

**Summary**  
**Highlands Associates Work on Tasks for Methow Watershed Council**  
**FINAL REPORT 7/25/08**

Highlands Associates was retained by the Methow Watershed Council in September, 2007 to conduct research and provide a report responding to eight (8) tasks. Work initially began in October 2007 but was halted when the Council's contract with the Department of Ecology hit a snag. The issues were settled and the go ahead given to Highlands in February 2008.

Work on Tasks 3, 4, 5 and 6 required some research but were generally able to be completed or provided suggestions for the Council on how to proceed when it became apparent to answering the question or generating the data was beyond the scope and budget.

Work on Tasks, 1, 2 and 7 become complicated due to conflicting boundaries for the "reaches" or "sub basins" to be used for the analysis and the desire to generate data that would update and be comparable to a report prepared by Highlands in 2003. Highlands staff attended two Council meetings (one with no quorum) to review and discuss the work on these tasks and to obtain direction from the Council. Highlands staff also met with the Chair (Katharine Bill), council member Greg Knott and Ecology representative Rusty Post to review and refine the data analysis for these tasks as well as the conflicting boundary issues.

Highlands was given the direction to use the sub basin boundaries prepared by Golder in 2004 (see Map 1) and to focus the effort on completing the tasks using these boundaries. Members of the Council also assisted by providing data on parcels served by irrigation ditches or districts and guidance on the boundaries for closed basins (very little data and few maps exist on both of these subjects). This summary report contains the data requested by the Watershed Council.

- 1. Reduction in number of potential parcels due to conservation easements** (see Table 1). There are presently 182 parcels with some form of Conservation Easement on them (determined by using the Okanogan County Assessor's Use Codes with a CE appended). Due to the individual nature of the Conservation Easements, it is not possible to determine or project a reduction in the number of potential parcels without individually researching each easement.
- 2. Estimate number of single family residences with irrigation water** (see Table 1). There are presently 395 "developed" (parcels with a single family residence) that also have irrigation water.

### **3. Adjustment for amount of water currently allocated to state parks**

There are two state parks in the Methow Subbasin: Alta Lake and Pearrygin Lake. Water has been allocated to each park for both domestic supply and irrigation. The amounts allocated are shown below.

#### Alta Lake State Park

- Domestic supply: 63.4 acre-feet/year
- Irrigation: 1328 acre-feet/year, from the Wells Pool

#### Pearrygin Lake State Park

- Domestic supply: prior to acquiring the Derry property, the park had a right to 17 acre-feet/year for domestic use. The Derry acquisition included additional rights. As of October, the amount of domestic supply related to the Derry purchase was unclear. *Tony Rapozo is working on sorting out the domestic supply issue; left message 5/8/08 to see if he can give an update.*
- Irrigation: 762 Chewuch Canal Co. shares

### **4. Adjustment for amount of water currently allocated to the National Forest for campground use and stock watering**

The Okanogan National Forest holds between 400 and 500 water rights. Methow Valley Ranger District (MVRD) water rights represent 7.14 cfs, as specified below. The MVRD boundary is Forest Road 39, just west of the divide between the Methow and Okanogan watersheds. It is possible that one or more water rights in the Methow watershed may not be included in the tally for the MVRD. If that is the case, the amount of water represented would not be significant.

The Forest Service also holds reserved rights associated with the reservation of National Forest system lands that was allowed for in the Forest Service Organic Administration Act of 1897. Those reserved rights have not been quantified. They may be used only for specific purposes, including erosion control, fire control, forest administration, and timber production. The Okanogan National Forest does use some water under those reserved rights. The priority date on most of the reserved rights is 1898.

Non-reserved water rights on the MVRD are as follows:

- Domestic supply, including campgrounds and old guard stations: 2.3 cubic feet per second (cfs).
- Irrigation (Eight-Mile Ranch): 1.04 cfs.
- Stock watering: 3.8 cfs. Most individual rights are for under 0.01 cfs. As of October, 2007, the Forest Service was in the process of making several

allotment management plan revisions to ensure that each stock watering development is consistent with the associated right.

**5. Investigate status of Wilson Ranch water right and report on current water use. Include research on any plans for a PUD and, if a development is planned, proposed water use**

- Lee Bernheisel reports that Wilson Ranch is using old irrigation water rights (Willis and Early Winters Ditch), subject to an agreement, which he has sent. I think Mr. Bernheisel is willing to share the agreement with the watershed council; I am waiting for him to confirm that. The agreement provides for 83.47 acre/feet of water/year. As of buildout or 2015, whichever comes first, Merrill has agreed to convey any surplus water to a water trust. Mr. Bernheisel's understanding is that Wilson Ranch is not eligible to use water under the 2 cfs rule, and the water right that is being used is not divestible—it could not count toward the 2 cfs calculation because it pre-dates 1976.
- Ecology staff do not know the status of the water right. Teresa Mitchell has sent me some files; studying the files and doing further research will take a fair amount of time. Because there are many documents related to the project, a public information request might be required to get all of the pertinent information.
- Susan Burgdorff-Beery at Ecology has referred me to the public information officer in Yakima, stating that the rights are complicated.
- Rebecca Grant, Okanogan County planning, reports that Wilson Ranch is working with the County on PD modifications, to convert rental units (cabins and rooms) to privately-owned units. How or whether that would affect water rights is unknown.

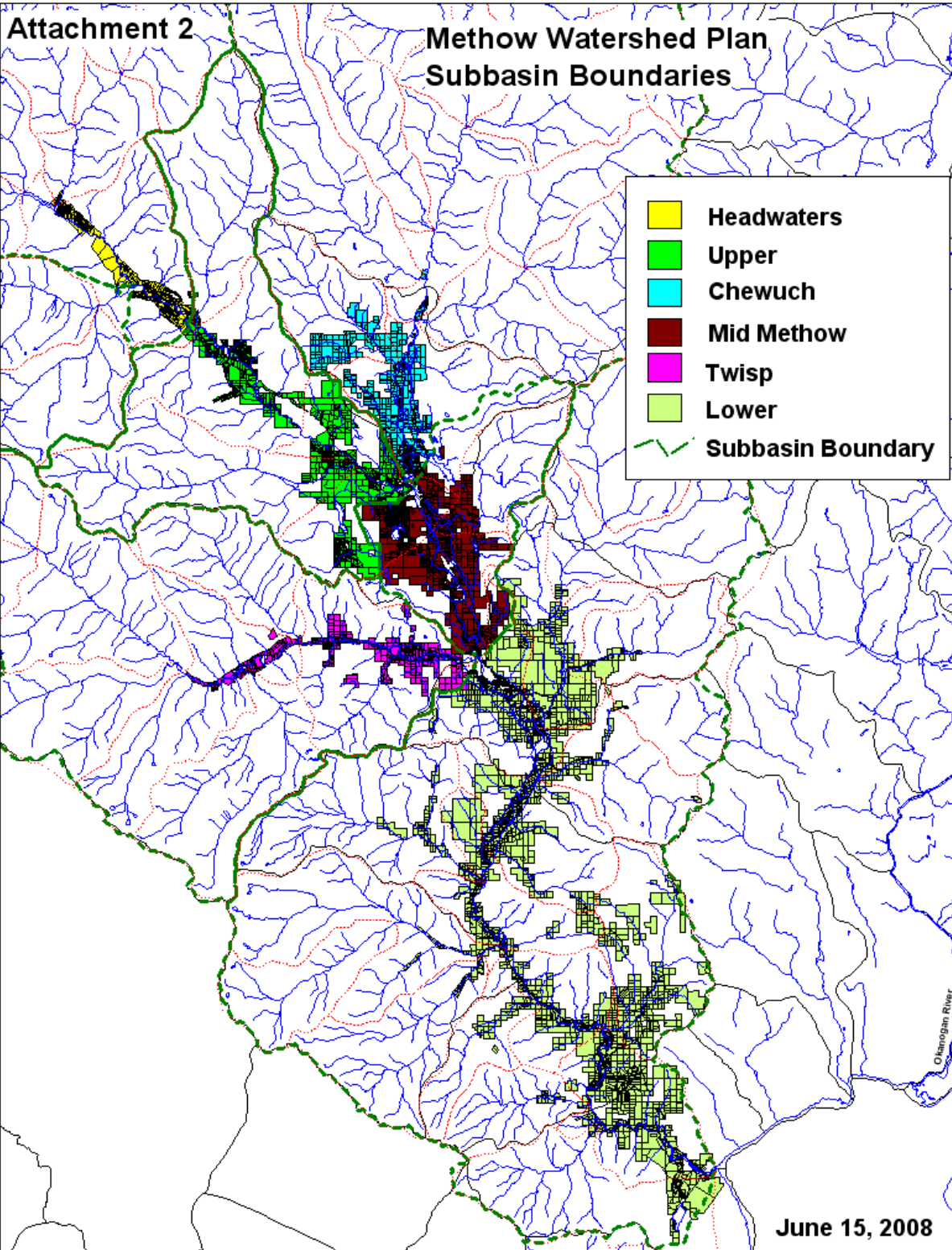
**6. Update amount of water currently being used under DOE's emergency rule (some group a/b systems)\***

JJ at the Okanogan Health District says she probably could identify systems developed under the emergency rule; it would be difficult and would take about a day of her time. Some have not been built out yet. Estimate: 12-20 systems approved under PD emergency rule; then none allowed for a long time; then started again. It would be helpful if we could be more specific about what the Council is trying to accomplish. If Health District staff are to do the work, it will need to be scheduled at a time when they are able to fit it into their workload.

**7. Update number of parcels in closed basins (see Table 1).** There are presently 484 “developed” parcels (parcels with a single family residence) in the Closed Basins.

**8. Attend 2 council meetings to provide reports.** Highlands staff have attended three council meetings to date.

### Methow Watershed Plan Subbasin Boundaries



June 15, 2008

**TABLE 1 – 2008 Selected Parcel Data Methow Watershed\***

<u>Reach</u>	<u>Pre 1977 Developed Parcel High Estimate</u>	<u>Pre 1977 Developed Parcels Low Estimate</u>	<u>Total Developed<sup>1</sup> Parcels</u>	<u>Total Developed<sup>1</sup> and Developable<sup>2</sup> Parcels</u>	<u>Developed<sup>1</sup> Parcels w/ Irrigation Water<sup>3</sup></u>	<u>Parcels w/ Conservation Easement<sup>4</sup></u>	<u>Developed<sup>1</sup> Parcels in Closed Basins</u>
<b>Headwaters</b>	56	50	387	822	15	47	<b>0</b>
<b>Early Winters</b>	0	0	0	0	0	0	<b>0</b>
<b>Upper Methow</b>	108	96	652	1324	15	40	144
<b>Chewuch</b>	240	214	452	786	70	25	1
<b>Mid Methow</b>	258	230	682	1139	171	37	82
<b>Twisp</b>	124	110	328	558	81	30	0
<b>Lower Methow</b>	502	446	938	2127	43	3	257
<b>TOTALS</b>	<b>1288</b>	<b>1145</b>	<b>3439</b>	<b>6756</b>	<b>395</b>	<b>182</b>	<b>484</b>

1. “Developed” parcels are those remaining parcels which have an Assessor’s DOR code that indicates residential use (codes 11, 12, 13, 15 and 19), a WA in the water adequacy column meaning that the parcel has an approved domestic water source, or Assessor DOR Codes of 81, 83, 88 & 94 with an Improvement Market Value over \$50,000. The number provided indicates the estimated total number of single-family dwelling units
2. “Developable” parcels are those remaining parcels which are not presently “Developed” or under a Conservation Easement. Please note that parcels with Assessor’s DOR code 14, 16, 17 and in the 20’s, 30’s, 40’s, 50’s, 60’s and 70’s are not included as developable or developed.
3. Includes “developed” parcels that have Assessor DOR Codes indicating irrigated agriculture/resource use or are served by a “ditch” company or irrigation district. The later data was obtained from Watershed Council Members for Early Winters, Wolf Creek Reclamation District, Methow Valley Irrigation District, Chewuch Canal Company, Twisp Power and Irrigation, Barclay Ditch, etc.
4. Parcels with conservation easements means that the Assessor’s DOR Code includes CE for conservation easement. Such parcels may be included as “developed” if the parcel meets the criteria established in footnote #1 above. Such parcels are not included in the total for “developed” and “developable”.

\* Methodology for developing data in table.

1. Updated parcels, subdivisions, zoning, shorelines, wetlands, comprehensive plan land use designations, floodplain, property and comment data from 2003 parcel information with parcel data downloaded in May 2008 from the Okanogan County Assessor.
2. Used 2004 sub basin boundaries provided by Golder Associates. T
3. No data was available on closed basin boundaries so a combination of data identifying parcels in closed basins from 2003, a DRAINAGES dataset from 2003 and a list of closed basins and lakes from the Ecology Emergency Rule was used to determine which parcels lie in closed basins.
4. Downloaded well adequacy data provided by Okanogan County Public Health (2004-present) and coded all parcels with a WA that have received a water adequacy certificate.
5. Update GIS map for each of the seven reaches or subbasins in the basin (Early Winters not included see #8 below.)
6. In each sub basin update the columns in database for attributes to be used in analysis: Conservation Easements, irrigation and water adequacy. Where possible, data was derived from Okanogan County Assessor's Parcel Data downloaded from County on May 5, 2008.
7. Update the attributes to each parcel
8. Eliminated publicly-owned parcels (including land owned by cemetery districts, PUDs, irrigation districts, towns, Okanogan County, state agencies, and federal agencies) and land without owners (primarily rights of way; also islands, platted common areas and similar undevelopable land)
9. Eliminated parcels in Winthrop and Twisp. Parcels in towns are served by public water systems and are not subject to the 2 CFS reservation
10. Continue with 2003 assumption that eliminates the Early Winters reach, as there are no privately-owned parcels to analyze
11. Output the data about remaining privately-owned parcels to spreadsheets (one for each reach)

*Spreadsheet analysis*

1. Parcels sorted by Assessor DOR code (use classification)
2. Parcels developed for residential use segregated. Includes: codes 11, 12, 13, 15 and 19.
3. Parcels with Use Codes 81, 83, 88 & 94 with Improvement Market Value over \$50,000 were assumed to have a single family residence
4. Parcels with "WA" indicates that the Okanogan County Health District has issued a water adequacy certificate for a dwelling since April 14, 1992. Parcels so coded were counted as an existing single-family dwelling regardless of Assessor's DOR Code.
5. Parcels identified as undeveloped or in agricultural use (DOR codes 81, 82, 83, 88, 91, 92, 93, 94, 95, 96, 97, 99) segregated
6. All other parcels deleted

