are developed (i.e. by further subdivision) to the maximum extent allowable under existing parcel size regulations. All scenarios assumed a maximum monthly average consumptive use of 710 gallons/day (gpd) per parcel. This maximum consumptive use is expected to occur in July, when irrigation demands (outdoor uses) are highest.

Assuming current conditions, all seven reaches defined by RCW 173-548¹ have water remaining in their reserve, ranging from 100% (Early Winters) to 48% (Lower Methow).

Assuming future build-out with no new parcels and existing parcel size regulations, 6 reaches would have water remaining in their reserves. The Lower Methow would exceed its reserve, leaving 1,092 presently existing parcels out of a total of 2,913 presently existing parcels unable to be supplied by a well.

Assuming full build-out of all possible parcels under present zoning, 5 reaches would have water remaining in their reserve. The Upper Methow and Lower Methow would exceed their reserves. The Upper Methow would have 127 parcels unable to be supplied by permit-exempt wells out of a total of 1,948 possible parcels. The Lower Methow would have 24,313 parcels out of a total of 26,133 possible parcels unable to be supplied by wells.

Even considering the fact that these are DRAFT estimates of water use based on conservative assumptions which could over-estimate water use, the MWC position is that they are accurate enough to conclude that, under existing parcel size regulations, possibly the Upper Methow and almost certainly the Lower Methow reaches are over-allocated for water with respect to WAC 173-548. This applies to the Lower Methow even if no further subdivision of existing parcels is allowed.

As partners in planning for smart and sustainable growth, we feel it would serve residents in the Methow Watershed if the MWC's work

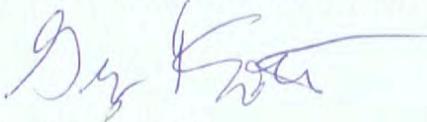
¹ *Headwaters, Early Winters, Upper Methow, Chewuch, Middle Methow, Twisp River, Lower Methow*

informs your land use planning and results in a revised Comp Plan and a revised WAC 173-548 that work together to ensure an adequate future water supply in the Methow.

A copy of this DRAFT report has been provided to your representative on the MWC and has been forwarded to the Washington State Department of Ecology for their review and comment. After your review, if you have any questions or wish to pursue more detailed discussions about our tracking database and these DRAFT results, please feel free to contact our Secretary Jackie Moriarty (509-997-4081) at the Twisp Town Hall to make arrangements. ,

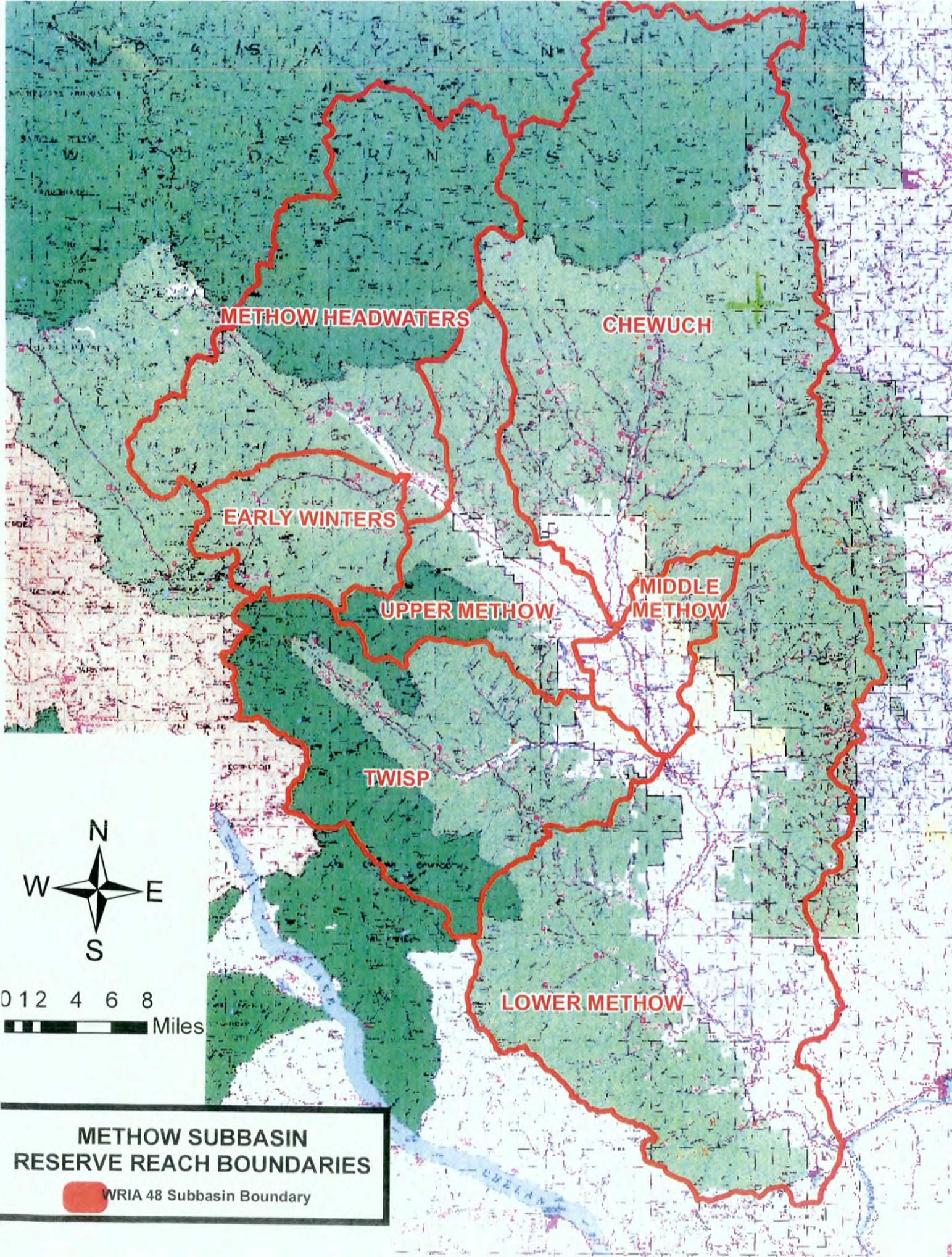
Sincerely,

The Methow Watershed Council

A handwritten signature in blue ink, appearing to read "Greg Knott", with a long horizontal flourish extending to the right.

For the Council

Greg Knott - Methow Watershed Council Chair



METHOW HEADWATERS

CHEWUCH

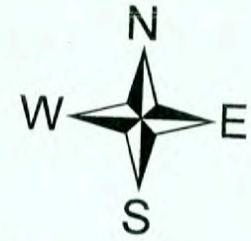
EARLY WINTERS

UPPER METHOW

MIDDLE METHOW

TWISP

LOWER METHOW



0 12 4 6 8
Miles

**METHOW SUBBASIN
RESERVE REACH BOUNDARIES**

 WRIA 48 Subbasin Boundary

Perry Huston, Planning Director, Okanogan County Office of Planning & Development,

123 5th Ave. N, Suite 130, Okanogan, WA 98840, (509) 422-7160 phuston@co.okanogan.wa.us

c/o Brenda Crowell, 123 Fifth Avenue North, room #150, Okanogan WA 98840 bcrowell@co.okanogan.wa.us

Methow Valley Citizen's Council Response

To Okanogan County Comprehensive Plan (DRAFT 3/12/11)

Legal requirements and authorities

The Comp Plan and the EIS should be addressed at the same time, but they are being addressed separately.

The EIS was closed for comments prior to the completion of Hearings on the Comp Plan.

For your reference:

1. Current Draft Comp Plan, dated 12/27/10

2. Current Comp Plan map, 10/14/10: Best viewed on website of the Okanogan County Commissioners, far right-hand side

3. Planning Enabling Act (Comp Plan is under these statutes)

<http://apps.leg.wa.gov/rcw/default.aspx?cite=36.70>

Note: Applicable law cites at the front of several sections are from Planning Enabling Act unless otherwise indicated. Some elements of this Act are required in the Comp Plan, others are optional.

The following document is organized according to chapters in the 12/27/10 draft Comp Plan.

Alternatives: There is no discussion of Alternatives. They do not appear in the Comp Plan or the EIS where only a "no action" alternative is mentioned.

Chapter One: The Okanogan County Comprehensive Plan (pp. 1 – 10)

APPLICABLE LAW (FROM PLANNING ENABLING ACT)

RCW 36.70.330 Comprehensive plan — Required elements.

The comprehensive plan shall consist of a map or maps, and descriptive text covering objectives, principles and standards used to develop it, and shall include each of the following elements: (included below, under subsections)

Executive Statement:

Vision Statement

Neighborhood Groups

Technical Committees

Description of Process

Adoption Process

Amendment Process

County Wide Planning Policies

Private Property and Water Rights

Executive Statement

The statement that all viewpoints were considered is false and misleading. Ignoring the input of Neighborhood Groups convened by the county, some with official status (Lower Valley Advisory Broup), subverts the public process. The fact that the recommendations (arrived at through consensus after one or two years of regular meetings) by these citizens are not reflected in the plan raises questions about whether the planning commissioners and BOCC gave disproportionate weight to private, as opposed to public, input. None of the input of the neighborhood planning groups (funded by State Department of Commerce grants totaling \$125,000) was included. Instead the Planning Commission and Board of County Commissioners (BOCC) crafted the plan to satisfy only one group of constituents, the Coalition for Property Rights. This fact is apparent in the communications (obtained under the Public Records Act) that exist between the county

and CPR and the shifting emphasis in succeeding drafts that eliminate anything that could be construed as pertaining to environmental protections or effective planning.

"The existing plan did not provide the policy level guidance which directs the specific land use regulation creating the necessary permitting tools to adequately preserve the property rights of private land owners and at the same time preserving the land and environmental resources for future generations." Changes from the existing document suggest that this draft, as presented, was designed to enhance the financial position of a few rather than for the good of the community.

The comparison of the current Draft Comprehensive Plan to the current (1965) plan is a flawed comparison because the 1965 plan advocated for protection of productive agricultural lands, local food security and warned against the blight that would occur with sprawling development; it is a far superior comp plan. The minimum designation (1 acre minimums) does not reflect the content or vision of 1965 document.

Vision Statement

The vision statement in this 12/29 plan draft fails to capture and incorporate the "pro-development" stance that this plan personifies. It also fails to incorporate the input of those who participated in the neighborhood groups. Any references to environmental protections, i. e., a land ethic, stewardship values, responsible use, balance with nature, etc., that were included in the vision statements (see 1-09 draft plan) were eliminated. These references, which appear in the existing plan, have also been eliminated; there is much stronger language in the Methow plans. A few examples from 1964 plan: "To conserve and restore natural beauty and other natural resources." (p. 9) "Development of recreation (summer home) subdivisions is just beginning to occur in Okanogan County." "In approving the recreation subdivision the county is going to have to take extra care in assuring that the plats are furnished with an adequate and permanent water supply, that the lots are large enough so that stream pollution can be prevented, that road access to the plats is adequate, that public access to the waterfront can be preserved, and that provisions are made for fire safety." (p 28)

The statement that the county will provide for the health, safety and welfare of the citizens by "wise-use" of all the resources available to them is particularly egregious. For one thing, these resources are not even designated, except on public lands; for another, the term "wise-use" is a catchword phrase. It has an emphasis on using resources for private economic gain, rather than with an eye towards overall sustainability of the county's resources for all citizens, that flies in the face of the type of sustainable use mandated by the law.

While the existing plan contains concerns for protection of Methow Valley features valued by the community and visitors, the proposed plan has eliminated those elements under the influence of those whose primary interest is in personal enrichment through subdivision of open lands.

Description of the Process

This information should include the fact that after the first draft (January, 2009) was presented to the Planning Commission, a small group of vocal individuals (most of them CPR members) was able to convince the Commission and later the BOCC to withdraw all the neighborhood vision statements from the plan, and fail to include anything relating to the recommendations stated therein.

Adoption Process

If the county is to comply with the SEPA rules and laws they will need to submit an entirely new EIS, since the plan on which the former is based has been radically changed since the issuance of the first EIS in Spring of 2009. A portion of this (Addendum A) has only been done and presented to the public, but is inadequate for comprehensive EIS comment.

Amendment Process

Public Services

Future amendments to the comprehensive plan should consider a process for discussion amongst school districts, fire districts, local governments, and other service providers to establish future level of service projections and a methodology for analysis of impacts to level of service. This should be dealt with in the current CP revision process.

On pages 5 and 6, the draft incorrectly states that appeals would be pursuant to the Land Use Petitions [sic] Act. That law prescribes the process for appealing individual project permits, not a comp plan. An appeal of the comp plan would probably have to be pursuant to a writ of review.

The development of the County's Comprehensive Plan cannot be inconsistent with the county's duty under

RCW 36.70A.170(1) to designate:

- (a) Agricultural lands that are not already characterized by urban growth and that have long-term significance for the commercial production of food or other agricultural products;
- (b) Forest lands that are not already characterized by urban growth and that have long-term significance for the commercial production of timber;
- (c) Mineral resource lands that are not already characterized by urban growth and that have long-term significance for the extraction of minerals; and
- (d) Critical areas.

Moreover, the Planning Enabling Act, RCW 36.70.330 requires that the County include the following elements in its Comprehensive Plan:

A land use element which designates the proposed general distribution and general location and extent of the uses of land for agriculture, housing, commerce, industry, recreation, education, public buildings and lands, and other categories of public and private use of land, including a statement of the standards of population density and building intensity recommended for the various areas in the jurisdiction and estimates of future population growth in the area covered by the comprehensive plan, all correlated with the land use element of the comprehensive plan. The land use element shall also provide for protection of the quality and quantity of groundwater used for public water supplies and shall review drainage, flooding, and storm water run-off in the area and nearby jurisdictions ...

Any supporting maps, diagrams, charts, descriptive material and reports necessary to explain and supplement the above elements.

As set forth below, it appears that the current draft of the Comprehensive Plan fails to comply with these requirements by: (1) failing to fully designate natural resource lands; (2) failing to provide for the protection of the quantity and quality of groundwater; and (3) failing to protect critical areas, in particular, habitat necessary for fish and wildlife.

All the following comments are on county policies: RCW 36.70A.170 requires that "Counties must designate Agricultural lands, Forest lands, Mineral lands, and Critical Areas".

The Vision Statement includes reference to the "great diversity in occupation and lifestyle" of County residents. "With the farmers and cattlemen came a greater stewardship of the land and appreciation of the need to look ahead with a vision to ensure that future generations could prosper and enjoy this economic vitality."

As Okanogan County has grown "recreation, hunting and fishing has also become an economic generator to our local businesses". These are the reasons Resource Land designations must assure agricultural lands for future generations, as well as protection of environmental values that have become more important as "economic generators" - a "plan for the County as a whole".

Neighborhood groups were formed to facilitate this process: they included the Middle Methow; a Lower Methow Advisory Group was appointed by the county and the Mazama Advisory Committee is referenced in the existing Comp Plan.

The neighborhood groups began work in June of 2007 with an official kick-off at Growth Summit I in August of 2007. The groups, supported by County Planning Staff, contracted planning professionals, and citizen volunteers discussed densities, compatible uses, affordable housing, along with additional elements within a geographic boundary they identified as their area of interest.

Unfortunately the vision statements, goals, and policies created after more than two years of meetings by these resident neighborhood groups, nor the Lower Valley Advisory Group, are not incorporated in this draft.

"A revised draft was presented for review under SEPA in January of 2009. The SEPA review is ongoing as the plan is reviewed and revised. A refined draft emerged from the initial SEPA process and was scheduled for hearings in front of the Planning Commission in March of 2009 and followed by hearings before the Board of County Commissioners in [inserted late fall of 2010][deleted summer of 2009]. Adoption is anticipated by [inserted March 31, 2011][deleted December 31, 2009]." "The Shorelines Master Program and Critical Areas Ordinance is under review for update and scheduled for completion by December 31, [inserted 2010][deleted 2009]. The scheduling of this adoption process has continued to shift with resident input now limited to the mid-winter period (2010-2011) will unfortunately result in additional omission of constructive review.

"The Comprehensive Plan and Comprehensive Land Use Designation Map identify resource areas, compatible land uses, and densities in all unincorporated areas, including public lands. The Okanogan County Comprehensive Plan identifies existing incorporated boundaries of the Cities and Towns but has no authority within those boundaries." This suggests that the Board of Commissioners (BOC) has authority over public lands, but not for cities and towns. Although land use designation maps have not yet been available content of BOC correspondence and this draft suggests that the BOC is under the impression they can plan for all future crop and forest land needs to be met on public lands (Federal and State) and conservation easements. County Wide Planning Policy 6 "It is the expectation of Okanogan County that State, Federal, and Regional agencies will prepare, implement, and update plans and regulations consistent with the County's Vision Statement and Comprehensive Plan" also suggests that public land agencies are expected to conform their plans to those of the BOC.

County Wide Planning Policy 2 has deleted "It is the intent of Okanogan County to promote the coordination of all local planning initiatives and to integrate as appropriate other plans and priorities into the County Comprehensive Plan including, but not limited to: approved Watershed Plans, Economic Development Strategies, approved Salmon Recovery Plans, Recreation Plans, Comprehensive Flood Hazard Management Plans, Shoreline Master Programs, Community Wild Fire Protection Plans, and Transportation Plans." Included in its place is "The comprehensive plan will be used as a tool to protect the customs and cultures of Okanogan County". This change eliminates the "comprehensive" nature of the plan.

County Wide Planning Policy 3 states that "The County will develop and implement a public involvement strategy to ensure the opportunity for early and continuous citizen participation throughout the Comprehensive Plan Update process." This was to be the function of the Neighborhood Groups, but their input is excluded from this draft.

County Wide Planning Policy 4 stated that "The updated Comprehensive Plan will include County Wide Goals and Policies that address land use, natural resource lands, environmentally sensitive areas, natural hazards, community safety, economic development, transportation, housing, parks and recreation, utilities, essential public facilities, and capital facilities needs and priorities." This change also loses the "comprehensive" nature of the document in protecting county resources. It is unfortunate that this policy statement has been deleted from this draft.

The current County Wide Planning Policy 4 also states that "It is the intent of the County to ensure that the updated County Comprehensive Plan be sensitive to the diversity of unique landscapes and demography within the County. To allow for resident and geographic specific planning, the County will be divided into the following planning areas:" including Methow Valley (Mazama, Middle, Lower) areas. "The planning area boundaries were created to reflect different local conditions and to recognize historical service areas and transportation corridors." Methow Valley neighborhood groups (as did other neighborhood groups) endorsed this policy, but the current draft does not utilize it in future plans. The existing Methow addendums should be incorporated in the Plan or an appendix is essential to achieve this policy and avoid a considerable change from current conditions, environmental protections, and planning goals.

County Wide Planning Policy 5 calling for agency consultation was also deleted. It specified that "The County will consult with the incorporated cities, the Colville Confederated Tribes, and State and Federal organizations throughout the County Comprehensive Planning Process as necessary and appropriate." The current proposal that future crop and forest land needs can be met with public lands can not be considered in the absence of ongoing consultations.

County Wide Planning Policy 8 had stated "It is the intent of Okanogan County to actively involve and coordinate with the incorporated cities and towns throughout the County Comprehensive Planning process", but it also was deleted.

County Wide Planning Policy 11 "Okanogan County will establish criteria to identify and map environmentally sensitive areas and will prepare regulations to preserve and protect these areas utilizing the provisions of Best Available Science" This policy has been deleted. It was stressed by all of the Methow Valley neighborhood groups; its retention is in the best interests of our economy. This is not only important because of support by Methow groups but because, if the plan is not based on science, it is inadequate as a planning tool for the future. It's vital that it incorporate new knowledge about healthy streams, rivers, and aquifers; the need for uninterrupted wildlife corridors; soil science; and preparation for the effects of climate change.

County Wide Planning Policy 15 has inserted "Okanogan county will adopt a transportation element that

ensures the development and maintenance of a transportation system that is safe and efficient. Every effort will be made to make needed improvements to the transportation system concurrent with new land development”, while deleting “Okanogan County will evaluate current and anticipated transportation opportunities to ensure the development of a transportation system that is efficient, safe, environmentally sensitive, serves a diverse population, and improves facilities concurrent with new land development”. This alteration suggests that this draft was constructed to facilitate “new land development” without concern for the environment and the current population. The chapter on transportation has been deleted from this draft.

Concluding Statement of the Chapter:

Chapter 1 concludes with “This statement should not be construed in any manner that implies any interference with an owner’s right to sell their water right to any buyer”. This does not take into consideration the concern of neighborhood groups that water rights not be removed from current agricultural uses nor transferred out of the county. The county must retain water rights for agricultural needs within the county. A bill has been passed by the legislature that would make out-of-basin transfers illegal (SB 5555) and one of our County Commissioners, Andy Lampe, has testified in favor of it. [See attached Parlette letter.]

Chapter Two: Existing Conditions (p. 11)

The comprehensive plan shall consist of a map or maps, and descriptive text covering objectives, principles and standards used to develop it, and shall include each of the following elements:

(1) A land use element which designates the proposed general distribution and general location and extent of the uses of land for agriculture, housing, commerce, industry, recreation, education, public buildings and lands, and other categories of public and private use of land, including a statement of the standards of population density and building intensity recommended for the various areas in the jurisdiction and estimates of future population growth in the area covered by the comprehensive plan, all correlated with the land use element of the comprehensive plan. The land use element shall also provide for protection of the quality and quantity of groundwater used for public water supplies and shall review drainage, flooding, and storm water run-off in the area and nearby jurisdictions and provide guidance for corrective actions to mitigate or cleanse those discharges that pollute.

(3) Any supporting maps, diagrams, charts, descriptive material and reports necessary to explain and supplement the above elements.

In 2002, the average farm size was 858 acres. There were 1,486 farm operations utilizing 1.2 million acres (including public land) and half of the agricultural holdings that exceeded 160 acres were 1,280 acres or more. Only 11% of the earth’s surface is suitable for agriculture and 2 acres are being lost each minute. In Washington 23,000 acres are being lost each year. Meanwhile the planet’s population hit 7 billion this year and is expecting to explode to 9 billion in just 40 years. Our society with its “customs and culture” should be doing everything possible to protect its productive cropland. Without protection of our watersheds and ground water our agricultural Resource Lands will be lost.

Chapter Three: Land Use - Resource Lands (pp. 14 – 21)

LAND USE ELEMENT IN GENERAL:

REQUIRED: RCW 36.70.330

This Land Use Element does not fulfill the requirements of RCW 36.70.330.

The Land Use Element and Circulation elements are not correlated as required by RCW 36.70.330. The Land Use Element does not provide for protection of ground water quality and quantity as required by RCW 36.70.330

RCW 36.70.330 requires the County’s Comprehensive Plan to “provide for protection of the quality and quantity of groundwater used for public water supplies.” However, the draft completely fails to analyze the issue and to adopt development standards that reflect water limitations. The failure to plan taking into account limited water supplies will make it that much harder to develop a critical areas ordinance (“CAO”) that protects fish, wildlife and aquifers. The less water protected now, the more stringent critical area regulations will need to be in the future. Given the limited availability of water, it is essential that the County meet its legal mandate to protect groundwater supplies.

(1) A land use element which designates the proposed general distribution and general location and extent of the uses of land for agriculture, housing, commerce, industry, recreation, education, public buildings and lands, and other categories of public and private use of land, including a statement of the standards of population density and building intensity recommended for the various areas in the jurisdiction and estimates of future population growth in the area covered by the comprehensive plan, all correlated with the land use element of the comprehensive plan. The land use element shall also provide for protection of the quality and quantity of groundwater used for public water supplies and shall review drainage, flooding, and storm water

run-off in the area and nearby jurisdictions and provide guidance for corrective actions to mitigate or cleanse those discharges that pollute.

The current draft Comprehensive Plan fails to meet these statutory obligations. The plan has no mention of the requirements to protect groundwater quality or quantity in the draft Comprehensive Plan and the SEPA document prepared for the Comprehensive Plan only references future, yet to be developed, documents as the basis for any development of protection measures. This fails to meet the requirements of RCW 36.70.330.

The information presented under "current use of the land" in Chapter 2 suggests that with over 2 million acres of "Minimum Requirement District" and over 27 thousand acres of "Valley Floor" less than 600 acres were identified as "Agricultural", although elsewhere the historical and economic importance of agriculture is stressed. See Chapter 3 "1,205,229 acres in agriculture (2007) \$208,758,000 value of agricultural products produced (2007)".

RESOURCE LANDS:

The draft Comprehensive Plan erroneously states that the County may not designate all qualifying resource lands, if more than the minimum necessary to sustain the industry. That is incorrect. The County must designate all lands that qualify as lands of long-term commercial significance. For example, under the Growth Management Act ("GMA"), Okanogan County must designate "[a]gricultural lands that are not already characterized by urban growth and that have long-term significance for the commercial production of food or other agricultural products." RCW 36.70A.170(1)(a). "Agricultural land" under the GMA is land that (1) is not already characterized by urban growth; (2) is "primarily devoted to" commercial agricultural production; and (3) has "long-term commercial significance" for such production. *Lewis County v. W. Wash. Growth Mgmt. Hearings Bd.*, 157 Wash.2d 488, 502, 139 P.3d 1096 (2006)(quoting RCW 36.70A.030(2)).

This definition does not allow a county to exclude resource lands on grounds that they are "more than the minimum necessary." All resource lands meeting this definition must be designated. As the Growth Management Hearings Board stated in *Turtle Rock Homeowners Association v. Chelan County*, EWGMHB Case No. 07-1-0001 (FDO, July 17, 2007):

RCW 36.70A.170 requires all counties and cities to designate and conserve the natural resources by designating all forest lands, mineral resource lands, and agricultural lands that have long-term commercial significance. The legislature directed counties to do this as quickly as possible because many new rural developments were starting to take land away from farm, timber, and mining ventures. It was important for the legislature and the state of Washington to conserve these resources for future generations.

Instead of applying these standards, the draft Comprehensive Plan states that only 27,600 acres is needed to maintain a viable base for agriculture and 420,000 acres is needed to maintain a viable base for the cattle industry in the County. See Draft Comp. Plan at 17. This is insufficient. First, the draft Comprehensive Plan does not reference sources upon which they determined that number of cattle and land was sufficient and how it was determined that public lands would suffice to support cattle economy.

Second, even if this number is a correct goal, it greatly underestimates the amount of land needed for livestock purposes. Based upon current information from the public land managers there are at least 84,473 AUMs required per year in the County, which includes:

National Forest/ Okanogan Valley:	34,000 AUMs
National Forest / Methow Ranger District:	12,229 AUMs
BLM:	7,548 AUMs
DNR:	25,941 AUMs
DFW:	765 AUMs

The draft Comprehensive Plan asserts that 30,000 cow/calf pairs are required to sustain the current cattle economy in the County. Based upon that goal, 8 months x 30,000 AUMs amounts to 240,000 AUMs . According to above data, public lands only provide about one third of AUMs required to support current cattle economy. The remaining lands are private lands in the County, which must be designated to protect the county's rural economy. Moreover, this amount does not consider the amount of private land used to raise hay for winter feed, while cattle are on public land to graze. At a minimum, the County must examine all existing natural resource lands and designate these lands in an appropriate manner.

Agricultural Lands of Long Term Significance (pp. 16 – 19)

The Urban resource land category (included in earlier drafts) was eliminated. Irrigated agricultural land adjoining or in urban growth areas has no protection from development.

Non-compliance with RCW 36.70A.170.

The criteria for designation of resources –applicable to all counties-- does not specify that public lands can substitute for private land. “Needs of the industry” appear to be the only criteria being followed in resource lands designation. This principle is only one of the criteria cited in the Washington legal code. Failure to include other factors leads to:

1. Non-compliance with WAC 365-190-020 which states “It is more costly to remedy the loss of natural resource lands or critical areas than to conserve and protect them from loss or degradation. The inherent economic, ecological, social, and cultural values of natural resource lands and critical areas should be considered in the development of strategies designed to conserve and protect these lands..

2. Non-compliance with WAC 365-190-050 which requires that many other factors be considered in designating agricultural lands, For example, the classification of prime and unique farmland soils is a prime selection factor. Plan ignores and relies only on one factor for selection. The figures used to justify the “needs of the industry” are not backed up with any documentation or research from reputable sources. To cite “material submitted by advocate groups for Agriculture” as the standard by which resource land is excused from designation is arbitrary and capricious and outside the legal requirement.

To eliminate consideration of the above WACs and RCW by limiting selection to only the “needs of the industry” and proscribing inclusion of anything not in that category is an arbitrary and capricious standard. Designation of public lands as the county’s resource lands gives no information as to the suitability of such lands for the purpose intended, including soils, water, climate, and the cumulative effects on public recreation and wildlife, including endangered species.

Federal and state agencies must accommodate county in use of their (public) lands as “resource lands” with all that implies. No MOA’s or MOU’s between county and agencies are included in appendices to indicate this has been done.

The draft also recognizes that as Okanogan County has grown “recreation, hunting and fishing has also become an economic generator to our local businesses”. These are the reasons Resource Land designations must assure agricultural lands for future generations as well as protection of environmental values that have become more important as “economic generators”. This draft proposes that all future food crop and forest land needs be met on public lands (Federal and State) and conservation easements and deletes the need for protections included in the existing plan. That proposal is not in the best interest of Okanogan County's economy.

Public lands and the few properties with conservation easements alone cannot supply the needs of the county.

A deleted section of Chapter 3 of the existing plan included the following: “As stated previously Okanogan County protects and promotes agriculture as not only an important foundation block of our local economy but as an integral part of our heritage. Okanogan County further recognizes that many of our agricultural operations fall in or near urban centers. As more pressure mounts on the transportation grid and the cost of transporting food and materials grows, it is important that local policies recognize a need to preserve the capacity to provide a local independent food supply. For future generations to thrive, it is imperative a local dependable food supply is possible.” These concerns were expressed by the Methow Valley neighborhood groups and should be included in the Revised Comprehensive Plan. That objective cannot be obtained if currently productive croplands are not protected by county planning.

The Comp Plan draft now under consideration proposes that all current Commercial Forest and Agricultural private croplands be designated Rural-High Density, thereby assuring their potential for increased residential density. This draft suggests that all county resource lands are public lands and that those public lands are either “Commercial Agriculture or Forest”; only a small percentage of the public land acreage is in commercial production. Most commercially productive county agricultural lands are privately owned. This proposal is contrary to public land management practices and does not provide for the legislatively intended protection of privately-held productive forest and agricultural cropland.

The Resource Land designation is intended to promote zoning that minimizes the conversion of forest and crop lands to other uses and to discourage the permitting of incompatible uses. This Comp Plan draft has not included any private forest or crop-producing lands within that designation. The current draft attempts to remove the constraint of “regulatory restrictions” by omitting private Commercial Forest and Agricultural croplands from Resource Land designation. The constraint of topography assures that High-Density Rural build out would be concentrated on valley-bottom and bench-top Commercial Agricultural croplands. That

would produce unacceptable environmental impacts. Designation of private Forest Lands and Agricultural Lands as High-Density Rural will permit incompatible uses and decrease agriculture and resource based activity.

This proposed Comprehensive Plan does not recognize the importance of agricultural and resource based activities on the economics and lifestyle of Okanogan County. The policies in the current draft of the Comprehensive Plan do not recognize the importance of outdoor recreation to the economy and lifestyle for Okanogan County residents. The designation of productive forest lands and croplands on valley floors and benchlands as High-Density Rural will disperse and increase residential density with associated infrastructure. It is not compatible with "customs and culture" of the county and will decrease open space, impact aesthetic values, increase fencing associated with "open range", as well as decreasing opportunities for outdoor recreation and crop production critical to the county's economy. What is now open space will require extension of the existing transportation grid, expansion of utility infrastructure and increase associated costs. This proposal could result in great losses to utility ratepayers and providers who make services available to developments without permanent residents to reimburse costs.

The proposals presented in this draft of the Revised Comprehensive Plan if accepted would change the character of Okanogan County and be an economic loss to most of the people whose homes are on these lands.

As Commissioner Hover is well aware the entire lower Methow is "designated critical habitat" for the three listed salmonids (spring Chinook salmon, steelhead and bull trout). The productivity and abundance of these species is directly tied to habitat quality (in-stream and riparian, especially) degradation of which could cause a decrease in the parameters that measure recovery. Our Commissioner is the Chair of the Salmon Recovery Board responsible for the millions of dollars of public monies that have been and will continue to be spent to restore fish related habitat in the Methow and the success of these efforts will depend to some degree on land management in the watershed.

Regional salmon recovery planning efforts have identified a number of "limiting factors" and "biological strategies" to restore fish and these could be prevented or adversely impacted by increased development in floodplains/riparian areas in the lower valley. Best available science should require the restriction of increased residential density in the lower valley; it should be provided the same protection given to the upper valley to protect the "critical habitat" which is part of the recovery effort for these listed salmonids. An inventory of the water resources of the Methow watershed prepared in 2000 provides information that must be considered prior to designating Resource Lands in the Lower Methow (Salmon, Steelhead and Bull Trout Habitat Limiting Factors, Water Resource Inventory Area 48, Washington State Conservation Commission Final Report, Carmen Andonaegui, 7/18/00).

The following information was derived from this inventory:

Most of the subwatershed is federally owned and managed by the National Forest Service as the Okanogan National Forest. The majority of federal land is west of the Methow River, with only a small portion of federal land east of the Methow River in the upper reaches of the North Fork Texas Creek and upper French Creek. [All of these lands should be managed to protect the "critical habitat" of the salmonids discussed above.]

The Methow River valley floor, including the lower reaches of Libby, Gold, McFarland, Squaw, and Black Canyon Creek drainages and the majority of land east of the Methow River are a patchwork of private lands, DNR managed lands and WDFW managed lands. The lower elevation land adjacent to the river is mostly private and is occupied by orchards, field crops, rangeland, and family residences.

The lower Methow River is a migratory corridor for all anadromous salmonids and fluvial bull trout that spawn and rear in the Methow watershed. It also serves as rearing habitat for all salmonid species (spring chinook, summer chinook, rainbow/steelhead, and bull trout).

Libby Creek is over adjudicated, resulting in the dewatering of lower Libby Creek during low flow years. This results in direct mortality to steelhead juveniles, an ESA listed species, and a decrease in steelhead habitat. Management strategies should be implemented to avoid this occurrence. On USFS and private lands, manage livestock grazing to avoid and minimize impacts to existing riparian habitat and to allow for the recovery of riparian stands to mature stands. [Any increase in residential density with accompanying roads, wells, and septic systems on private lands or agricultural activity such as livestock production or irrigated crops on public lands would threaten the "critical habitat" of concern.]

The lower reaches of the mainstem and South Fork Gold Creek are privately owned. Roads parallel every major stream in the drainage having a major affect on aquatic habitat (USFS 2000f). Summer Chinook salmon spawn in the Methow River below the confluence with Gold Creek. Small numbers of spring chinook salmon spawn in the first 3 miles of Gold Creek (Edson 1990; USFS 2000f). Summer steelhead spawn and rear in the Gold Creek drainage (USFS 2000f). On private land in the lower reach of the South Fork Gold Creek alterations to the floodplain may be negatively impacting floodplain functions (TAG 2000). The conversion of riparian areas to agricultural and residential use in lower Gold Creek has degraded aquatic habitat (L. Hofmann, WDFW, pers. Comm., 2000). An assessment of water diversions and their affect on stream flow, aquatic habitat, and riparian habitat is needed, as well as an assessment of road location on sediment delivery and stream channel function. This should include both county and USFS roads. Sedimentation in the drainage should be addressed by identifying roads for closure, relocation, obliteration, and drainage improvements. There should be no increase in roads that would accompany designation of these lands as High-Density Rural.

Black Canyon Creek joins the Methow River at RM 8.1; summer steelhead spawn in the lower 0.4 miles of Black Canyon Creek (USFS 1999a). Sediment levels are very high in Black Canyon Creek, due to heavy management in the drainage (roading, timber harvesting, and cattle grazing), from highly erosive soils, and from two major fires in the drainage this century. Black Canyon Creek is entirely or substantially dewatered during periods of high irrigation water use in the summer and early fall months (Methow Valley Water Pilot Planning Project Planning Committee 1994).

The above information must be considered when a decision is being made regarding protection of the entire Methow watershed. This would involve extending the Methow Review District at least to Black Canyon as verified in the minutes of a regular meeting of the Okanogan County Regional Planning Commission held on Monday, October 26, 2009: "Director Huston verified that the Planning Commission had instructed Staff at a prior meeting to extend the zone Valley 5 and Upland 20 to Black Canyon and leave Methow Review District in tact. The Planning Commission verified that this was their request." In addition, the Commissioners expressed the intention to keep this provision in the Plan at a large public meeting on June 15, 2010 and directed the Planning director to proceed with the necessary arrangements. The draft now being reviewed does not include this decision, although no subsequent rationale has been presented for its exclusion. MVCC requests that this Planning Commission directive be incorporated in the Revised Comprehensive Plan.

RCW 36.70A.170(1)(d) requires the County to designate critical areas and RCW 36.70A.060(2) specifically requires the development of regulations to protect these areas, stating, "Each county and city shall adopt development regulations that protect critical areas that are required to be designated under RCW 36.70A.170." If the County adopts a new comprehensive plan with policies that subvert these requirements, the County will be in violation of the GMA. *See also Pilchuck v. Snohomish County*, CPSGMHB Case No. 95-3-0047 (FDO, Dec. 6, 1995)(Holding that the Legislature places a "higher order of directiveness" or "higher order of urgency" in regards to critical areas).

The GMA duty to "protect" critical areas is not served by a comprehensive plan that would damage and, in some cases, destroy vital critical areas. As outlined above, the current draft does not provide adequate protection for critical aquifer recharge areas (a GMA "critical area") nor does the draft plan adequately protect habitat of state and federally threatened species. Every county in the State of Washington is obligated and required to protect Threatened Species and their habitats.

Chapter Four: Land Use - Rural Lands (pp. 22 – 25)

(See also under "Sub Areas" for implications for the Lower Methow Valley.)

"Lands in the Rural designation will contain the greatest mix of existing and proposed uses because of the tremendous diversity of these lands." "Neighborhood commercial/service centers will become more necessary and must be appropriately sited. The existing mix of agriculture, resource based activities, recreation, and tourism should be maintained to provide diversity to our economic base." The current draft has deleted "These activities must be sited only when the review processes have identified adequate water supplies and the proximity of essential services."

"At the same time, lands in the Rural designation often contain areas of critical habitat, aquifer recharge areas, shorelines of state and local importance, wetlands, and other important features of the land and environment."

The following sentence has been deleted: "It is critical that the Comprehensive Plan and the Zone Code and permitting processes it generates achieve a successful balance of these important considerations."

Deleted General Planning Objectives include: "Land use proposals must be effectively reviewed to insure residential and other uses do not create an incompatible mix of densities and activities" and "Okanogan County shall provide innovative land use tools such as clustering to enable property owners the opportunity to preserve open space and other critical environmental features such as habitat, wetlands, and migration corridors concurrent with development proposals." These concerns were also recognized by the Methow Valley neighborhood groups.

The GPO "Agricultural activities shall be recognized and promoted in the rural designation" has been retained, but the balance of the sentence "to insure the opportunity for small scale operations. Development proposals shall be reviewed for impacts to existing agricultural operations" has been deleted.

"Areas moving away from transportation corridors, in areas where ingress/egress or the location of safe building sites is restricted due to topography, or areas with a demonstrated inability to provide adequate water resources will be designated rural low density."

"Lot sizes in areas designated rural low density will be 5 acres or greater in size" has been inserted and "Those areas currently designated for lot size in excess of twenty acres shall be designated as Rural Low Density" has been deleted.

The accompanying Map does not follow the criteria set forth in the plan's text. For example, the Middle Fork of Gold Ck is not in proximity to paved roads, major roadways, supply centers, or existing subdivisions. It is an inholding within USFS land with no road that is plowed in the winter and dirt USFS in summer. Yet it is designated Rural High Density.

Generally accepted densities would classify Rural High Density (1-5 acres) as urban. It also appears that Rural Low Density would be down to as small as 5 acres. This is hardly low density. The Rural 20 and Rural 10 should be reinstated in order to adequately configure the land to the existing uses in Okanogan and the great variety of topography.

How can there be sufficient water available for such dense development, especially on large new subdivisions in the lower valley? We are producing a situation in which land will be purchased for development and the owners will later discover they cannot obtain the necessary water. This is very poor planning.

The definition, densities and uses of rural lands should allow for protections once served by resource lands; however this is not the case. Only two choices of rural density are considered in the plan, either high (1acre minimum) or low (5 acre minimum). Requiring the entire county be designated either one or five acre "rural" is untenable and unrealistic. Such densities are not compatible with the land itself and the insufficient water resources.

Rural high density of one acre minimum does not comply with commonly accepted definition of "rural" under state law. One acre is an urban, not rural density. The proposed Plan states that high density rural will be located adjacent to urban areas and areas that demonstrate an enhanced ability to provide services. But the map shows high density rural development will be permitted in many areas that are remote and far from services. The fact that a road goes through is not an indicator of suitability for high density zoning!

Rural lands will be a catch-all for the greatest variety of permitted and conditional uses. For example, low density rural (5 acre minimums) allows as a compatible conditional use "non-resource based heavy industrial". Such a use demands an industrial zone designation, not low-density rural that is mainly on land now used for agricultural purposes.

Development proposals will no longer be reviewed as to impacts on existing agricultural operations. The Plan concedes that rural lands may contain important shorelines and critical areas, but offers no guidance as to how this is compatible with one acre parcel densities.

Lot sizes of 5 acres minimum are not low density. Areas with a "demonstrated inability to provide adequate water resources", as well as steep, hard to access areas and those used currently for agricultural and forest resources demand a much lower density. Even the previous 20 acre minimum is insufficient on much of the difficult and arid terrain. Much of this land is currently in forest and agriculture.

What public input can the county refer to, that drove them to zone remote areas, in Agricultural land use, with no public services and inadequate water resources, as urban densities of 1 acre minimums? How can the county explain the reduction in parcel sizes in low density rural and the removal of medium densities? In the Tunk Valley we have about 30,000 acres of contiguous shrubbe -steppe that now could be chopped into 1's and 5's? What is the rationale for that?

Chapter Five: Urban Lands (pp. 26 – 28)

This Section on Urban Lands deals with City Expansion Areas (CEAs) and Unincorporated Towns. These two sections were called "Urban Growth Areas" and "Limited Areas of More Intense Rural Development" (LAMIRDS), respectively, in prior drafts of the Comprehensive Plan. Details include the following. Point number 5 is one of the most important points.

1. The history section under CEAs is helpful and should also be included for Unincorporated Towns.
2. Definitions are needed for the processes of annexation, approval and adoption.
3. In designating CEAs, there should be a clear line of authority spelled out in the Comprehensive Plan going from proposal to designation to approval to adoption.
4. There is too much reliance on Development Agreements that are not cited or described. At the very least, it would be better to ensure compliance through a statement that "Development agreements must adhere to Okanogan County Code and must be consistent with all applicable land use regulations." A better suggestion might be to simply include this sentence and drop the requirement for Development Agreements entirely. Development Agreements have not existed long enough to demonstrate they will work.
5. Water and sewage facilities must be provided for prior to CEA authorization of development agreements, commercial development, high density residential development or other substantial development proposals. The document only states that "capital facilities" will be "planned for". Water supplies and sewage facilities need to be specifically included as requirements of the Comprehensive Plan. In addition, water supplies and sewage facilities need to be in place or have secured funding before CEAs can be granted authority to manage substantial developments.
6. The designation of CEAs should include provision of maps that can be reviewed by the public.
7. New or expanded CEAs should be subject to rights of appeal.
8. The authority to approve designations does not belong solely to the County, but is subject to federal, state and tribal laws as well.
9. Frequent references to "service centers" should be changed to "community services" to be more respectful and to acknowledge a broad range or typical amenities.
10. The section on Unincorporated Towns does should include meaningful coordination with the County. Designation should confer some benefits. This could include Planning Department assistance with projects. There should be a process for becoming Incorporated or in becoming a City.

Chapter 6: Unincorporated Towns (pp. 29 - 30.)

History

The creation of unincorporated towns and community centers has developed over time through development and transportation needs.

Purpose

Unincorporated Towns are the rural villages and service centers located in the County that are not incorporated. By designating those areas, the County recognizes the important role they play as a service center and focus point in providing community services for the surrounding neighborhood. The area within the designation should provide sufficient land area and services for the logical expansion of the Unincorporated Towns based upon the vision needs of the County residents and the ability of the area to provide services.

Designation Criteria

Unincorporated Towns will be may be designated developed based on the following criteria:

- Existence of services such as neighborhood retail, tourist retail and government services.
- Existence of urban density.
- Historical value as past settlement with existing tourist activities.
- Ability to support more intense development.
- Ability to provide community services such as trails or tourist attractions.

Future Unincorporated Towns

Due to the vast size of Okanogan County, it is important to locate necessary services in proximity to the residents. Settlement patterns will be driven by expansion of agriculture, forestry, and mining on the rural areas as well as an expansion of tourism. New service centers should be considered to minimize impacts to the transportation system brought about by longer trips to obtain basic services.

The Unincorporated Towns also serve as a focal point for area residents providing for a sense of community. The demand for new Unincorporated Towns will be created by the needs of the area residents and land owners.

Proposals for new Unincorporated towns should be reviewed in accordance with the designation criteria and general planning objectives found in this section. New Unincorporated Towns should attempt to provide for convenient transportation and access to community services.

General Planning Objectives

GPO – 6.1 Existing Unincorporated Towns act as neighborhood service community centers that contribute positively to the social and economic well being of the citizens of the County. Effective planning within the existing boundaries of the Unincorporated Towns and logical expansion nearby areas provides will benefit maintain or improve to the public by increasing the proximity of our citizens to necessary supplies and access to community services and facilities.

GPO – 6.2 Existing Unincorporated Towns should develop in such a manner that adequate water supplies are available and on-site septic systems are sufficient to provide for the users of the community provided within them.

GPO – 6.3 Existing Unincorporated Towns should plan for developments in such a manner that the impacts to the transportation system brought about by the increased users of the services provided are mitigated to avoid an erosion of the level of service provided that provide for inexpensive transportation.

GPO -6.4 Underlying zoning within Unincorporated Towns and their logical expansion areas should provide an effective mix of permitted and conditional uses that provide the for community services appropriate to a neighborhood service center without impacting the ability of the towns and cities to develop regional services within their existing boundaries or urban growth areas.

GPO – 6.5 Designated Unincorporated Towns shall retain their existing zoning. Rezoning to compatible zones will be on an elective basis

Chapter Seven: Sub-Areas (p. 31)

Applicable law: RCW 36.70.340

Comprehensive plan — Amplification of required elements.

The comprehensive plan may also be amplified and augmented in scope by progressively including more completely planned areas consisting of natural homogeneous communities, distinctive geographic areas, or other types of districts having unified interests within the total area of the county. Since this uses “may” why is it under “required elements”?

We Support the current inclusion of Sub Unit A and Methow Valley Plan and Methow Review District. Rewording by a Land Use attorney is recommended to avoid a legal challenge. Provision for Sub Areas has been removed from last draft and needs to be reinstated. Provide for future planning of sub areas, as in above “Amplification of required elements.”

Lower Methow Valley should be included with the rest of the Methow Valley. There is supporting language in the Comp Plan and a rationale under the Circulation element – (the Lower Valley has the same characteristics as the rest of the Methow and the Circulation Element language supports this.) The Lower Methow should not be a bedroom community for services in upper valley – this is not a good planning strategy re Mid-Methow advice, traffic, gasoline, etc. Public support has been shown for stricter zoning. Data has been provided by Kurt Danison showing number of plats in three alternatives.

This should be coordinated with SMP/CAO in the Lower Methow. How can the overlap here on significant issues be addressed now that the SMP and CAO are not a part of the Comp Plan?

Without necessary protection of the Lower Methow Sub Area fish and wildlife (i.e., salmonids, grey wolves, grey squirrels, lynx) of federal and state concern may be threatened.

Three listed salmonids are using the lower river as critical habitat. The productivity and abundance of these species is directly tied to habitat quality (in-stream and riparian especially) degradation of which could cause a decrease in the parameters that measure recovery. Millions of dollars are being spent to restore fish related habitat upstream and the success of these efforts will depend to some degree on habitat conditions in other portions of the watershed. Regional salmon recovery planning efforts have identified a number of "limiting factors" and "biological strategies" to restore fish and these could be prevented or adversely impacted by increased development in floodplains/riparian areas in the lower valley.

Sub Areas in other areas of the county should be delineated. This plan is about guidance for future development. Why isn't it provided? Provision as to how other areas of county may be designated as sub-areas. ...not just the Methow. Possibilities are the Okanogan Highlands, upper Pine Creek, and Tunk Valley where scenic quality, lack of services, shortage of water and need for critical areas habitat are not being served by present zoning in plan.

Chapter Eight: Circulation Element (pp. 32 – 36)

APPLICABLE LAW: Required: RCW 36.70.330

REQUIRED: A circulation element consisting of the general location, alignment and extent of major thoroughfares, major transportation routes, trunk utility lines, and major terminal facilities, all of which shall be correlated with the land use element of the comprehensive plan; any supporting maps, diagrams, charts, descriptive material and reports necessary to explain and supplement the above elements.

Optional: a transit element as a special phase of transportation, showing proposed systems of rail transit lines, including rapid transit in any form, and related facilities,

The following information was derived from Kurt Danison's **2/14/11 Testimony on behalf of Omak, Tonasket, Brewster, Pateros and Twisp**:

It has been requested that the County provide meaningful opportunities for coordination of the county and incorporated community's long range planning efforts. Of special concern are airports and city expansion areas.

With one exception, Methow State Airport, all of the general aviation airports in the County are owned, maintained and incorporated into a nearby city or town. With the exception of the Twisp Airport, all of the municipal airports are incorporated islands several miles from the city that owns it, which means land use on the private ground surrounding the facilities falls under the jurisdiction of Okanogan County.

The cities and towns want to call the County's attention to RCW 36.70.547 that relates to planning in the vicinity of general aviation Airports. The cities and towns wish for the County to initiate the "Consultation" that is required before planning decisions, both Comprehensive and Zoning are finalized in the vicinity of their Airports. RCW 36.70.547 talks about preparation of land use plans around General Aviation Airports providing that the land use planning authority (county in this case) must discourage incompatible land uses and specifically provides as follows: Such plans and regulations may only be adopted or amended after formal consultation with: Airport owners and managers, private airport operators, general aviation pilots, ports and the aviation division of the department of transportation.

The cities and towns with airports have adopted resolutions (Brewster, Omak, Tonasket and Oroville all passed in June 2010 and sent signed copies to County Commissioners, Twisp is preparing to adopt) and in some cases (Brewster for example) have amended their comprehensive plans to provide clear policies related to protection of airports from incompatible land uses and their desire to cooperatively plan with the County. While the cities and towns would rather work with the county on creation of appropriate policies and land use designations for those lands surrounding the airports they also want to be on record as opposing use of the Rural High Density designation on these lands. If an existing designation is to be used, Rural Low Density or Resource would be more appropriate and less likely to create incompatible land uses.

The other area of concern to these communities is related to those areas on the comprehensive plan map labeled as City Expansion Areas. There are two issues with this concern, the types and densities of land uses and the standards for development. The cities and towns have identified urban growth or future service area boundaries, designated the future land use in these areas, conducted some analysis of the long term impacts on services based on the planned land uses and in most cases (Tonasket and Twisp are just completing updates) the City or Town Council has adopted the results as part of the Comprehensive Plan. As an official part of the Comprehensive Plan, the adopted growth areas and land use designations are integrated into and drive long range planning required for water, sewer, streets, etc..... each city and town must do. The cities

and towns are disappointed that the county's draft plan basically ignores the results of decades of planning by their communities.

Maps and other materials related to comprehensive planning in the cities and towns have been provided to the Planning Department as part of required public review processes over the years and adopted plans and maps were submitted to the County Planning Commission and County Commissioners (at the request of the Commissioners) as the County's draft plan was being developed. The cities and towns would like the County to amend the draft comprehensive plan map to accurately reflect adopted urban growth or future service areas (the Brewster and Omak City Expansion areas are not correct, Tonasket is preparing to adopt a new UGA) and an effort made to develop land use designations compatible with the adopted city or town plans for the adopted growth areas.

Another issue is related to the standards (streets, water, sewer) required for new development within the growth or expansion areas prior to annexation by the city or town. Because a city or town intends to eventually annex these areas, it is important that the infrastructure in and on the ground be compatible with city or town requirements. The cities and towns have requested that the comprehensive plan provide clear policies on how development in identified growth or expansion areas will be reviewed and conditioned in light of the city or towns development standards and what role the city or town will play in any development review.

County Wide Planning Policy 8 had stated "It is the intent of Okanogan County to actively involve and coordinate with the incorporated cities and towns throughout the County Comprehensive Planning process", but it was deleted.

Chapter Nine: Environmental Protection (p. 37)

Applicable law: RCW 36.70.350

Comprehensive plan — Optional elements.

A comprehensive plan may include -- (1) a conservation element for the conservation, development and utilization of natural resources, including water and its hydraulic force, forests, water sheds, soils, rivers and other waters, harbors, fisheries, wild life, minerals and other natural resources, (2) a solar energy element for encouragement and protection of access to direct sunlight for solar energy systems,

Climate change,

What will be the environmental impact of fewer grants from the state as a result of not including Climate Change?

The two critical environmental policies, the Shorelines Management Plan and the Critical Areas Ordinance should be referenced here?

Ground Water [See "water" and 2011 DOE letter attachments]

"The land use element shall also provide for protection of the quality and quantity of groundwater used for public water supplies." That is one of the rare places that the law uses a word like "shall" to create a mandatory duty (e.g., "shall review" drainage).

A duty to use the land use element to protect groundwater for public water supplies should be included. The county should analyze the issue in the EIS or other documents and reach conclusions regarding densities and land uses that would be allowed or prohibited in certain parts of the county to protect drinking water supplies and apply those concepts in the CP.

Okanogan County's water is produced by precipitation, and diminished by annual evaporation rates and consumptive use. The water retaining geology is the alluvial material along streams and rivers which is where water resources can be found according to the USGS and those waters supply little more than valley floor irrigation and scant domestic water. Many stream basins are over allocated, and produce very low, or no flow at the end of summer. University of Washington climate scientists predict water availability problems will be worse in the near future. How those tributaries can accommodate any more well drilling for newly cultivated Agricultural Lands and newly designated High-Density Rural developments on existing croplands should be explained.

As groundwater issues have increased across the State decisions for water quality have been made in Grays Harbor, Walla Walla, and Yakima Counties. Protecting groundwater stores from contamination and overdraft

should be a top priority for counties and cities across the state. The United States Geological Survey issued a study that showed that 8 in 10 of the wells in the Columbia Plateau showed a decline in water levels over the last 25 years. Many declines were over 100 ft and some as great as 300 ft, with the largest and most widespread declines in the Yakima River basin, and spanning the Idaho border in the Pullman-Moscow area. In May 2010, the United States Geological Survey issued a report that sampled public water supply wells in Washington State. More than one in five of the well water samples contained contaminants at concentrations greater than human health benchmarks. In February 2010, the Washington State Department of Ecology, the U.S. Environmental Protection Agency and other agencies issued a report finding that almost 20 percent of the wells in the lower Yakima Valley are contaminated with nitrates and over 2,000 people, many of them poor and minority families, are drinking well water with contamination levels above health based drinking water standards.

Recently three appeals addressing county failures to protect drinking water sources in Walla Walla, Yakima, Grays Harbor Counties were won. In Walla Walla and Yakima Counties, the county decided not to protect aquifers that are important drinking water sources from pollution caused by new development. Washington's forward thinking Growth Management Act required all counties and cities to protect underground reservoirs of drinking water, referred to as aquifers, by either 1991 or 1992. Okanogan County should not fail to fulfill this basic duty of protecting our families' and businesses' drinking water supplies.

In Yakima County the situation was so dire that 12 percent of wells studied in the Lower Yakima Valley didn't meet drinking water standards due to heightened levels of nitrates, leaving many dependent on those wells for drinking water at higher risk for a number of serious health conditions. Bacteria contamination has also been detected in some of the area wells. Likely sources of the nitrate and bacteria contamination include urban and rural residences, land development, and certain agricultural activities. In Walla Walla, there have also been documented cases where the area's shallow gravel aquifer has been contaminated with nitrates and bacteria. The likely sources included urban and rural residences, land development, and certain agricultural practices.

Reductions in groundwater stores in affected areas can have devastating long-term effects on local farmers dependent on them for irrigation, and the contamination of water sources used for drinking water is a major public health issue. Cleaning up contaminated aquifers is costly and is often paid for by state and federal taxpayers.

Changes in groundwater levels can also have significant ecological ramifications. Groundwater plays an important role in supporting wildlife habitat and in sustaining the water cycle, as groundwater sustains many wetlands and provides the base flow for many streams and rivers.

Aesthetics

The comprehensive plan as proposed contains no design requirements or design review proposals that would impact aesthetics. The section regarding the use of overlays and the section of this EIS discussing the subdivision code will deal with the proposals for ridgeline protection and dark sky requirements.

This was a concern of many neighborhood groups and should be dealt with in the Revised Comprehensive Plan.

Light and Glare

The comprehensive plan as proposed contains no requirements that would impact light and glare. The section regarding the use of overlays and the section of this EIS discussing the subdivision code will deal with the proposals for ridgeline protection and dark sky requirements.

This second sentence appears to contradict the first.

Air Quality

"By reducing the potential for off-the-grid development and the subsequent use of generators for power production and wood fueled heat, the emissions generated by the use of these appliances should be reduced." It would be more effective to have requirements for clean-combustion wood-burning stoves than to suggest that any place that is off the grid is going to be more polluting. This ignores many aspects of traditional power use and the pollution it causes.

Air pollution affects the environment by harming soil, water, crops, forests, wildlife and visibility. Thus it affects not only residents but tourism and the economy. Air pollution also causes lung disease and decreases

lung function in children. It also worsens and increases the risk of dying from heart and lung disease and is associated with cancer.

The main sources of air pollution in Washington are motor vehicles (over 50%) and smoke from outdoor burning and wood stoves. The effects of auto emissions, resuspended dust, and particulate matter from wood burning are particularly severe in narrow mountain valleys. "Prescribed burning, wildfires, woodstoves, agricultural fires and residential burning all contribute during various seasons." (Accessed on 3/27/11 at <http://www.ecy.wa.gov/news/2005news/2005-003.html>)

RECOMMENDATIONS:

1. Permit no woodburning devices in any "development" except for the possibility of one in a lodge or public building.
2. Enforce the Washington State standard for opacity of any smoke column from a woodburning device. This is a limitation of 20 % opacity and is not difficult to enforce. It means, simply stated, that no smoke column should be visible from a wood burning device except when a fire is being started or fuel is being added. Information which demonstrates the ease of becoming certified to determine the opacity of smoke columns is available. This is much more easily enforced than laws tied to ambient air quality monitoring.
3. It is strongly recommended that the county train an employee to monitor opacity periodically across the county.
4. Any development which plans to hire employees should have at least one employee certified to determine opacity and that this employee would be assigned the task of monitoring smoke columns in the development for violations of the Washington State opacity requirements.

The Methow Valley and other mountain valleys with steep topography and local inversions are susceptible to extreme air quality situations. Since inversions in high mountain valleys are localized, they are not managed by state or regional air quality control agencies in our area. Okanogan county developed an air quality ordinance as mitigation required by the Record of Decision for the Early Winters ski area proposal in the 1980's, in order to maintain the clean air quality that was existing, in the face of expected development. This ordinance has since been abandoned. Thus, there does not exist any local control over air quality in sensitive areas such as the Methow Valley except generalized alerts designed for the region over-all. The Lower Methow in particular is very narrow with very steep sides. The currently low population density has protected it to some degree from the effects of inversions, particularly in the winter. 1-acre zoning could have a drastic effect upon the current situation. The following quotation of Sue Billings on a Department of Ecology website explains the situation further (Department of Ecology News Release - Jan. 5, 2005):

"Billings added that the Methow Valley is particularly sensitive to smoke due to its steep topography and local inversions. She encouraged Methow Valley residents to consider alternatives to burning, particularly when the air quality is bad. Alternatives to outdoor burning include composting, mulching and disposal at the local solid-waste facility.

The "air" section on page 8 does not identify the current air quality of the county, nor of the Methow Valley in particular. It does not attempt to compare the air emissions of any alternatives that were considered. It does not include air quality impacts to residential and rural areas at various levels of population density if wood heat is used, nor does it address the impacts to the Federal Class I air quality standards of the adjacent Pasayten Wilderness. It fails to address whether current regulation and enforcement would be sufficient to maintain Class I and Class II standards with the various population densities and related activities proposed in the Comprehensive Plan. In addition, it fails to address the impacts upon visibility that small minimum lot sizes (such as 1 and 5 acres) would have county-wide, particularly those areas which depend upon tourism and recreation.

Although several of the neighborhood groups named clean air as a vital concern for the Comprehensive plan, there is little or no provision in either the Comprehensive Plan nor the Zoning Codes to address this concern and goal of the citizens.

Chapter Ten: Coordination (pp. 38 – 39)

A point not dealt with in this review is the removal of language regarding consultation; it would seem that consultation with Federal Agencies with ESA responsibilities and the Tribe is a requirement on many issues, but has been removed from the Comp Plan. Instead of the above the Plan states that the Agencies have an obligation to support whatever the County comes up with.

Kurt Danison's testimony (referred to above) on Circulation Element document the county's lack of coordination with the years of work the towns have done on their possible expansion areas and the negative impact of 1-acre lots surrounding towns and airports.

Map:

APPLICABLE LAW: RCW 36.70.330

Required: The comprehensive plan shall consist of a map or maps, and descriptive text covering objectives, principles and standards used to develop it, and shall include each of the following elements:

(2) A land use element which designates the proposed general distribution and general location and extent of the uses of land for agriculture, housing, commerce, industry, recreation, education, public buildings and lands, and other categories of public and private use of land, including a statement of the standards of population density and building intensity recommended for the various areas in the jurisdiction and estimates of future population growth in the area covered by the comprehensive plan, all correlated with the land use element of the comprehensive plan. The land use element shall also provide for protection of the quality and quantity of groundwater used for public water supplies and shall review drainage, flooding, and storm water run-off in the area and nearby jurisdictions and provide guidance for corrective actions to mitigate or cleanse those discharges that pollute Puget Sound or waters entering Puget Sound; (3) Any supporting maps, diagrams, charts, descriptive material and reports necessary to explain and supplement the above elements.

It is not possible for the public to prepare adequate comments on this Comprehensive plan, due to a lack of information on the accompanying maps. Commissioner Lampe delivered a disclaimer at the beginning of each public hearing which stated that the Comprehensive Plan Map was not necessarily accurate and should not be considered in detail.

The public cannot comment adequately on Resource Lands because the map does not designate which lands are resources for agriculture, for forests, nor for mining. They are all lumped together. The public cannot deliver adequate comment on Rural Low and Rural High densities since the maps are apparently not yet accurate and not yet complete. It is not possible to know which lands are designated as low or high density.

No maps with sufficient detail to prepare adequate comments have been provided to the public other than a map on the website which is not available to anyone without a computer or one which depends upon slow telephone lines which cannot download large documents.

The available Map does not follow criteria set forth in plan's text.] For example, Middle Fork of Gold Ck, Tunk Valley, upper reaches of McFarland and Squaw creek. Properties within USFS land, many with no paved roads and no access in winter, are designated Rural High Density on the current map.

What public input can the county refer to, that drove them to zone remote areas, in Agricultural land use, with no public services and inadequate water resources, as urban densities of 1 acre minimums? How can the county explain the reduction in parcel sizes in low density rural and the removal of medium densities?

For the reasons set forth above, it appears that the current draft of the Comprehensive Plan fails to meet the requirements of RCW 36.70A.060(2), RCW 36.70.330, and RCW 36.70A.170(1). Accordingly, the plan should be redrafted consistent with the requirements of the law and re-circulated for public review.

Optional Elements under Planning Enabling Act not included in Comp Plan:

RCW 36.70.350

Comprehensive plan — Optional elements.

(6) a public services and facilities element showing general plans for sewerage, refuse disposal, drainage and local utilities, and rights-of-way, easements and facilities for such services, (7) a public buildings element, showing general locations, design and arrangements of civic and community centers, and showing locations of public schools, libraries, police and fire stations and all other public buildings, (8) a housing element, consisting of surveys and reports upon housing conditions and needs as a means of establishing housing standards to be used as a guide in dealings with official controls related to land subdivision, zoning, traffic, and other related matters, (9) a renewal and/or redevelopment element comprising surveys, locations, and reports for the elimination of slums and other blighted areas and for community renewal and/or redevelopment, including housing sites, business and industrial sites, public building sites and for other purposes authorized by law, (10) a plan for financing a capital improvement program, (11) as a part of a comprehensive plan the commission may prepare, receive and approve additional elements and studies dealing with other subjects which, in its judgment, relate to the physical development of the county.

Economic Impacts

The review processes that support the implementation of the comprehensive plan must be thorough enough to accomplish the effective review of project proposals for impacts but not onerous to the point the processes themselves become an obstacle to economic development. Without consideration of each alternative potential impacts cannot be considered.

Where possible, programmatic review should identify possible impacts of permitted uses and prescribe mitigations to those impacts prior to project application. This effort provides a level of predictability for land owners and project proponents and allows local government to anticipate impacts that economic development activities can cause to infrastructure and service delivery agencies. It is agreed this needs to be done before an EIS can be meaningful.

APPENDIX:

Lower Valley Advisory Group, Middle Methow Neighborhood Group, the Parlette letter and water (including 2011 related DOE letter) documents are attached.

Mark Schuppe (WDOE) letter regarding exempt wells is included here:

March 23, 2009
Perry Huston
Okanogan County Planning
123 Fifth Ave N Ste 130
Okanogan WA 98840

Re: Eagle Canyon Estates

Dear Mr. Huston:

I am writing this letter to clarify the Department of Ecology's position on the above referenced development proposal and to respond to comments attributed to Okanogan County Planning staff in the Okanogan Valley Gazette-Tribune. In a December 29, 2008, letter from the Department of Ecology (Ecology) to Okanogan County Planning commenting on the mitigated determination of nonsignificance for the Eagle Canyon Development, it was stated, in part:

This project requires water rights.

The Attorney General's Opinion, (AGO 1997 No.6) regarding the status of exempt ground water withdrawals, states that a group of wells drilled by the same person or group of persons, at or about the same time, in the same area, for the same purpose or project should be considered a single withdrawal and would not be exempt from the permitting requirement contained in RCW 90.44.050, if the total amount withdrawn for domestic use exceeds 5,000 gallons per day or if a total of more than .5 acre of lawn and garden are irrigated.

The Attorney General's opinion suggests that caution should be used in finding developments to be exempt from needing a water right permit if the possibility exists that the development of the project will result in the ultimate withdrawal of water in excess of 5,000 gallons per day or the irrigation of more than .5 acre of lawn and garden.

Ecology has not retracted those comments.

In a February 26, 2009, article in the Okanogan Valley Gazette-Tribune one of your staff, Ben Rough, is quoted as making the following statement at a SEPA appeal hearing:
WSDOE very commonly addresses the need for a water right during the comment period. This is often followed up with a meeting with WSDOE and the proponent at which time the determination of needing a water right is overturned. The proponent for this project did have discussions with WSDOE and it was decided that eight exempt withdrawals is acceptable.

While I did have two telephone conversations with the project proponent's representative, at no time was the project's need for a water right "overturned". On the contrary, I stated that Ecology would not retract its SEPA comments as these comments were consistent with the law. I did state that, given the lack of staff resources, it was not likely that Ecology would appeal the County's SEPA threshold determination or land use

decision. Ecology's exercise of discretion in its enforcement authority should not be construed to mean that "eight exempt withdrawals is acceptable".

As an administrator of a government agency with enforcement authority, I am confident you understand the need to weigh many factors before you decide to pursue enforcement. To date, correspondence between Okanogan County Planning and Department of Ecology regarding the Eagle Canyon development has been through SEPA comments. I urge Okanogan County Planning staff to first contact the Department of Ecology before presuming Ecology has taken a position contrary to our comments stated in our SEPA letter mentioned above.

The current budget climate has placed Ecology in the position where I must prioritize my existing resources. In the context of our SEPA review for developments proposing to rely on the domestic exemption, I plan to continue to comment on development proposals and advise counties and developers on whether the use of the exemption is appropriate. In cases where Ecology believes that an exemption is inappropriate and an immediate threat to public health and safety, impairment of senior water right holders, or environmental harm will result, then I will direct my staff to engage to prevent such an action. An example of where Ecology is implementing this approach is in the Kittitas basin. However, in the absence of the threat of immediate harm, I must rely on counties to appropriately condition developments based on water availability under current law. If a county chooses to approve a project in a manner other than recommended by Ecology through our SEPA comments, then both the county and the developer are at risk in proceeding with the development.

As indicated in Director Manning's February 17, 2009 letter to the Legislature on a similar controversy around exempt stock watering uses, we plan to continue to work with stakeholders and the Legislature on a global solution to confusion surrounding the exemption. I believe this approach, along with targeted intervention by Ecology on projects that create significant impairment risk, is appropriate in the current budget climate.

Please understand if the county approves 8 exempt wells for the project that risk still exists for the project. While Ecology doesn't currently have enough resources dedicated to enforcement of exempt well use, we cannot speak to future situations.

I recognize it can be difficult when dealing with the groundwater exemption. I appreciate your patience and cooperation. If you have any questions please call me at (509) 454-4258.

Mark C. Schuppe, Acting Section Manager
Water Resources Program
MCS:gg/090324
cc: Scott DeTro
Robert Harris
Patrick Williams, Center for Environmental Law and Policy

Methow Valley Citizens' Council
P.O. Box 774
Twisp, WA 98856
mvcc@mvcitizens.org
509 997-2669

Okanogan County Board of Commissioners
123 Fifth Avenue North, Room 150
Okanogan, Washington 98840

Sent via email

June 20, 2013

RE: Comments on the 2013 Comprehensive Plan and Map, 05/16/13

Dear Commissioners:

Thank you for the opportunity to comment on the 2013 Comprehensive Plan and Map. These comments are submitted on behalf of the Methow Valley Citizens' Council, which works to maintain the rural and agricultural character of the Methow Valley through planning and conservation of the quality of our water, air and wildlife.

The development of the County's Comprehensive Plan cannot be inconsistent with the Planning Enabling Act, which under RCW 36.70.330 requires that the Comprehensive Plan include the following:

- 1) "a land use element which designates the proposed general distribution and general location and extent of the uses of land ... including a statement of the standards of population density and building intensity recommended for the various areas ... and estimates of future population growth ... correlated with the land use element of the comprehensive plan."
- 2) a land use element that will "provide for protection of the quality and quantity of groundwater used for public water supplies," and
- 3) "supporting maps, diagrams, charts, descriptive material and reports necessary to explain and supplement the above elements."

The County is also required, under the Growth Management Act described in RCW 36.70A.170(1), to designate resource lands—including agricultural, forest and mineral resource lands—and critical areas.

As discussed in the following, the current draft of the Comprehensive Plan fails to comply with these requirements by: 1) failing to fully identify the "standards of population density and building intensity for various areas" under its land use classifications, 2) failing to provide for the protection of the quantity and quality of

groundwater, and 3) failing to protect critical areas, in particular, important groundwater resources and critical aquifer recharge areas.

Although the 2013 Comprehensive Plan and Map have been improved with regard to designation of resource lands, compared to the previous 2010 Revised Plan, and we are pleased to see the inclusion of a Methow Valley More Completely Planned Area (CPA),¹ this latest plan revision raises significant new issues. Our major comments and concerns are enumerated in the following:

1. The Plan fails to fully identify the “standards of population density and building intensity” as required under the Planning Enabling Act and should clarify the lot sizes and densities assigned to all land use classifications

Principal among our concerns with this latest draft of the Plan is the omission of references to specific lot sizes and densities associated with the land use designations. All former rural designations have been consolidated into one “Rural” classification with wide-ranging but undefined potential densities. (It now includes what had been designated Rural High Density² and Rural Low Density³ in the 2010 Revised Plan.)

In addition, no lot sizes are specified for Forest or Agricultural Resource Lands. Only in the Methow More Completely Planned Area (formerly the Methow Review District) and unincorporated towns⁴ does the Plan indicate what densities and zoning we might expect (no change from current zoning).

Defining the lot sizes or dwelling unit densities that are to be allowed under different land use categories—the “standards of population density and building intensity” referred to under the Planning Enabling Act—is fundamental to comprehensive planning. The density discussions in the Plan, such as those under the chapters on Forestry, Agricultural and Rural Lands, are wholly inadequate to meet this basic standard. Descriptions for all three classifications are virtually identical (see pages 18, 20 and 23), written as follows:

“Residential uses are consistent with” (insert either Forestry Lands, Agricultural Lands or Rural Lands). “Lot sizes, setbacks, height restrictions, and other considerations are specifically addressed in the underlying zone, subdivision regulation, and other regulation as appropriate. The lot sizes and overall density allowed in underlying zoning should consider the following

¹ The terminology in the Planning Enabling Act is “More Completely Planned Area,” or MCPA. This Comprehensive Plan uses both “More Completely Planned Area” and “Completely Planned Area” (CPA) interchangeably. Throughout our comments, we have used CPA to refer to these local plans.

² Minimum lot sizes one acre or smaller only with clustering or planned development

³ Minimum lot sizes five acres or smaller only with clustering or planned development

⁴ Methow, Carlton, Malott, Loomis, Wauconda, Chesaw, Molson, Ellisford, Mazama, Monse, Nighthawk, and Havillah

criteria:

- Proximity to transportation system.
- Proximity to city centers.
- Availability of potable water and water delivery systems.
- Availability of fire protection, police, and other emergency services.

Minimum lots should be sufficient in size to allow compliance with on-site sewage disposal and the protection of potable water sources. Lots in areas served by a sanitary sewer system, and so designated by the Board of County Commissioners, will be required to be served by the sewer system.”

Similarly generic is the description for Rural Lands, found in Chapter 4 under the Purpose section (page 24), which reads as follows:

“The objective of the rural designation is to provide an effective inventory of land for residential and other uses while avoiding unnecessary conflicts.... A mix of residential densities should be allowed to provide an adequate inventory of housing sites for those seeking a rural lifestyle and to provide worker housing in proximity to employment providers.”

“Okanogan County is large in size and varied in topography and climate. For these reasons, lands in the rural designation will exhibit great differences in terms of its ability to support residential density and other land use activities. Underlying zoning and/or the review processes that support and implement this Plan must be established with consideration for the ability of the land to support the proposed land use activity.”

Such descriptions are too broad and nonspecific to promote a sense of what is being envisioned, or to be able to draw conclusions about how the classifications will be translated into zoning. In the Rural designation, for example, we have to assume densities will be anywhere from one home per acre up to one home per twenty acres, based on the current zoning and proposals put forward under the 2010 Revised Plan. This is an extraordinarily broad range of possibilities.

Equally concerning is the fact that there is no discussion at all about the housing densities or lot sizes we might expect in Unincorporated Towns and Neighborhood Commercial Centers (Chapter 5) or City Expansion Areas (Chapter 6). Oddly, it is only under General Planning Objectives (on page 12) that we learn the zoning in unincorporated towns will remain unchanged. Similarly, it is only in the draft EIS (on pages 13 and 14) that we learn that the Molson and Barnholt Overlays are to be removed, but that it is likely the zoning will remain the same in these areas because “the density criteria support” those densities (Molson is zoned for 20 acre lots and Barnholt for 2 acre lots). These proposals should be stated clearly in the discussion of densities under the appropriate land use classification in the Plan.

Without identifying densities or permitted lot sizes, it isn't possible to assess the impacts of the proposed Plan against the current plan or plan alternatives. The citizens of Okanogan County and local municipalities need to know and be able to evaluate what is being proposed and how it might affect them. They also need to have some indication of what the ultimate zoning designations will be. The proposed Plan, as currently written, is insufficient to serve as a basis for a new zoning ordinance and map.

2. The Plan fails to provide for the protection of the quantity and quality of groundwater

In spite of the requirement under the Planning Enabling Act to protect groundwater in the land use element of the comprehensive plan, no policies in proposed Plan address groundwater. One of the few statements that can be interpreted as potentially addressing groundwater, in addition to the consideration of "the availability of potable water" cited in the preceding, is the following statement (on page 24) in the chapter on Rural Lands:

"Underlying zoning and/or the review processes that support and implement this Plan must be established with consideration for the ability of the land to support the proposed land use activity. The ability of lands in the rural designation to support density and permitted/conditional uses will be affected by other bodies of required regulation such as Critical Areas Ordinance and Shoreline Master Program. This must be taken into account when the adequacy of land in the rural designation is reviewed."

Since Aquifer Recharge areas are to be addressed in the Critical Areas Ordinance (CAO), it might be assumed that the County's obligation to provide for the protection of the quality and quantity of groundwater would be addressed there. However, the most recent draft of the CAO failed to incorporate "best available science" or make use of the substantial body of scientific information available on the County's groundwater resources submitted by our organization and others. In addition, the CAO provided no real measures to protect groundwater resources.

Water for domestic use and for agriculture is critical to Okanogan County's future. Scarcity in the face of competing demands among new development, agriculture and fish have long been issues in the County, prompting closure of a number of sub-basins and severely restricting water withdrawals in those areas. MVCC and others have submitted testimony and documents to the County describing the location and characteristics of the County's groundwater resources, the serious limitations of those resources, existing examples of depletion, the acute vulnerability of the County's groundwater to surface sources of contamination, including contamination from septic systems at the one home per five acre densities under consideration in the 2010 Revised Plan, and the related threats posed to surface water resources and

fish.⁵ To date, the County has shown no evidence of responding to any of the water-related issues that have been raised or to the volumes of information it has been given.

3. To protect groundwater, the County should use information available through the local watershed planning efforts of the Methow Watershed Council and the Okanogan Conservation District to determine lot sizes and densities—especially in critical sub-basins.

The Methow Watershed Council (MWC) sent an important letter, dated June 14, 2011, to the County Commission regarding the 2010 Revised Plan (See Attachment E). In the letter, the Council informed the Commission that, based on scientific studies and estimates of water use and resource capacity, there is not enough water in much of the Methow Valley to supply existing lots—let alone the number of new lots that could be created through future subdivision.

Rather than repeat the comments and volumes of information on groundwater already provided by us and others, which remain relevant to the proposed Plan and which are included in our attachments, we want to highlight some of the salient points in this letter. The following are excerpts:

“The MWC suggests that you develop the Okanogan County Comprehensive Plan (Comp Plan) only after due consideration of our information on current use and anticipated future permit-exempt domestic and stock use based on existing lot sizes so that it supports zoning and development review processes responsive to this information. It would be counterproductive to propose, now or in the future, a Comp Plan which results in an over-allocation of permit-exempt use under WAC 173-548, the rule that currently restricts total permit-exempt groundwater withdrawals post 1977 in any of 7 reaches⁶ to 2 c.f.s.”

“...the MWC now has the capability to estimate the effect of current parcel size regulations and possible Comp Plan parcel size revision on the Methow’s available water supply as defined by WAC 173-548.”

“Assuming future build-out with no new parcels and existing parcel size regulations, 6 reaches would have water remaining in their reserves. The Lower Methow⁷ would exceed its reserve, leaving 1,092 presently existing

⁵ See, for example, Attachments A, B, C, D, E, F, G, H, J, K, L.

⁶ The Methow watershed is divided into seven subbasin reserve reaches, shown on the map submitted with this letter in the attachments.

⁷ The Lower Methow reach is one of the largest and extends south from Twisp and the Beaver Creek drainage to Pateros.

parcels out of a total of 2,913 presently existing parcels unable to be supplied by a well.

Assuming full build-out of all possible parcels under present zoning, 5 reaches would have water remaining in their reserve. The Upper Methow and Lower Methow would exceed their reserves. The Upper Methow would have 127 parcels unable to be supplied by permit-exempt wells out of a total of 1,948 possible parcels. The Lower Methow would have 24,313 parcels out of a total of 26,133 possible parcels unable to be supplied by wells.”

This information points to the urgency of addressing the issue of densities and groundwater resources in the comprehensive plan, especially in the Lower Methow and other areas where critical groundwater resource shortages loom. For example, studies associated with the Okanogan Conservation District’s efforts in the Okanogan River watershed have documented similar problems or potential future problems in the Joseph, Osoyoos, Salmon, Sinlahekin, Tunk and Omak subbasins.

4. We support development of CPAs,⁸ but they are not a replacement for a sound comprehensive plan

We support the development and adoption of More Completely Planned Areas (CPAs) as provided for under RCW 36.70.3409. However, CPAs are no replacement for a sound comprehensive plan. Given the brevity and incompleteness of the proposed Plan, it would be wrong to rely on CPA plans to flesh out the kind of details that need to be addressed in the comprehensive plan. Permitting the development of CPAs should not be used in place of adopting a more adequate comprehensive plan. Moreover, the criteria listed for determining where and when a CPA will be prepared leave too much uncertainty about the County’s commitment to doing them.

Asking for a petition “from a majority of landowners within the newly proposed CPA” (on page 32) in order to be considered by the County Commissioners for CPA planning sharply contrasts with, for example, the 15% of landowner signatures required for initiating a process to form a parks and recreation district in the Methow Valley School District. This requirement unnecessarily limits consideration of citizen-initiated efforts, particularly in an area with many absentee landowners, such as the Lower Methow.

⁸ RCW 36.70.340 states the following: “The comprehensive plan may also be amplified and augmented in scope by progressively including more completely planned areas consisting of natural homogeneous communities, distinctive geographic areas, or other types of districts having unified interests within the total area of the county. In no case shall the comprehensive plan, whether in its entirety or area by area or subject by subject be considered to be other than in such form as to serve as a guide to the later development and adoption of official controls.”

In addition, the requirement (on page 33) that CPA plans shall “not exceed the requirements of the Planning Enabling Act or those portions of the Growth Management Act applicable to Non-GMA Counties” is not necessary and open to wide variation in interpretation. It is within the County’s purview to determine, when presented with a proposed CPA plan, whether or not to adopt recommendations.

Finally, in the face of the critical water resource issues facing many areas within the County, including the lower Methow Valley and other subbasins facing severe water limitations in documents produced by the Methow Watershed Council and Okanogan Conservation District,¹⁰ it makes sense to prioritize doing CPA plans in these areas. Such critical water resource areas should be identified in the comprehensive plan together with a schedule and an explicit commitment to doing CPA plans in these areas.

5. The policies of the Methow CPA should be extended to incorporate the Lower Methow

The serious water resource deficits in the Lower Methow subbasin, described in the MWC letter referred to in the preceding, require urgent action. We recommend that the policies and guidelines outlined in the Methow CPA be extended to incorporate the Lower Methow as part of the proposed Plan. This will help to slow the subdivision of land and the creation of parcels in excess of water resource capacities. It will also help to preserve groundwater for existing parcels.

Ultimately, a CPA plan should be completed for the Lower Methow and should be identified as a high priority in the comprehensive plan.

An advisory group (the Lower Valley Advisory Group (LVAG)) meeting most of the requirements described (on page 33) for creating a CPA plan was formed for the Lower Methow in 2007. It served as a special advisory group to the County, with a County-funded facilitator. This was done as part of initial efforts to revise the comprehensive plan and resulted in a Lower Valley Plan. The planning process involved a diverse committee, adequate public notice and advertising, invitations to join the committee and produced vision statements, goals, policies and density recommendations with a record of votes by the committee on the issues. (See Attachment A, file named “Lower Valley Advisory Group Docs”) that could be included in the proposed Plan as a foundation for completing a CPA in the Lower Methow.

6. The Methow Valley More Completely Planned Area (CPA) needs to be made more consistent

¹⁰ Including but not limited to the Joseph, Osoyoos, Salmon, Sinlahekin, Tunk and Omak subbasins.

The section on the Methow Valley More Completely Planned Area has not been consistently updated to apply to the Methow Valley School District (the Methow Review District)¹¹. Many parts of it instead refer only to the Upper Methow Valley (Mazama area or Sub Unit A). This does not accomplish the county's goal, as stated in the plan, that "it is the intent of the County to continue to utilize CPA Plans for the Methow Valley.

This section needs to include definitions of the Methow Valley, the Upper Valley, and any sub-areas within it. The following terms should be defined, eliminated, or consolidated: Methow Valley, Upper Methow Valley, Upper Valley, Methow Comprehensive Plan, Upper Methow Comprehensive Plan, Methow Review District, Methow Valley Plan, MVMCPA, MCPA, CPA, Subunit A, Mazama Plan, Lower Valley, Lower Methow Valley. There needs to be a clear description of the boundaries—both in narrative form and on a map—so that people can understand what geographic area is covered by the Methow Valley CPA.

7. Other Comments

The following includes comments as well as additional discussion on topics described above.

Table of Contents, Page 1

The Table of Contents should include the Methow Valley More Completely Planned Area on pages 42 through 96.

Vision Statement, Page 5

The Vision Statement on page 5 should recognize the important role of agriculture in the county economy. The Washington State Employment Security Department has documented that the "agriculture and government sectors were, and will be for the foreseeable future, the main driving force of the Okanogan County economy."¹²

Planning Objectives, Pages 9-10

Planning objectives have been consolidated in the 2013 Comprehensive Plan, whereas they were incorporated under different sections in the 2010 Revised Plan. The rearrangement is confusing and, without numbers, the objectives are hard to compare with the previous document. It would be good to number the objectives.

Chapter 2: Existing Conditions, Pages 14-15

¹¹ Note on wording: For consistency and clarity, we are using the terms Methow Review District or School District 350, since these are the descriptions and boundaries covered by the existing comprehensive plan.

¹² T. Baba Moussa, Okanogan County Profile p. 4 of 6 (Washington State Employment Security Department: January 2009), accessed on Feb. 8, 2010 at: <http://www.workforceexplorer.com/article.asp?PAGEID=94&SUBID=&ARTICLEID=9420&SEGMENTID=3>

Table 1 of existing comprehensive plan designations and zones on page 14 is confusing and bears no relationship to the same table on page 12 of the previous 2010 Revised Plan. Furthermore, the table should be updated to show the 2013 Comprehensive Plan and Map revision for comparison—so that the public understands the implications of the 2013 Plan.

The Figure 1: Historical Population Data 1960-2000 and Table 1: Historical Population For Growth Management And Other Purposes on pages 14 and 15 should be updated to include 2010 population data.

Figure 2: Total Projected Population for Okanogan County 2000-2030 is blank. There is no projected population graph.

Chapter 3. Resource Lands, Pages 16-18

Improvements addressing our concerns have been made in designating Resource Lands, compared to the 2010 Revised Plan, in that designations now include extensive lands under private ownership. However, designation criteria are somewhat vague and require stronger definition. We also have concerns that language inserted regarding “exclusion criteria” and “de-designation criteria” are vague and potentially weaken designations. Finally, there are no recommendations or provisions for protecting resource lands. Any references to permitted lot sizes and densities in Resource Lands have been omitted. The 2010 Revised Plan referred to 20-acre minimum lot sizes in Forestry Lands. Limiting lot sizes and densities in Resource Lands is essential to prevent their loss as a vital source of employment within the County and will reduce pressure to convert these lands to strictly residential uses. Large minimum lot sizes should be established to sustain the viability of both Forestry Lands and Agricultural Lands of Long-term Significance.

Agricultural Lands of Long Term Significance, Pages 17-18

The Washington State Supreme Court has held the following:

“...agricultural land is land: (a) not already characterized by urban growth (b) that is primarily devoted to the commercial production of agricultural products enumerated in RCW 36.70A.030(2), including land in areas used or capable of being used for production based on land characteristics, and (c) that has long-term commercial significance for agricultural production, as indicated by soil, growing capacity, productivity, and whether it is near population areas or vulnerable to more intense uses.”

Designation criteria on page 17 somewhat follow the minimum guidelines for designating agricultural lands under WAC 365-190-050(3)(c)¹³ but should more

¹³ “(i) The classification of prime and unique farmland soils as mapped by the Natural Resources Conservation Service[.]” WAC 365-190-050(3)(c)(i).

“(ii) The availability of public facilities, including roads used in transporting agricultural products[.]” WAC 365-190-050(3)(c)(ii).

closely conform to the WAC. As written on page 17, the criteria in the 2013 Plan are awkward and incomplete. For example, designation on page 17 lists “tax status” but does not include the full statement written in the WAC which reads “Tax status, including whether lands are enrolled under the current use tax assessment under chapter 84.34 RCW and whether the optional public benefit rating system is used locally, and whether there is the ability to purchase or transfer land development rights.”

In addition, designation criteria should include the definition under RCW 36.70a.030(2), which defines agricultural land as land primarily devoted to the commercial production of horticultural, viticultural, floricultural, dairy, apiary, vegetable, or animal products or of berries, grain, hay, straw, turf, seed, Christmas trees not subject to the excise tax imposed by RCW 84.33.100 through 84.33.140, finfish in upland hatcheries, or livestock, and that has long-term commercial significance for agricultural production.”

Finally, the criteria should identify specific maps, documents, aerial photos and other sources used in identifying agricultural land, and how those sources are evaluated or interpreted in making the agricultural designations on the Plan Map.

Compatible Uses, Page 18

Page 18 lists the following compatible uses in Agricultural Lands of Long Term Significance: “Residential uses including all single family, extended family, and farm worker housing. The Farming Operations Disclosure will be required on plats creating new lots and site evaluations for existing lots.” Please clarify and define what the Farming Operations Disclosure is and what it is intended to accomplish.

While low-density single-family residential development in agriculture areas is a compatible use, higher densities are not. Newcomers to the countryside often have little understanding of the business of farming or forestry. The conflicts between farmers and non-farm neighbors are well known. Lawsuits and the threat of suits can threaten viable commercial farming. The plan should include policies addressing these issues and show how it will deal with them. It should speak to the need for low-density zoning, defining a range of minimum lot sizes and other

“(iii) Tax status, including whether lands are enrolled under the current use tax assessment under chapter 84.34 RCW and whether the optional public benefit rating system is used locally, and whether there is the ability to purchase or transfer land development rights[.]” WAC 365-190-050(3)(c)(iii).

“(iv) The availability of public services[.]” WAC 365-190-050(3)(c)(iv).

“(v) Relationship or proximity to urban growth areas[.]” WAC 365-190-050(3)(c)(v).

“(vi) Predominant parcel size[.]” WAC 365-190-050(3)(c)(vi).

“(vii) Land use settlement patterns and their compatibility with agricultural practices[.]” WAC 365-190-050(3)(c)(vii).

“(viii) Intensity of nearby land uses[.]” WAC 365-190-050(3)(c)(viii).

“(ix) History of land development permits issued nearby[.]” WAC 365-190-050(3)(c)(ix).

“(xi) Proximity to markets[.]” WAC 365-190-050(3)(c)(xi).

measures to prevent the conversion of the County's agricultural resources to residential use and to preserve agriculture-related jobs.

Methow Valley More Completely Planned Area, Pages 42-96

We appreciate the County's efforts and provision of the mechanism provided by Chapter 7, More Completely Planned Areas, to accommodate the values, priorities, and goals of residents of the Methow Valley and of other areas within Okanogan County who may choose to do more localized planning.

We also appreciate that the section devoted to the Methow Valley CPA has been included in the body of the 2013 Plan, codifying the efforts of Methow residents over the past four decades to create a plan that reflects local values. The inclusion of this section is a reassuring confirmation of the commissioners' statements over the course of the comp plan revisions that they intend to preserve the protections and designations that have governed the Methow Review District since 1976, as codified in the two plans adopted by the commissioners as addendums to the county's comprehensive plan (the Methow Valley Plan of 1976 and the Upper Methow Valley Plan of 1989, revised in 2000).

Yet after reading the section on the Methow Valley CPA, we are concerned that the updating process for this part of the plan is incomplete. From the statement on page 32 ("It is the intent of the County to continue to utilize CPA Plans for the Methow Valley") and the introduction and other language in the CPA section ("The Methow Valley CPA covers an area previously described [as] the Methow Valley Plan including Sub Unit A of the Methow Valley Addendum to Okanogan County's Comprehensive Plan"), it appears that it was the intent of the commissioners to have this CPA section apply to the Methow Review District (Methow Valley School District 350), as in the current comprehensive plan.

However, after the introduction, much of the wording appears to describe only the Upper Methow Valley (also referred to as Sub Unit A or Mazama). Many of the references throughout the section are exclusively to Mazama, and other details, such as acreage, also do not encompass all of Methow Valley School District 350.

On page 49 in the current draft (May 16, 2013), under "Purpose and Scope," the plan reads, "In 1976, Okanogan County officials adopted the Methow Valley Addendum to the County's Comprehensive Plan. The Addendum addresses land use in all of School District 350 and included the area formally known as MVMCPA as one of four planning areas." The majority of the text throughout this section needs to be revised to encompass the entire Methow Review District and not only Mazama.

Other references, such as the 22,100 acres cited on page 43, are also inaccurate for the Methow Valley School District, which is about 200 square miles, or 128,000 acres, from Gold Creek to Mazama, the area covered by the Methow Valley CPA.

As one reads through the section on the Methow Valley CPA, the text becomes more confusing, because it alternates between references to the goals and conditions in the Upper Methow Valley and those in the Methow Review District.

Population data in the Methow Valley CPA chapter also need to be updated to use the most current numbers from the 2010 census. The statement that the Methow River is classified as class AA throughout the area of the Methow Review District is in error.

Rather than provide a line-by-line review of the Methow Valley CPA chapter, we propose convening a representative group of residents from the Methow Valley, including the Mazama Advisory Committee and Lower Valley Advisory Group, to work together to update the Methow Valley CPA chapter, in accordance with the provisions for more completely planned areas envisioned by the description on page 32, “to provide for land use planning at a sub-area scale, including the Methow Valley.” This would ensure that the Methow Valley CPA section reflects current concerns and conditions and applies to Methow Valley School District 350, and the Lower Methow when added.

While the county has incorporated the two separate plans for the Methow Valley and Upper Methow as addendums to the previous comp plan, we agree that it is a clearer and a more effective planning tool to merge these documents into a single section to cover the Methow Valley CPA. This unified plan can address individual geographic areas where different conditions—in climate, vegetation, elevation or land use, for example—make more area-specific goals and protections appropriate.

We also reiterate MVCC’s position, included in comments on previous drafts of the plan, that the area covered by the provisions and protections in the Methow Valley CPA section should be extended south to include the Lower Methow Valley. See, for example, the letter dated June 14, 2011, from the Methow Watershed Council (Attachment E). This letter describes the seven reaches in the Methow watershed and describes the boundaries of the Lower Methow reach as extending south from Twisp and the Beaver Creek drainage to Pateros. This is consistent with the guidelines for creating the boundaries of a more completely planned area, as described in chapter 7, as follows: “Logical natural and physical boundaries (highways, other CPA planning area boundaries, watersheds, etc).”

Conclusion: We continue to find the comprehensive plan and map submitted in 2009 superior to recent plan revisions

The comprehensive plan and map submitted in 2009 was better, in most respects, than the 2010 Revised Plan or the 2013 proposed Plan. We provided testimony and submitted lengthy written comments documenting our concerns about the changes that were made to the 2009 plan during hearings on the 2010 Revised Plan. Most of

our earlier comments remain relevant to the issues presented by this 2013 proposed Plan, particularly in terms of protecting the quality and quantity of the County's groundwater.

We therefore incorporate by reference our comments on the previous drafts together with the comments of others who discussed similar or related concerns and raised issues we think are important. We also incorporate by reference, and include in our attachments, comments we made on the last version of the draft Critical Areas Ordinance (CAO) because the CAO is cited in the Final EIS on the 2013 Comprehensive Plan as a means of mitigating the impacts of development and of protecting potable water supplies. We believe the current draft of the CAO would not provide this protection, and our CAO comments explain this further.

We thank you once again for this opportunity to respond to the proposed 2013 Plan. If you have any questions about our comments or the attachments we have provided, please contact me. Our organization is more than willing to help the County improve the Comprehensive Plan in any way we can.

Sincerely,

Maggie Coon
Chair, Methow Valley Citizens Council

List of Attachments:

- ATTACH A. MVCC comments on the 2010 Revised Plan and EIS (3-12-11)
- ATTACH B. MVCC comments on the Critical Areas Ordinance, dated (4-23-12)
- ATTACH C. USGS Aquifer Map showing unconsolidated aquifers in Okanogan County
- ATTACH D. DOE Water Availability, Methow Watershed WRIA 48; and Okanogan Watershed WRIA 49) (August 2012)
- ATTACH E. Methow Watershed Council Letter to the Okanogan County Commission (6-14-11)
- ATTACH F. DOE comments on the 2010 Revised Plan and EIS (04-07-11)
- ATTACH G. Futurewise comments 2010 Revised Plan and EIS (4-27-11)
- ATTACH H. CELP comments on 2010 Comp Plan and EIS (4-8-11)
- ATTACH I. Bricklin comments on 2010 Comp Plan and EIS (4-8-11)
- ATTACH J. Salmon, Steelhead and Bull Trout Habitat Limiting Factors, WRIA 48 (7-18-00)
- ATTACH K. Okanogan Watershed Plan, Chapter 3, Recommendations

ATTACH L. Dight comments on groundwater impacts of 2010 Revised Plan and EIS
2011-12

ATTACH M. SEPA Handbook

ATTACH N. WAC173.200.030/Groundwater Anti-degradation policy.

Article I Critical Areas Administration

General Comments: Language under Article I omits important detail about how the ordinance will be implemented and includes wording, most notably regarding exemptions, that could allow critical area regulations to be circumvented. References to state regulations the ordinance must comply with are missing. More significantly, best available science (as required under WAC 365-195) has not been fully considered in developing official critical area maps and regulations.

The review process, as currently delineated in the ordinance, relies heavily on “regulatory” critical area maps. While such maps are useful in theory, actual conditions on the ground should take precedence. If an area meets the criteria for a critical area but is not shown on the critical area maps, it must be regulated as a critical area. In addition, the critical area maps so far provided by the county are too general to be regulatory. Of particular concern is the incomplete mapping of fish and wildlife habitats and the lack of any mapping of critical aquifer recharge areas. Stronger guarantees need to be made *and documented* that best available science has been used as the basis for designating and mapping critical areas.

For the purposes of clarity, the ordinance should further detail the process by which critical area review is undertaken, criteria for determining whether a critical area exists, critical area report requirements, and the process by which new information about critical areas is incorporated in the ordinance and on maps on file at the county. We concur with concerns expressed by the Washington Department of Fish and Game in its comments regarding the need for a clear trigger.¹ Also of concern is clarifying when public notice will be given and procedures for gaining public comment regarding critical area determinations for specific development proposals. The county should consider the well-designed process outlined under “Critical Area Project Review Process” in the model ordinance provided in the Critical Areas Assistance Handbook.²

Finally, all definitions should be consistent with those outlined in related state and federal regulations and adopted county ordinances, and should be consistent with commonly accepted standards. Channel migration zone definitions and delineations, for example,

¹ “An important piece of a Critical Areas ordinance (CAO) that our agency looks for is a provision for “triggering” project review for protection of critical areas. In order to assure that projects avoid or minimize impacts to fish wildlife and their habitats protected by the CAO, it is important that the ordinance clearly triggers a review process. Building permit applications, preliminary plats, as well as large lot land segregations should trigger a review for consistency with wildlife goals and open space or biodiversity plans. This also applies to activities such as clearing and grading, which can have significant effects on wildlife habitat. A clearing and grading ordinance is an important local tool in planning for wildlife.” Excerpt from comments submitted to Okanogan County, dated January 15, 2010. (Comments are included on the enclosed CD.)

² Critical Areas Assistance Handbook: Protecting Critical Areas Within the Framework of the Washington Growth Management Act, Appendix A, Example code Provisions for Designating and Protecting Critical Areas. Washington State Department of Commerce, (2003)

must be approved by Department of Ecology and included in the Shoreline Management Plan (SMP). Any changes that come about as a result of Ecology's current review of the SMP should be incorporated in this ordinance.

OCC 14.12.010 Purpose/Authority

Under item C (1), critical resource areas may be altered through exemptions made by "subsequent administrative rules." Allowing exemptions by this means could circumvent the public review process, potentially weakening the ordinance and undermining its purpose. Categorical exemptions, other than those already outlined in the ordinance, should be handled as amendments to the critical areas ordinance. The phrase "*or subsequent administrative rules*" in the last sentence under this section should be removed unless conditions are added clarifying when such action may be taken.

OCC 14.12.020 Administrative Implementation

Proposed new items D-E: For the purposes of legal clarity and specificity, the relevant state legislation the county's ordinance must comply with should be cited here. The following should be added under this section:

D. The regulations of this chapter are intended to protect critical areas in accordance with the Growth Management Act and through the application of the best available science, as determined according to WAC 365-195-900 through 365-195-925, and in consultation with state and federal agencies and other qualified professionals.³

E. This chapter is to be administered with flexibility and attention to site-specific characteristics. It is not the intent of this chapter to make a parcel of property unusable by denying its owner reasonable economic use of the property or to prevent the provision of public facilities and services necessary to support existing development and planned for by the community without decreasing current service levels below minimum standards (See RCW 36.70A.020(12))⁴

Proposed new item F: SEPA and critical area review procedures should be evaluated to ensure project and environmental review are integrated. Prior to making a threshold determination, SEPA review should first rely on critical area review requirements and regulations to address environmental impacts. Also, pursuant to WAC 197-11-908, county-adopted categorical exemptions from SEPA should be amended so that exemptions for designated critical areas don't apply.⁵

The following should be added:

³ Ibid (Pg A-3)

⁴ Ibid

⁵ Ibid (Pgs 30-31)

F. These critical areas regulations shall apply concurrently with review conducted under the State Environmental Policy Act (SEPA), as locally adopted. Any conditions required pursuant to this chapter shall be included in the SEPA review and threshold determination.⁶

OCC 14.12.030 Exemptions

Add “clearing and grading” to the land use activities listed as being required to comply with OCC Chapter 14. These activities can severely impact critical areas. The fact that the county does not have a clearing and grading ordinance is a matter of concern as well, and we hope this will be addressed in the near future.

OCC 14.12.040 Preliminary Investigation/Site Visit

Under item A, wording makes performing a site visit to verify whether or not critical areas are present optional, at the discretion of the administrator or designee. This places emphasis on the quality of existing information and official critical area maps on file at the county, which are admittedly incomplete. Elsewhere in the ordinance (OCC 14.12.070) it says, “The distribution of critical areas within Okanogan County is described and displayed in reference materials and on maps maintained by the department. These reference materials, in the most current form, are intended for general information only and do not depict site-specific designations.” Given the lack of detailed mapping of critical areas available at the county, detailed designation criteria together with site inspections become more important.

Similar wording makes consulting affected agencies optional when critical area maps show a critical area is present, but the county determines there are none present. Where conflicting information exists, the county should consult the agency of relevant expertise. It is also important to consider whether critical areas and any associated buffers that occur near the site may be impacted.⁷

Language under this section should be revised to read as follows:

“Upon receipt of an application, the Administrator or designee shall consult all critical area maps and relevant reference material. After referring to maps and reference material, the Administrator or designee ~~may~~ shall perform a preliminary site visit (the cost of which is included in the permit application fee) to determine by visual observation, together with the know scientific evidence, whether or not critical areas or critical area buffers may exist within or adjacent to ~~on~~ the development site, or whether the proposed development or use may

⁶ Ibid. (Pg A-4)

⁷ Ibid. (Pgs 35-36)

otherwise impact a critical area. Before the Administrator declares that critical areas do not exist, contrary to information provided on critical area maps and relevant reference material, the Administrator may shall consult the affected agencies of expertise.”

OCC 14.12.050 Special Studies and Map Amendments and OCC 14.12.070 Critical Areas—Maps and Inventories

The process and criteria for identifying critical areas needs further clarification to ensure critical areas will be protected. A more complete and detailed process is outlined under “Critical Area Project Review Process” outlined in the Critical Areas Assistance Handbook.⁸

The following reference materials should be consulted or included as the basis for identifying and mapping critical areas:

1. *Washington State Office of Community Development, Citation of Recommended Sources of Best Available Science for Designating and Protecting Critical Areas*
2. *U.S. Geological Survey landslide hazard, seismic hazard, and volcano hazard maps*
3. *Washington State Department of Natural resources, Slope Stability maps*⁴³.
Washington State Department of Natural resources, Official Water Type Reference maps
4. *Washington Dept. of Fish and Wildlife, Priority Habitat and Species maps*⁵⁶.
Washington State Dept. of Natural resources, Natural Heritage Program mapping data
6. *Washington Conservation Commission, Habitat Limiting Factors, Anadromous and Resident Salmonid distribution maps*
7. *Washington State Dept. of Natural resources, State Natural Area Preserves and Natural Resource Conservation Area maps*
8. *Washington State Department of Natural Resources, Liquefaction Susceptibility and Site Class Maps*
9. *U.S. Geological Survey, Groundwater Atlas of the United States—Idaho, Oregon and Washington, HA 730-H (1994)*
10. *U.S. Geological Survey, National Atlas, Principal Aquifers map*

OCC 14.12.080 Definitions

⁸ Critical Areas Assistance Handbook: Protecting Critical Areas Within the Framework of the Washington Growth Management Act, Appendix A. Washington State Department of Commerce, (2003) (Pgs A-17 through A-21)

Among the definitions, “high intensity land use” and “low intensity land use” are inconsistent with commonly accepted standards.⁹ Under low-intensity land use, for example, anything less than one dwelling unit per acre qualifies as a land use associated with low levels of human disturbance or low wetland impact. This statement is simply not defensible, scientifically or otherwise.

Under the definition for “riparian,” riparian widths are to be measured on the slope of the land. Standard and commonly accepted practice, especially within areas under the jurisdiction of the Shoreline Management Act, is to measure horizontally.

Under definitions for “onsite compensation” and “offsite compensation,” the word “wetlands” should be replaced by “critical areas.” On and offsite compensation may apply to areas other than wetlands.

OCC 14.12.090 General Exemptions

Under item D, the exemption for “existing and ongoing agricultural activities legally conducted at the time of adoption of this chapter” should perhaps be amended. Consider adding a provision requiring any future expansion of existing and ongoing agricultural activities to comply the ordinance.

OCC 14.12.150 Application Requirements

Under item 6, add “*structures.*”

OCC 14.12.170 Performance Bonds

Language changing “shall” to “may” in the first sentence under this section potentially weakens the county’s ability to enforce critical area regulations. Enforcement will be stronger if the statement reads as follows:

“The Administrator shall require the applicant of a development proposal to post a cash performance bond or other security acceptable to the Administrator...”

OCC 14.12.180 Maintenance Bonds

Language changing “shall” to “may” in the first sentence under this section potentially weakens the county’s ability to enforce critical area regulations. Enforcement will be stronger if the statement reads as follows:

⁹ Ibid. (See, for example definition on pg A-12)

“the Administrator shall require the holder of a development permit issued pursuant to this chapter to post a cash performance bond or other security acceptable to the Administrator....”

Article II Aquifer Recharge Areas

General Comments: Substantial revision of Article II is necessary. Contrary to statements made in the ordinance, there is sufficient information to map critical aquifer recharge areas in Okanogan County. The county should, at a minimum, map areas that are susceptible to contamination and depletion and develop regulations specific to those areas.

In revising Article II, the county should consult the Critical Aquifer Recharge Areas Guidance Document published by the Department of Ecology. The county should also incorporate water protection concepts outlined under RCW 90.44 (Regulation of Public Ground Waters), RCW 90.48 (Water Pollution Control Act), RCW 90.54 (Water Resources Act of 1971), and WAC 173-200 (Ground Water Quality Standards), Washington's anti-degradation policy.

Threats to groundwater supplies along with possible regulatory remedies have also been outlined and documented in previous information submitted to the county, and are included with comments here (Attachment B).

This section of the ordinance would also benefit from a purpose statement, in compliance with WAC 173-100-050, including language such as the following:

“It is important to regulate land use and development in critical aquifer recharge areas in order to protect the quality and quantity of groundwater; to meet future water needs while recognizing existing water rights; and to provide for effective and coordinated management of the groundwater resources.”

OCC 14.12.200 Exemptions

Under item B, single-family development is exempted from critical area regulation in aquifer recharge areas. Given the substantial evidence that groundwater resources in Okanogan County are highly vulnerable to depletion and contamination, as outlined and documented in the attachments,¹⁰ this is a significant oversight and should be amended. Single-family development has a high potential for impacting groundwater quality and quantity, especially at currently zoned densities where septic systems are the principal means of waste disposal.

¹⁰ See Attachments A, B, C, E, F as well as documents provided on CD.

As discussed under Attachment B, the cumulative impacts to groundwater from development on septic systems can be safely mitigated if minimum lot sizes are increased.¹¹ Sewers or enhanced septic systems designed to remove nitrates are another solution. These are among measures the county should consider in protecting critical aquifer recharge areas, especially the unconsolidated aquifers found in the Methow and Okanogan valleys.

Under item C, the exemption is unclear. It seems to say that if less than 50% of a lot is covered with impervious surfaces, it is exempt from regulation, presumably to address issues of groundwater quantity. This is an excessive exemption (a one acre could cover 2000 square feet, a 10 acre lot could cover 10,000 square feet) and should be omitted. It fails to account for cumulative impacts and for development that, regardless of meeting the 50% standard, could still impact ground water quality.

OCC 14.12.210 Classification/Rating System and OCC 14.12.220 Designation/Mapping

Minimum guidelines for classifying critical aquifer recharge areas are outlined under WAC 365-190 (2), which states the following:

“Where no specific studies have been done, counties and cities may use existing soil and surficial geologic information to determine where recharge areas are. To determine the threat to ground water quality, existing land use activities and their potential to lead to contamination should be evaluated. Counties and cities shall classify recharge areas for aquifers according to the vulnerability of the aquifer. Vulnerability is the combined effect of hydrogeological susceptibility to contamination and the contamination loading potential. High vulnerability is indicated by land uses that contribute contamination that may degrade ground water, and hydrogeologic conditions that facilitate degradation.”

The county should, at a minimum, map aquifer areas that are susceptible to contamination and depletion and develop regulations specific to those areas. Contrary to statements made in the ordinance, there is sufficient existing information to do so. A significant number of hydrologic reports and studies have been conducted for the Methow and Okanogan, including recent studies associated with the watershed planning efforts of the Methow Watershed Council and the Okanogan Conservation District. Both

¹¹ According to Yates, EPA considers areas with septic system densities greater than one home per 16 acres as regions of potential groundwater contamination. In guidelines for operating onsite disposal systems, EPA indicates development within 1200 feet of a nitrogen-limited surface water on lots of at least 20 acres as being exempt from the need for septic system monitoring. The implication is that development on 20 acres would have minimal impact. (See Yates, Marylynn, “Septic Tank Density and Ground-Water Contamination,” Vol. 23, No. 5, Ground Water (September-October 1985) Accessed on March 15, 2011 at <http://info.ngwa.org.gwol/pdf/89104949.PDF>; see also Environmental Protection Agency. “Polluted Runoff (Nonpoint Source Pollution), B. Operating Onsite Disposal Systems Management” Accessed on March 15, 2011 at <http://www.epa.gov/owow/NPS/MMGI/Chapter4?ch4-5b.html>)

organizations have websites containing comprehensive lists of water and groundwater related studies conducted in Okanogan County. Notable is a recent warning from the Methow Watershed Council regarding the high potential for future groundwater depletion in the lower Methow Valley.¹² Based on the available science, the lower Methow, for example, could reasonably be considered a critical aquifer recharge area. Similar findings would argue for critical aquifer designation of the Tunk Valley.¹³

Regional maps of principal and unconsolidated aquifers¹⁴ with descriptions of their characteristics are published by the U.S. Geological Survey and provide useful information about Okanogan county aquifers.¹⁵

OCC 14.12.230 Regulations

The critical aquifer recharge area regulations are too nonspecific to adequately protect Okanogan County's groundwater supplies. For example, the ordinance identifies wellhead protection as a resource management tool, but doesn't specify where and under what conditions the provision allowing for expanded protection zones will be used, or cite the state regulation (WAC 246-280-135) that allows it. Critical areas need to be protected by regulatory measures that go *beyond* those used in non-critical areas. The regulations so far provided only represent current practices.

Article III Fish and Wildlife Habitat Conservation Areas

General Comments: This section of the ordinance does not apply best available science or meet minimum guidelines for designating fish and wildlife habitat conservation areas.¹⁶ The classification and rating system makes no mention of "sensitive species" or "other protected wildlife" as required under WAC 232-12-011. Of particular concern is the absence of any "special consideration" given to conservation or protection measures necessary to preserve or enhance anadromous fisheries, as required under WAC 365-195-925.

A vast number of fish and wildlife studies have been produced regarding the species and habitats found in Okanogan County. Such studies contain detailed information, including maps, plans and management recommendations.¹⁷ This includes, for example,

¹² See Attachment E

¹³ See Attachment F

¹⁴ See Attachment C

¹⁵ U.S. Geological Survey, Groundwater Atlas of the United States—Idaho, Oregon and Washington, HA 730-H (1994); U.S. Geological Survey, National Atlas, Principal Aquifers map

¹⁶ We share the concerns about Article III identified by Futurewise in earlier comments on the CAO submitted in 2010. We feel those concerns have not been fully addressed in this ordinance. A copy of the Futurewise letter is included under Attachment D.

¹⁷The following are just a few examples: Washington Department of Fish and Wildlife, Management Recommendations for Washington's Priority Habitats; Andonaegui, Carmen, Salmon, Steelhead and Bull Trout Habitat Limiting Factors, Water Resource Inventory Area 48, Washington State Conservation Commission, (2000); Connelly, J.W., Habitat Needs and Protection for Columbian Sharp-tailed Grouse in

information and recommendations resulting from the efforts of the Upper Columbia Salmon Recovery Board. The county needs to demonstrate that it has consulted the full range of resources available and incorporated that information in this ordinance. To aid in this effort, we have included additional resources on the enclosed CD.

OCC 14.12.250 Exemptions

Under item B, amend this section, for the purposes of clarity, to read:

“Removal of riparian vegetation within 30 feet of permitted additions that will be attached to structures existing as of the date of adoption of this Chapter.”

OCC 14.12.260 Classification/Rating System

Language under this section regarding Level 1 Habitats should be amended to ensure that the latest available information regarding threatened and endangered species is consulted and that both species identified on the Federal Register *and* the Washington State Listing are included. We suggest amending the definition to read as follows:

“Level 1 Habitat consists of areas that support Federal or State listed Endangered and Threatened species (as identified on the Federal Register and indicated under WAC 232-12-011 and WAC 232-12-014). This habitat includes designated habitat conservation areas administered by Federal, State, Tribal and/or local governments for conservation of those species.”

Level 2 and 3 Habitats could be grouped under a single category. Or, as an alternative, define Level 2 Habitats as those supporting state-listed rare species and species of concern. Level 3 Habitats could include other important habitats not necessarily containing rare species—such as mule deer winter range, natural area preserves, or parks and recreation areas. Level 2 and 3 Habitats might be defined as follows:

“Level 2 Habitat consists of areas that support one or more of the following species: (a) State listed Priority Habitats and Species (PHS); (b) sensitive wildlife species designated by the PHS program; (c) sensitive plant species listed by the Washington Natural Heritage Program.”

“Level 3 Habitat consists of areas that are designated by federal, state, tribal and/or local governments to protect important habitats and open space. These habitats may include wetlands, cliffs, riparian areas, caves, cliffs, islands, meadows, old-growth/mature forest, talus slopes, designated open space,

Washington with Emphasis on Okanogan county, (2010); Upper Columbia Salmon Recovery Board, Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan, (2007)

designated habitat for species of concern such as mule deer or whitebark pine, and shoreline setbacks that are habitat for fisheries.”

OCC 14.12.270 Designation/Mapping

Critical area maps of fish and wildlife habitats, as currently provided, are too general and incomplete to be useful in protecting critical habitats and leave out a significant amount of available information. At a minimum, the following sources should be incorporated by reference into the designation and mapping of critical areas for fish and wildlife:

- 1. Washington Department of Fish and Wildlife, Priority Habitat and Species maps*
- 2. Washington State Dept. of Natural Resources, Natural Heritage Program mapping data*
- 3. Washington Conservation Commission, Habitat Limiting Factors report, Anadromous and Resident Salmonid distribution maps*
- 4. Washington State Department of Natural resources, State Natural Area Preserves and Natural Resource Conservation Area maps*
- 5. Washington Department of Ecology, Washington State Wetlands Rating System for Eastern Washington, with incorporated revisions*

OCC 14.12.270 Designation/Mapping

Regulatory measures included in the ordinance need further development in order to adequately protect fish and wildlife habitats. We are concerned about ill-defined statements such as the following under OCC14.12.330 B (1): “Note: Riparian vegetation should not be removed unless there is no other alternative.” We are similarly concerned about the statement under OCC 14.12.330 B (4), which allows the administrator to reduce riparian buffer widths for low intensity uses. As noted in our comments under OCC 14.12.080, we disagree that densities less than one home per acre is a low intensity use.

Article VI Wetlands

General Comments: We support the use of the Washington Wetlands Rating System for Eastern Washington as a sound basis for wetlands designation, and because it allows sliding-scale setbacks rather than fixed buffers. There is a statement that the county will use the Eastern Washington Ratings Guide as amended *by Okanogan County*. That should be changed to simply read “as amended.” There should be a brief preamble prior to discussing the management of categories. The material under 14.12.630 could be moved up and used as a preamble. It should be clear that the steps in ranking wetlands are as follows: 1) wetland determination, 2) wetland categorization, and 3) wetland delineation.

OCC 14.12.580 Exemptions

Under item A, the exemption from critical areas regulation for Category II and III wetlands less than 2,500 square feet and for category IV wetlands less than 10,000 square feet is unnecessary and should be omitted. Small wetlands are already addressed in the ratings form, and are the basis for the sliding scale buffer. Under the new rating system, the total area is part but not all of what determines the wetland category. Small wetlands perform important environmental functions and the cumulative impacts of not regulating numerous small wetlands should be taken into account.

Channel Migration Zones

General Comments: Channel migration zones are a hazardous area and the Shoreline Master Program Guidelines provide they must be protected from new development. We agree development should not be allowed in severe channel migration zones, in order to protect people and their property, but moderate channel migration zones should be similarly restricted.