

Date: March 31, 2019

To: Carl Einberger, Aspect Consulting

Copy: Mike Hermanson, Rob Lindsay – Spokane County Water Resources department; others

Re: WRIA 55-Little Spokane River (LSR) - Watershed Management Plan Update

Fm: Greg Sweeney, citizen member, WRIA 55 update committee

In accepting Spokane County's participant invitation and stated objectives [addendum] (a.) and in a good faith effort to fulfill the plan update committee's required role (b.), please accept the following observations regarding the process to date, along with comments, questions and recommendations for further group discussion prior to moving forward.

**Guiding Legislative & Committee intent:** "...to restore and enhance [LSR] streamflows..." RCW 90.94.010; "...plan must include *actions that the planning units determine...*," "... highest priority recommendations must include replacing... consumptive water use... *during the same time as the impact and in the same basin or tributary*;" 90.94.020 (4)(c); "[that]...over the subsequent 20 years, will result in a *net ecological benefit to instream resources...*" 90.94.020 (4)(c)

**Committee Decision Context:** Encompassing eight (8) clearly defined sub-basins, the Little Spokane River basin, its seven (7) major lakes that lay along its West Branch, fed by hundreds of streams and countless "springs," the LSR and West Branch form a unique water system that a "healthy watershed." The Little Spokane drainage basin has recovered from generations of over-grazing and logging and is remarkably intact. However it is also legally "closed" (c.) since 1976, meaning no new water rights. Added domestic exempt water permits are generally not permitted where water is not available, or when diminishment or impairment might occur and devalue existing water rights, wells and/or spring-fed systems now serving existing, homes, farm and open land in a primarily rural environment.

Therefore, in making plan update decisions, committee members must consider and wisely balance the conflicting demands of limited water supply, pressures for new development, existing water rights, and current uses, along with long-term forecasts, changing conditions, growth and water availability.

#### **Observations & Concerns:**

##### **Rushed Process & Lack of education & Unanswered Questionable**

- **Rush** - The committee has requested education and training *prior to* acceptance of various *draft* technical estimates and growth projections. This has yet to be scheduled. Overall context is missing. Accordingly, the perception exists of a rush toward premature acceptance or adoption of data inputs that contain a significant level of uncertainty. The committee cannot proceed with important decisions without resolving certain concerns.
- The committee has received no independent, expert presentations by climatologists, demographers or economists regarding trends or other related forecasts used in growth projections. Absent proper context, any complex draft projection deserves scrutiny.
- The committee has yet-to-be informed about lessons learned by other watershed plan updates, underway or already adopted in other regions of the state.
- **Questions:** How will the new hydro-geologic model be used with regard to granting or denying new domestic exempt wells (DEW)? Will the hydro-geologic model be updated at

required intervals to reflect actual growth in each of the 8 sub-basins? At what intervals will this happen, and who is responsible? What “triggers” will be used? Will DEW permits be granted county-wide, or by sub-basin, based upon changed conditions, and who will approve this? What administrative framework will be established to manage these issues after the committee approves a final, updated LSR watershed management plan?

## II. Missing Data – Questionable Assumptions

**1. Class A & B water systems** – The “Demand Technical Analysis” (#2 below) does not include or even estimate the current water use of these mostly private systems. It does not provide specific sub-basin location, water source, volume, number of developed and non-developed plats and estimate of total use at build-out. Thus, *the possibility of errors* in use of the new Hydro-geologic Model increases. Any such error could result in substantial impairment of existing water rights, and subsequent litigation.

**2. Exempt Well Demand Technical Analysis** – This feels very rushed and it’s utility for 20-year use is uncertain, especially in the face of changing weather patterns and conditions.

**Example:** One deep, professional study, *an interactive climate analog map* of 540 U.S urban areas, shows that within 60 years, Spokane's climate will be most similar to Walla Walls, *7.1 degrees F warmer and 22 per cent drier.* (e.)

Population Growth Estimates – conservative, inflexible, and do not accommodate uncertainty or even reflect existing growth. (*see 3. below*)

Changes in Temp, Rain & Snow Cycles and Evaporation – Variability in recharge elements are not accounted for. (*see 4. below*)

Given the high likelihood of predicted precipitation pattern shifts, and that both growth projections and temperatures *will increase substantially, rather than decline* over the next twenty to forty years the plan update must calculate and consider the possibility of *less* domestic water availability, *more* permit exempt well permit requests and *greater* demand than allowed in the current estimate

Incorporating a range of “variable” data *inputs* (i.e. temp & population) will greatly inform subsequent use of the Surface and Ground Water Model, and projected *outputs*. This sort of sensitivity analysis will account for the “worst” case scenarios in a viable plan, which in turn will inform and empower an appropriate administrative framework to assess all variable inputs and scenarios. Essential to insure against impairment of existing water rights, litigation and community unrest.

**Note:** No “triggers” have been discussed or proposed for regular update of this 20-year plan.

**3. Conservative Population Growth Rates - Stevens, Pend Oreille and Spokane counties.** Following the great 2008 recession, regional population changes are informative, and *much higher than proposed projections*: Actual2010 growth rates: **Stevens + 40.4% - Pend Oreille + 45.2% - Spokane +30.5%**. Such documented, rapid change reinforces the degree of uncertainty in proposed growth rates and water use estimates. In-migration and related economic factors need to be considered, adjusted and updated periodically. The population growth estimates don't accommodate uncertainties such as these.

**Error:** actual growth rate 1.06% vs. projected rate at 0.74%; calculations are wrong. (d.)

Using a less-than-current *actual* estimate makes no sense. Additionally, even the current conservative estimate is bounded by the consideration of domestic use only, while we've seen huge growth in commercial use in North Spokane County (i.e. cannabis growers) over the past couple of years. The current estimate doesn't allow for uncertainty in growth or in use. How will this be addressed?

**4. Domestic Exempt Well Forecast (DEW)** Given the uncertainty and issues raised above and herein, the committee has been placed in an untenable position: premature adoption of the current forecast is dangerous and ill-advised. As conditions change, poor initial estimates would allow new domestic wells in vulnerable, low flow areas, degrade or run-dry existing wells, and result in legal action.

**Therefore, at this point, it seems** seeking early committee acceptance of these two (2) foundational yet preliminary technical report-estimates, the update process appears rushed without adequate committee training, accurate/variable data estimates, or independent professional counsel. The committee cannot accept or push this volunteer effort along without deeper discussion and info.

#### **Other Open Questions:**

What are the clear, legal meanings of: **1.** "net ecological benefit" and **2.** "streamflow resources?"

How will these requirements be: **1.** determined, **2.** by whom, and **3.** reviewed intervals?

How will DEW Technical Analysis and population projections be used in the new Model?

#### **Recommendations:**

**Water rights** - Acquire and Retire. Wise, already underway, should continue.

**Education & training:** Provide requested, professional, independent training on all facets of this watershed plan update process. Topics to include: draft technical papers; model inputs/outputs; changed weather conditions; economic, population, demographic trends and shifts.

**Class A & B water systems** - Prepare a more precise estimate of potential future use, location and number than available from the transportation plan. There are several ways of approaching this: for example: how many developed and undeveloped parcels per class and in what sub-basin areas are they located? What are GMA boundaries and plans projections? **Note:** County and state records do exist of Class A and B systems. Ecology has offered to provide support, GIS personnel or other assistance. Difficulty of data gathering is not relevant.

As growth cannot in and of itself be limited, the committee should work through ways to accommodate the unexpected: Growth estimates may be much higher or lower than projected, for example. What happens with continued expansion of indoor growing operations or other commercial uses, allowable under the permit exemption but not necessarily accounted for in the current estimate.

**Flexible Administrative Framework:** The committee sees the necessity of a flexible plan, mandated periodic updates, and specific permit exempt well policy directives to be included in an administrative framework for future local water permit management in all three (3) counties with jurisdiction within the drainage boundaries of WRIA 55.

#### **ADDENDUM**

(a.) During the 2018 Legislative Session ESSB 6091, codified as RCW 90.94 Streamflow Restoration, was passed to address issues raised by the 2016 Washington Supreme Court Decision, *Whatcom County v. Hirst, Futurewise, et al.* The new law directs the WRIA 55 Initiating Governments, in collaboration with the planning unit, to update the WRIA 55 Watershed Plan to *include projects and actions that will measure, protect, and enhance instream resources* in WRIA 55. At a minimum, the watershed plan update *must include those actions that the planning units determine to be necessary* to offset potential impacts to instream flows associated with permit-exempt domestic water use. ***The plan update is due by February 1, 2021.*** (f.)

(b.) RCW 90.94.030 “- watershed restoration and enhancement committees – “

(c.) <https://fortress.wa.gov/ECY/publications/documents/1111059.pdf>

(d.) Actual annual growth rate at 1.06%, vs. projected rate at 0.74%.

Looking back 2001-2017 (16 years) VS. Looking Ahead 2018-2028 (20 years)

Actual 1,923 / 113 average

projection 1,602 / 80 average

Example: 113 HH average X 20 year projection = + 658 41% under estimate  
2,260 new homes

(e.) Climate Analog for 540 North American Urban Areas - <https://doi.org/10.138/>

(f.) Spokane County Water Resources department, committee invitation letter, 10/1/2018

RCW 90.94.020 Intent-2018 c 1: “...ecology is directed to implement a program to *restore and enhance streamflows...*”

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