

New Water Management in the Lower Columbia



Salmon/Washougal and Lewis Watersheds

Water Resources Inventory Areas 27 & 28

Prepared by Travis Burns, Department of Ecology

October 6 / November 21, 2008

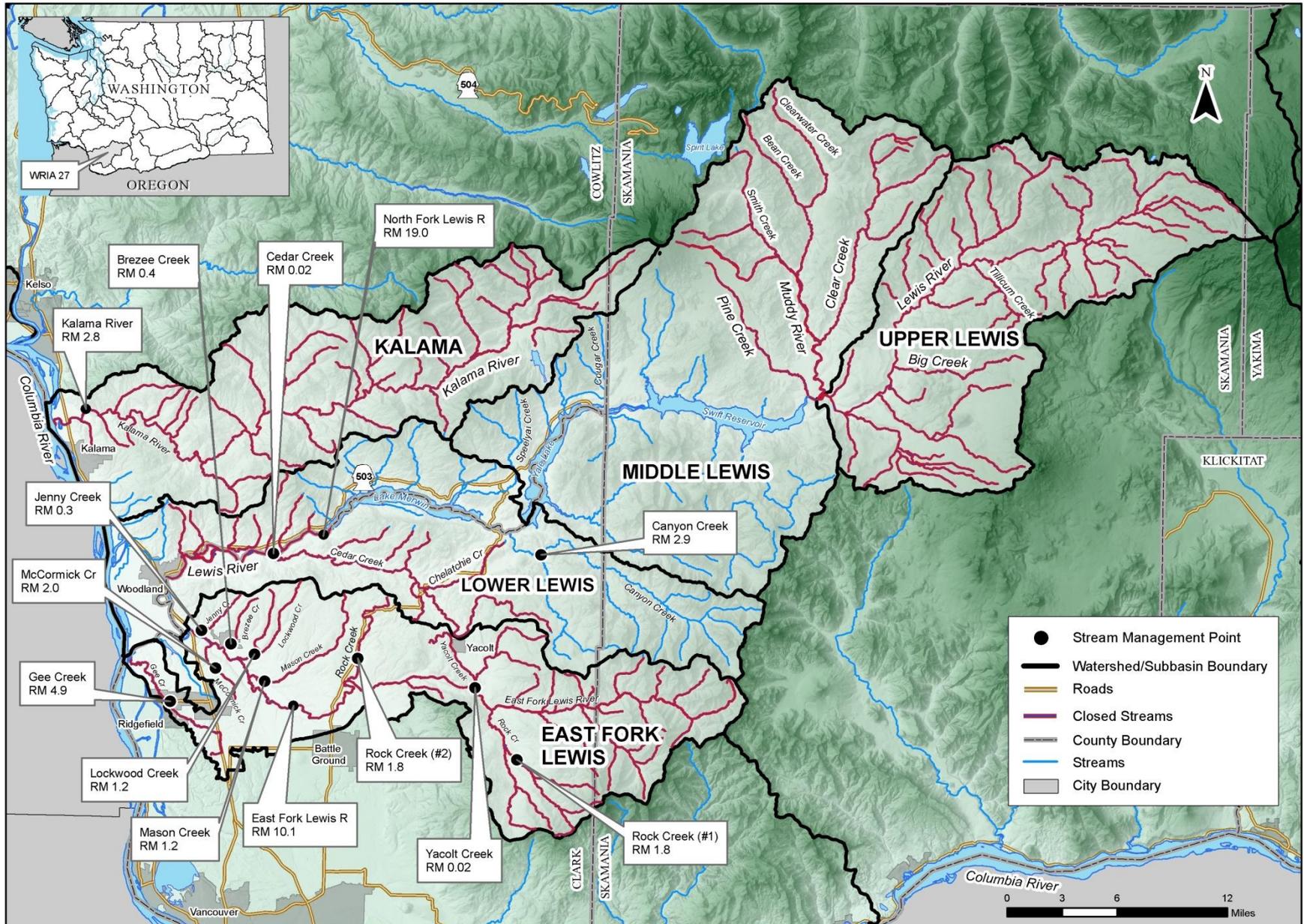
Watershed Strategy:

- In the Watershed Plan, the local Planning Unit recognized the long-term advantages of shifting future ground water withdrawals away from sources that impact water-critical headwaters.
- Most regional salmon recovery efforts are focused on the restoration of smaller tributaries. Potential gains in these areas are greatest. Flow tends to be less of a limiting factor in either mainstems or mouths near the Columbia River where there is significant tidal influence.
- Ecology's proposed rules implement the local watershed planning and salmon recovery strategy . . .

Proposed Rule Features:

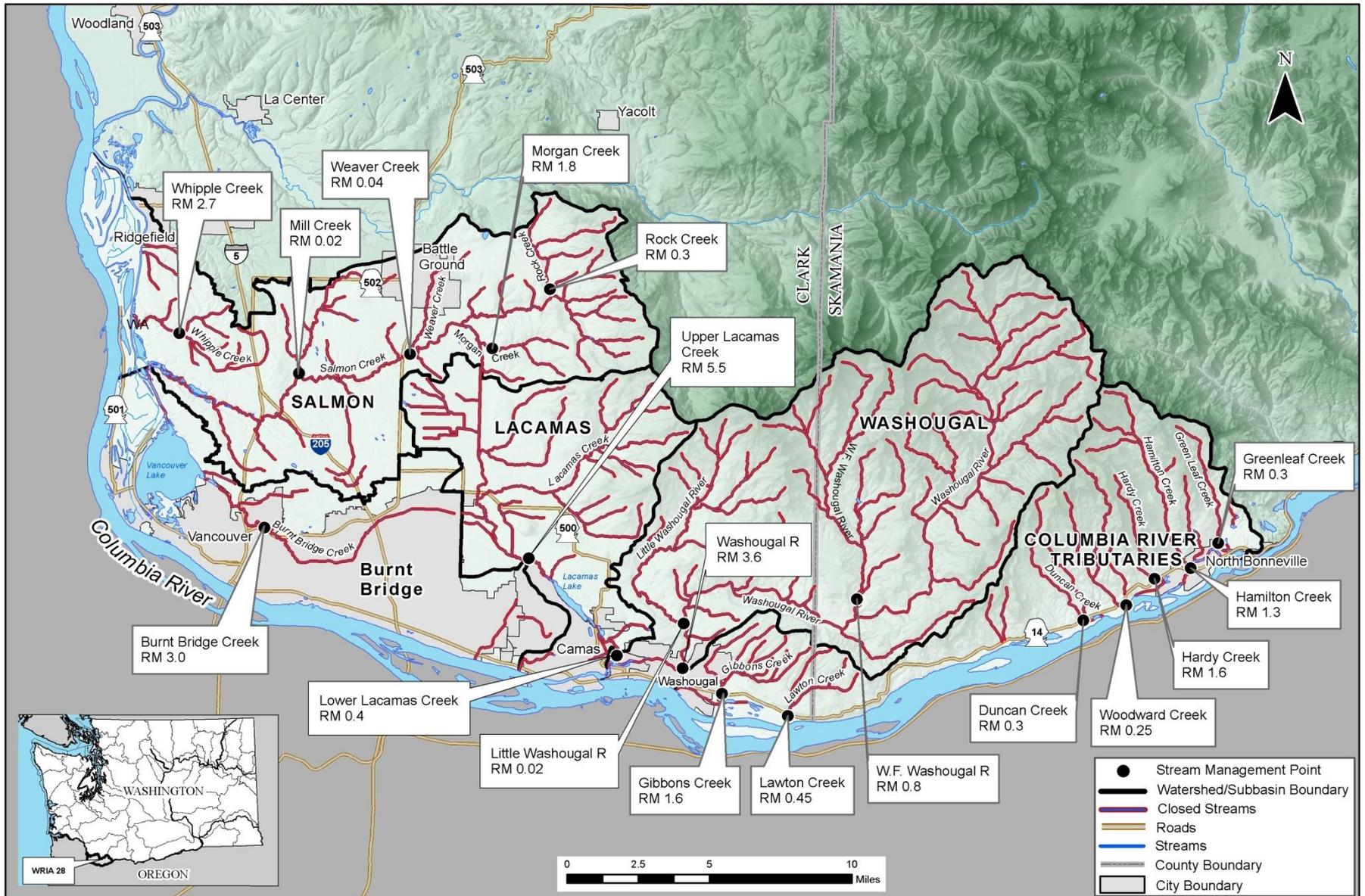
- Establish instream flows.
- Closing sub-basins to future withdrawals.
- Designating “regional supply areas” for future water supply.
- Establishing limited reservations of water for future use.
- *** Establishing conditions of use for access to the water reserves.

WRIA 27 Surface Water Closures and Control Points



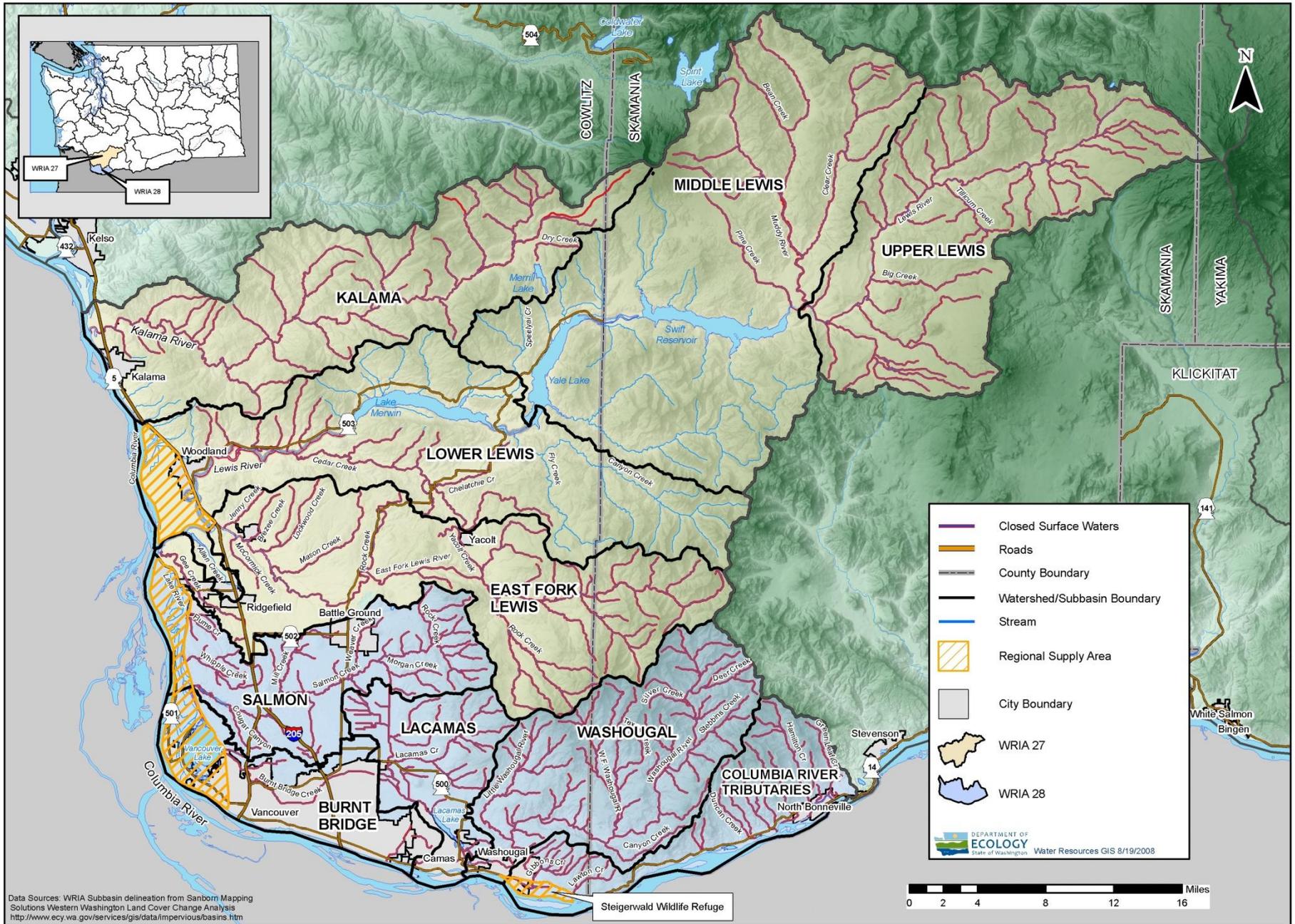
Data Source: WRIA 27 Sub-Basin delineation from Sanborn Mapping Solutions, Western Washington Land Cover Change Analysis
<http://www.ecy.wa.gov/services/gis/data/impervious/basins.htm>

WRIA 28 Surface Water Closures and Control Points



Data Source: WRIA 28 Sub-Basin delineation from Sanborn Mapping Solutions Western Washington Land Cover Change Analysis
<http://www.ecy.wa.gov/services/gis/data/impervious/basins.htm>

Regional Supply Areas and Surface Water Closures for WRIA's 27 and 28



Data Sources: WRIA Subbasin delineation from Sanborn Mapping Solutions Western Washington Land Cover Change Analysis <http://www.ecy.wa.gov/services/gis/data/impervious/basins.htm>

Surface and Ground Water Closures:

Exceptions to the closures include:

- Temporary water use for environmental restoration projects.
- Seasonal water use from November 16 to May 14 on the following rivers:
 - Kalama River,
 - North Fork Lewis River (below Merwin Dam),
 - East Fork Lewis River, and
 - Washougal River.
- Approved water use from the reservation . . .



Reservations for Future Use

- Both rules provide reservations of water to supply . . .
 **small water systems, domestic wells,
 and city/utility demands.**
- Reserves should (1) be sufficient to meet projected needs over
 the next **twenty years**, and (2) result in no significant impacts
 to instream values. [OCPI determination]
- Projects qualifying for access to a reserve will **not be
 subject** to the instream flows or closures.

Reservation Conditions of Use

- ❑ Conditions of use will *stretch* both instream flows and limited out-of-stream water supplies.

- ❑ Water purveyors will need to . . .
 - Conduct an **alternatives analysis** before accessing a reserve,
 - Offset to the “**fullest extent practicable**” the anticipated impacts that will result from use of the reservation, and
 - Provide other information/analysis as required in rule.

- ❑ Conditions apply to all “**public water systems.**” However, conditions do not apply to individual residential wells.

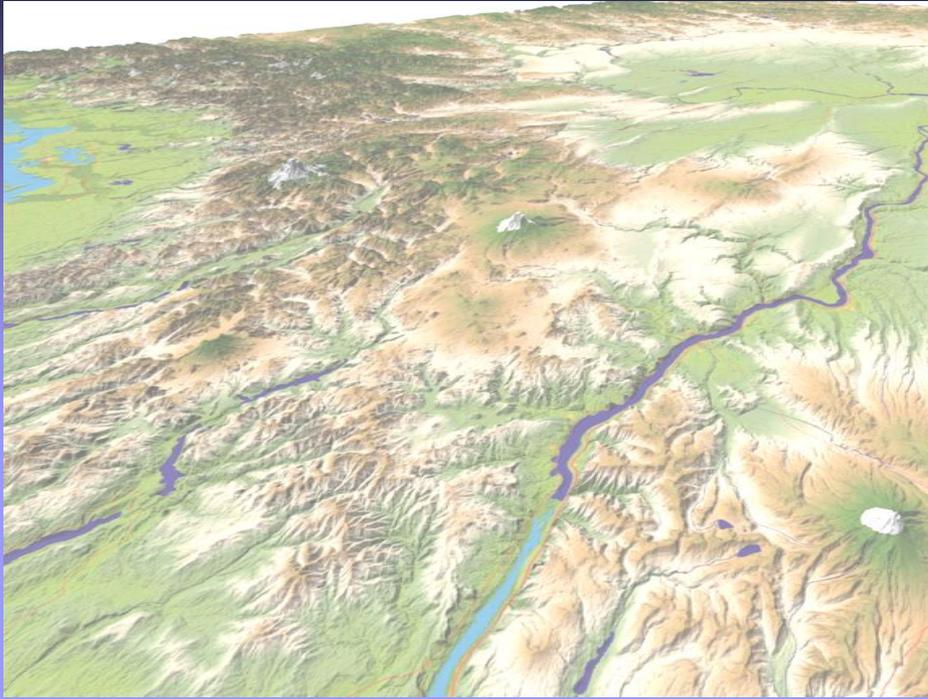
Reservation Conditions of Use (cont)

- ❑ An applicant must first seek to offset the overall depletion(s) through water-related actions to the maximum extent practicable.
- ❑ Water-related offsets may have a greater or lesser “weighted value” due to seasonality, location, or quality of water provided.
- ❑ Any remaining depletion that has not been offset by water-related actions must be offset through habitat-related offsets in quantities prescribed by guidance.

Status of Proposal

- Ecology is currently preparing both a response to comments and final rule documents for adoption.
- Anticipated date of adoption – between November 2008 and January 2009
- Rule goes into effect 31 days after adoption.
- Rule implementation strategy being developed, and guidance for evaluating out-of-kind offsets is being completed by watershed group.

Any Further Questions or Comments?



Rulemaking: Travis Burns

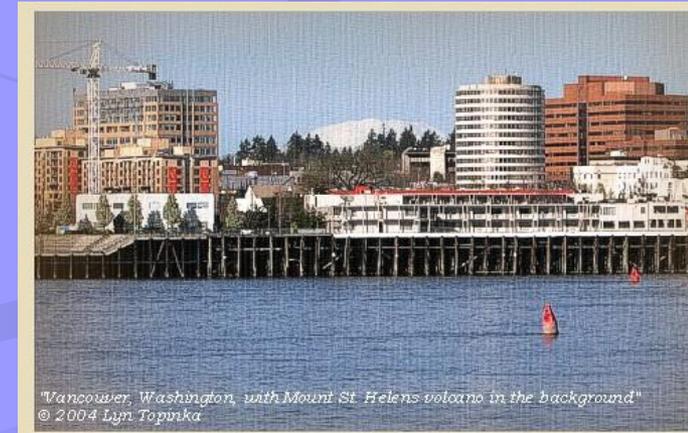
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Ecology web site:

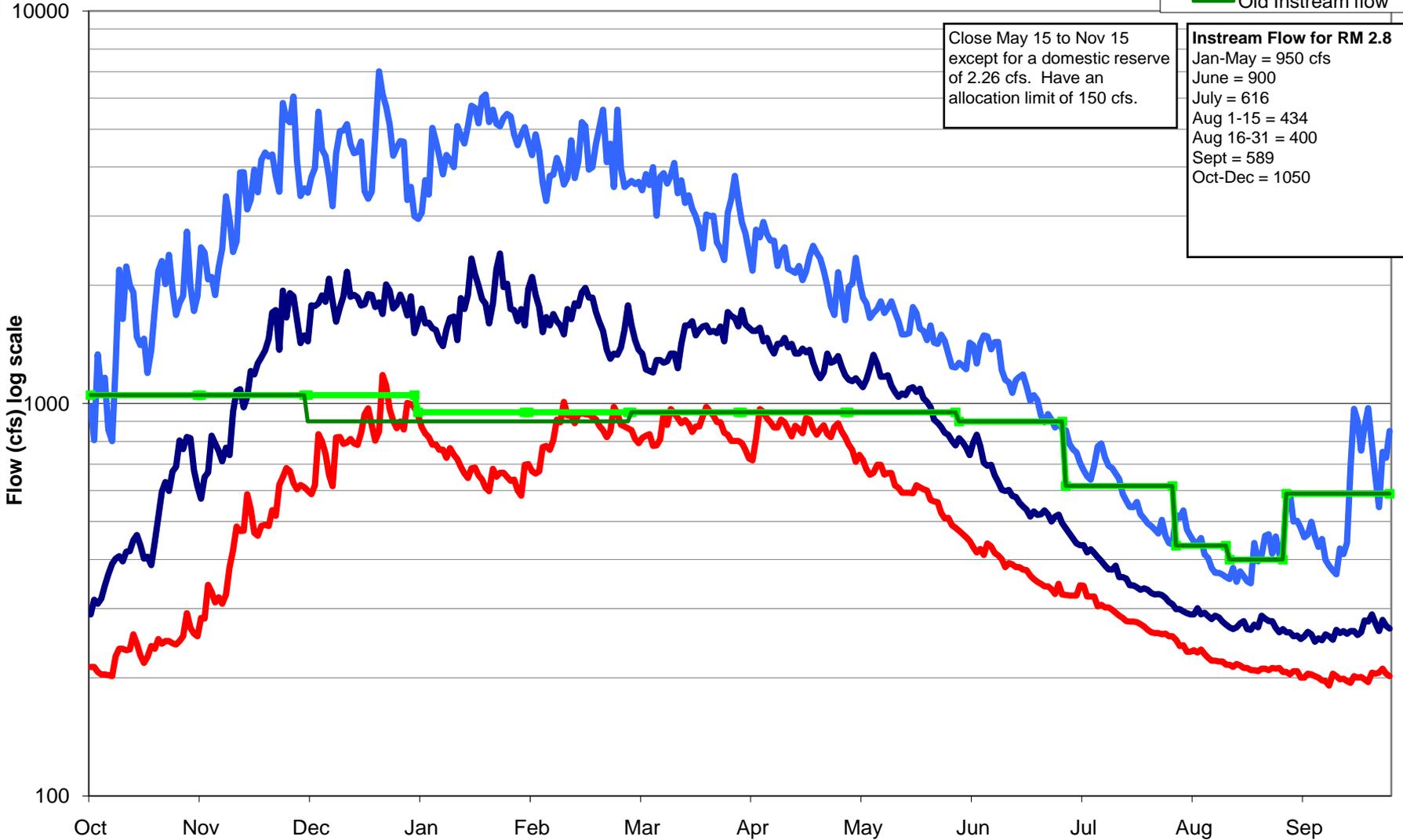
http://www.ecy.wa.gov/programs/wr/instream-flows/lewis_salmon_washougal.html



*"Vancouver, Washington, with Mount St. Helens volcano in the background"
© 2004 Lyn Topinka*

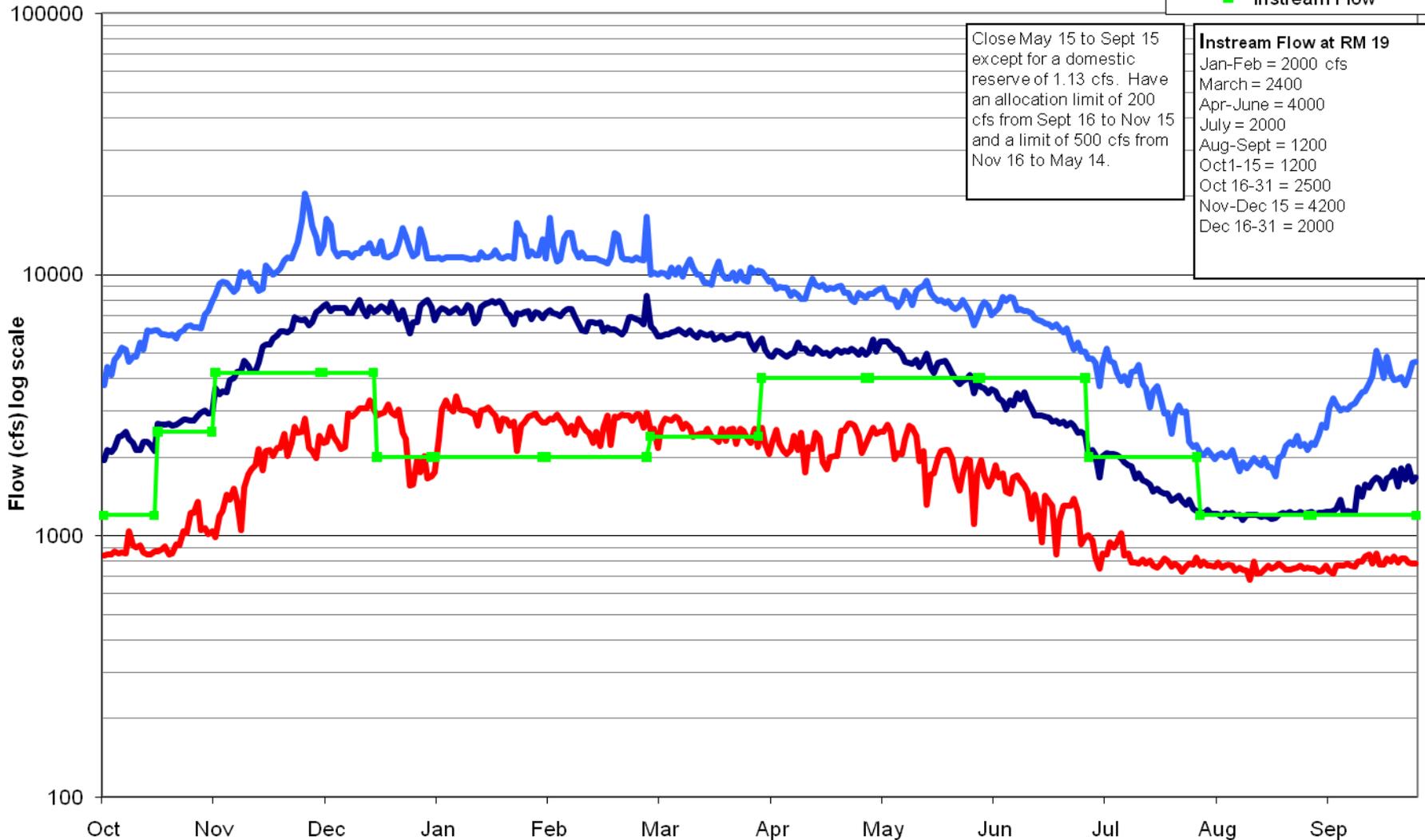
KALAMA RIVER BELOW ITALIAN CREEK NEAR KALAMA, WA
Flow Exceedence Probability Hydrograph
 USGS gage 14223500; RM 4.2; Period of Record: 1946 - 1982

- 10% Exceedence
- 50% Exceedence
- 90% Exceedence
- Instream Flow
- Old Instream flow



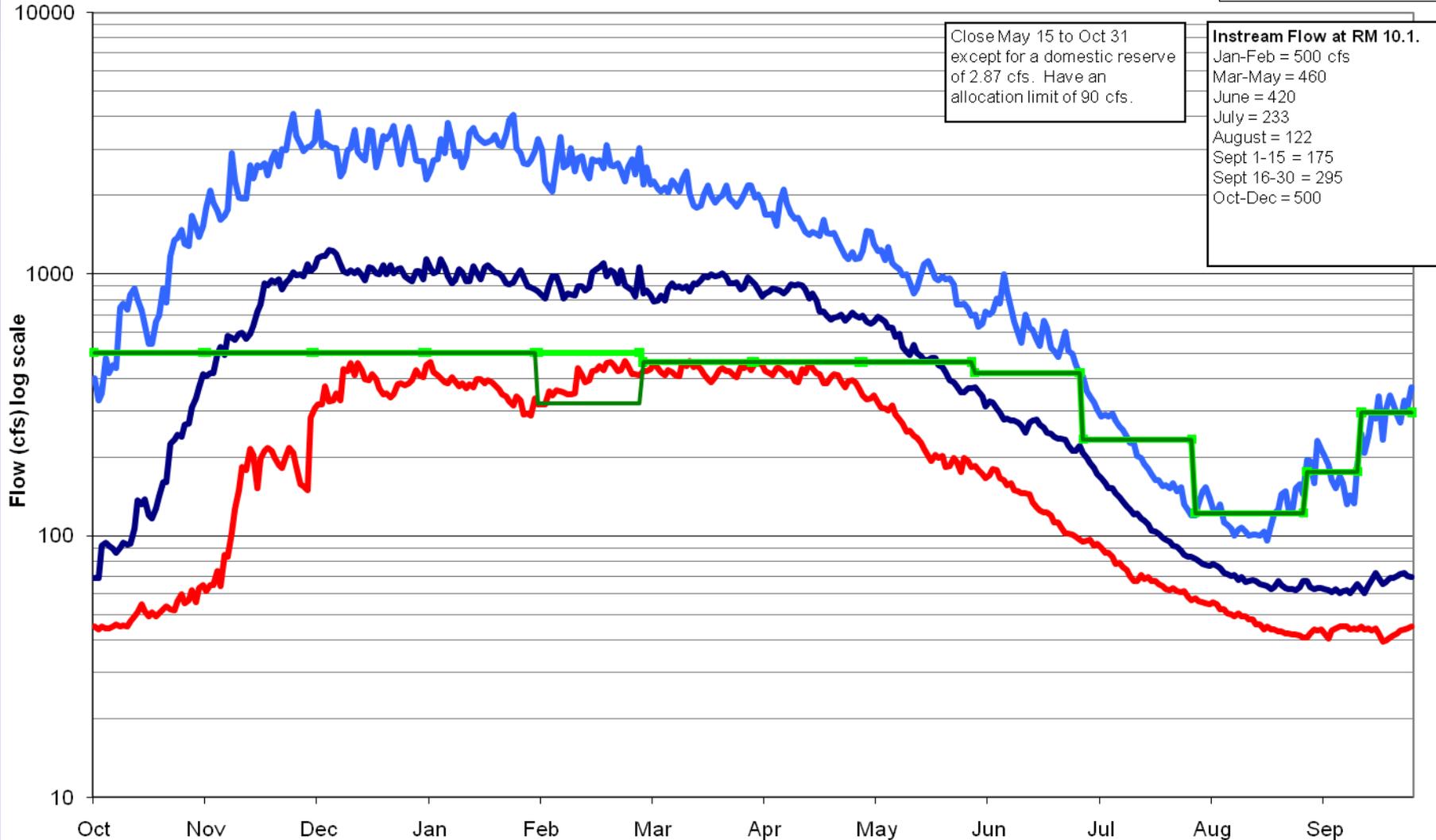
LEWIS RIVER AT ARIEL, WA
Flow Exceedance Probability Hydrograph
 USGS gage 14220500; RM 19; Period of Record: 1909 - 2003

- 10% Exceedance
- 50% Exceedance
- 90% Exceedance
- Instream Flow



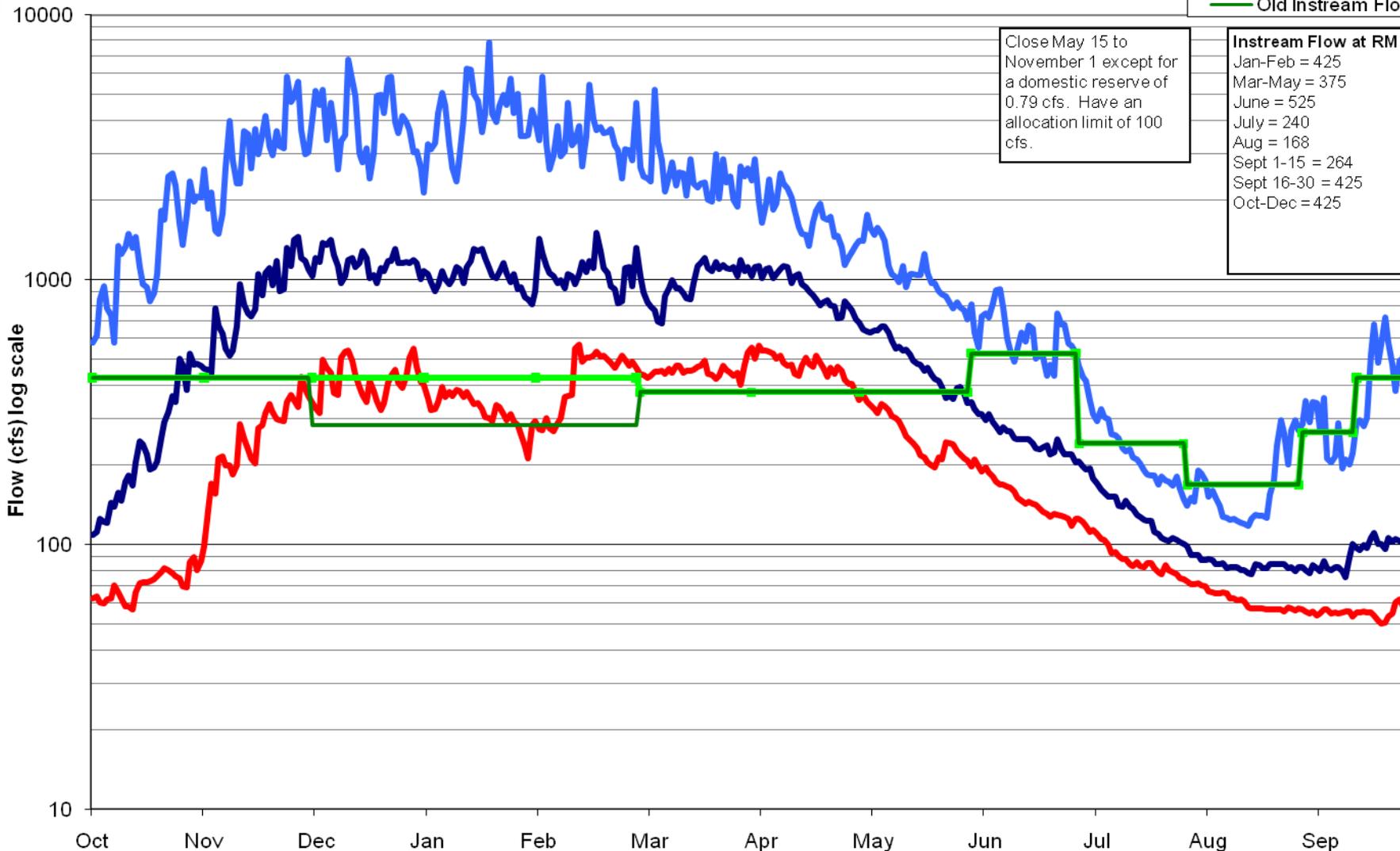
EAST FORK LEWIS RIVER NEAR HEISSON
Flow Exceedence Probability Hydrograph
 USGS gage 14222500; RM 20.2; Period of Record: 1929 - 2003

- 10% Exceedence
- 50% Exceedence
- 90% Exceedence
- Instream Flow
- Old Instream Flow



WASHOUGAL RIVER NEAR WASHOUGAL, WA
Flow Exceedence Probability Hydrograph
 USGS gage14143500; RM 9.2; Period of Record: 1944 - 1981

- 10% Exceedence
- 50% Exceedence
- 90% Exceedence
- Instream Flow
- Old Instream Flow



Close May 15 to November 1 except for a domestic reserve of 0.79 cfs. Have an allocation limit of 100 cfs.

Instream Flow at RM 3.6	
Jan-Feb	= 425
Mar-May	= 375
June	= 525
July	= 240
Aug	= 168
Sept 1-15	= 264
Sept 16-30	= 425
Oct-Dec	= 425