

Stevens County Water Bank



Presented by:

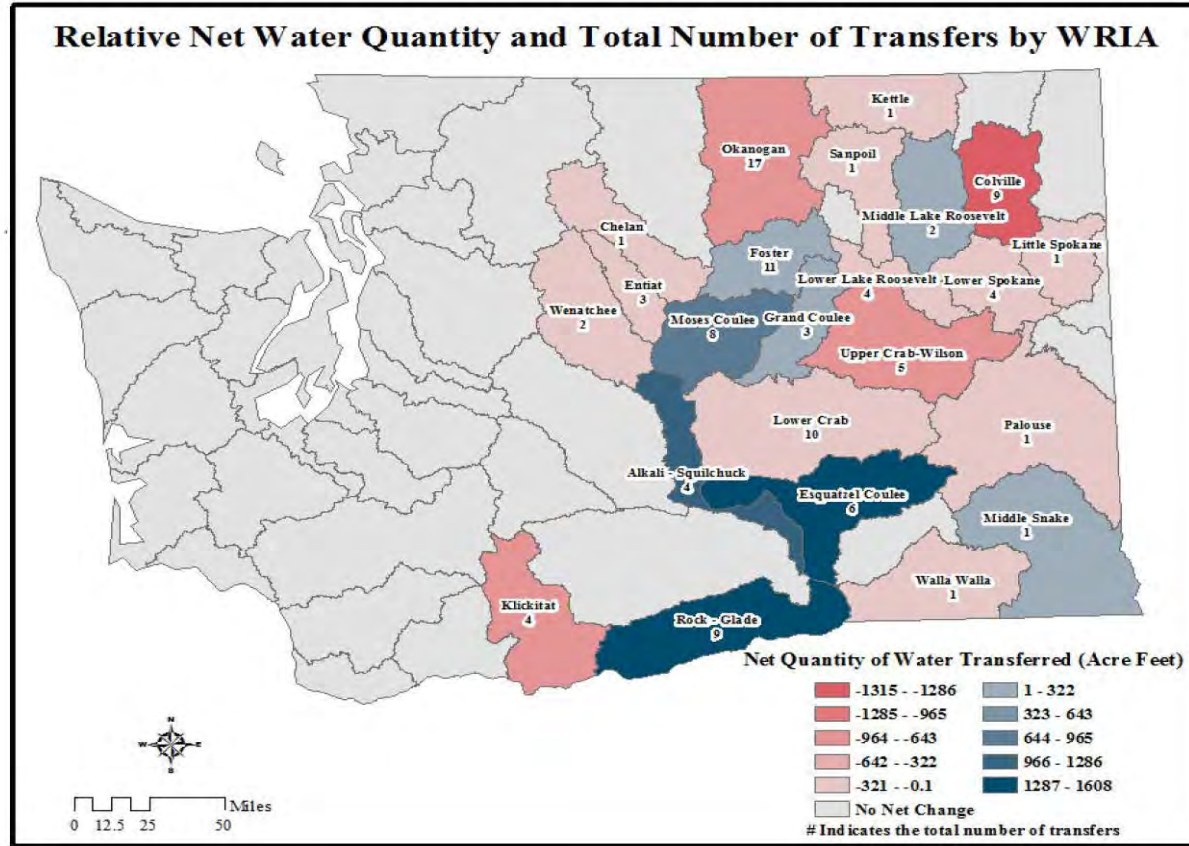
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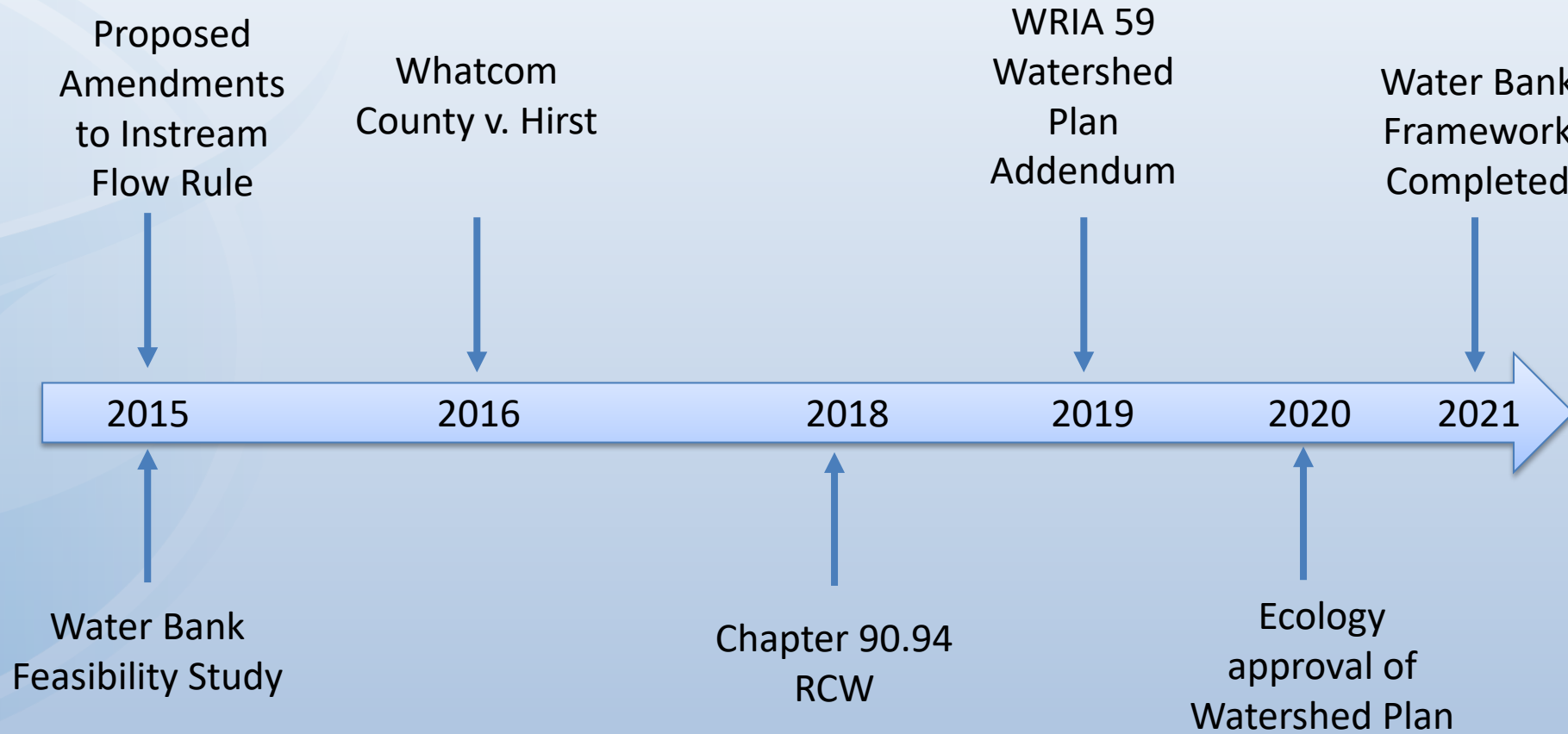
Transfers Out of County

Figure 2: Map of Transfer Count and Quantity by WRIA



Dostal, M. M. Kaminsky, H. Kennedy and H. Lee, Evaluating the Impact of Out-of-Basin Water Rights Transfers in Washington State, UW Evans School Student Consulting Lab, for Washington Department of Ecology (2021).

Timeline



WRIA 59 Colville River Watershed Plan

Recommendation No. 6

“Prior to the sale of any WRIA 59 water right(s) to the State and/or any other non-local user, every possible effort should be made to provide an opportunity for local transfer of the available water rights to interested water users within the watershed.”

“The purpose of this recommendation is to help maintain and enhance economic opportunities within the watershed, while protecting the active water rights of WRIA 59 for the maximum net benefits.”

Purposes

- Acquire water rights, from willing sellers, to serve as mitigation for new water permits within the watershed;
- Seek mitigated water rights permits, such as a groundwater permit to rely on Ecology's Sullivan Lake Trust Water Right to mitigation for new uses of groundwater;
- Develop and refine the hydrogeologic understanding of the watershed; and
- Provide outreach to citizens within the watershed regarding available water resources and opportunities to avoid relinquishment.

Benefits

- Assist water rights holders to maintain and protect their water rights.
- Encourage in-basin/in-County transactions by providing a viable local market.
- Identify opportunities for new water uses in the tributaries.
- Develop tools to better understand mitigation obligations.
- Facilitate the availability of long-term sustainable water supplies for economic growth and ecological benefit.

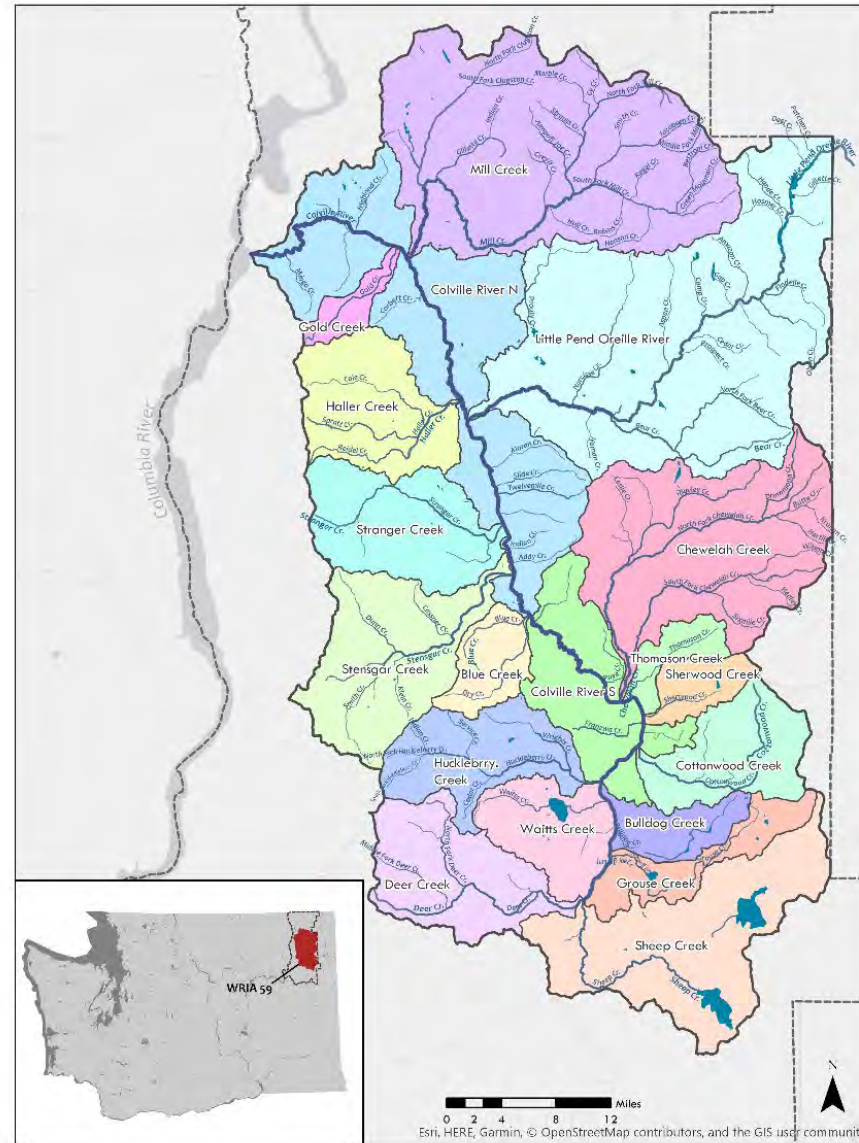
Water Bank Operations

- Water Resources Management Board
 - Review annual summary of the Water Bank
 - Coordination and outreach on potential water rights
 - Agreements
 - Grant requests, cost and fee revenue accounting
 - Hydrogeologic information
 - Compliance with Ecology's requirements
 - Review operations are consistent with Watershed Plan
 - Provide guidance for prioritization
- Stevens County
 - Daily operations
 - Fiscal Management

Water Bank: Next Steps

- Water Resources Management Board Meeting
 - TBD 2023
- Opportunities to seed the Water Bank
 - \$14 million in funding to buy water for water banks in rural counties with headwater streams
 - Up to \$4m per applicant
 - Continuing education and outreach


Colville River Watershed Water Bank Proposal




WAC 173-559: Instream Flow Rule Closure Status

- I. **WAC 173-559 implemented in 1977.**
 - I. **Established base flows in the Main Stem Colville River at two locations.**
 - II. **Closed the Upper and Lower Colville River to further consumptive appropriation from July 16 through September 30, except for in-house domestic use and stockwater if no alternate water supply is available**
 - III. **Determined no water is available for further Cu in tributaries. Tributaries are closed except for reservoir storage from November 1 through May 31**

This map displays lands within WRIA 59 that are classified as unlikely to develop. Seven land cover types within the WRIA were identified as unlikely to develop: flood zones, wetlands, lakes, cities, public utility districts, steep slopes, and publicly owned lands.

 Probable Area of Future Development

 Unlikely to Develop

Sub-basin	Developable Acres
Colville River N	23,412
Little Pend Oreille River	21,348
Sheep Creek	20,847
Mill Creek	15,056
Stensgar Creek	14,443
Haller Creek	11,430
Colville River S	9,604
Stranger Creek	8,836
Chewelah Creek	8,767
Waits Creek	7,489
Huckleberry Creek	7,229
Deer Creek	6,630
Cottonwood Creek	5,444
Grouse Creek	5,374
Bulldog Creek	5,171
Blue Creek	4,578
Thomason Creek	1,993
Sherwood Creek	1,385
Gold Creek	939



Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community

WHERE WILL FUTURE GROWTH OCCUR IN WRIA 59?

- Mapped areas that were unlikely to be developed

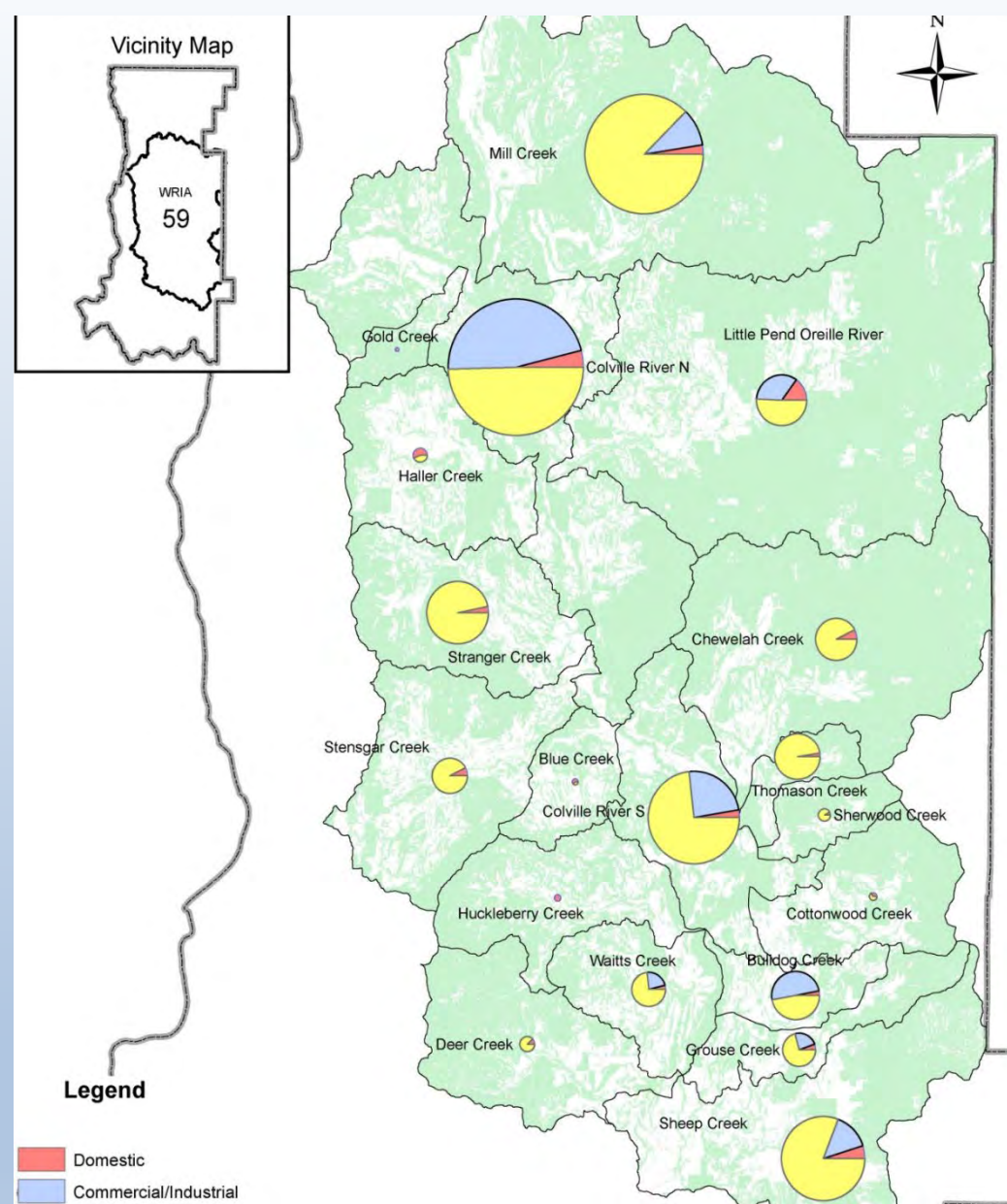
- Flood Zones
- Wetlands
- Lakes
- Cities
- PUD's
- Steep Slopes
- Publicly Owned Lands (USFS, BLM, DNR, etc.)

- Majority of Watershed Will not have future potential domestic/industrial growth (72%)

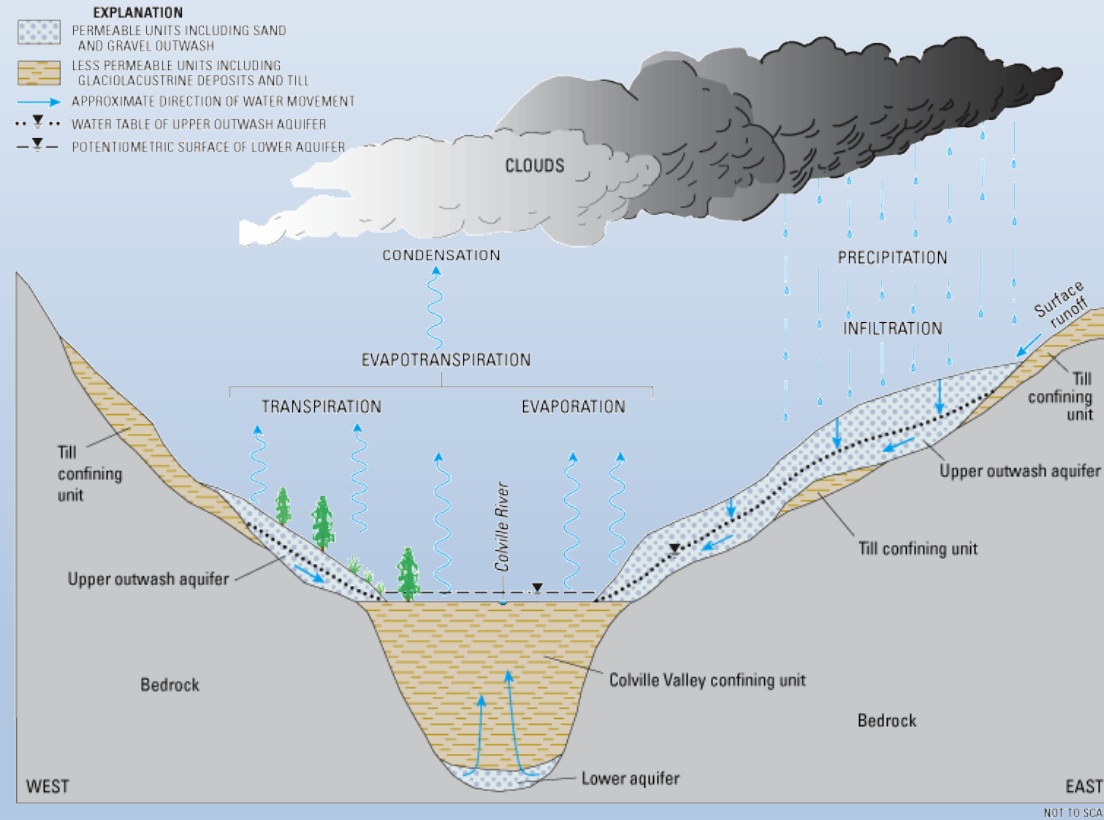
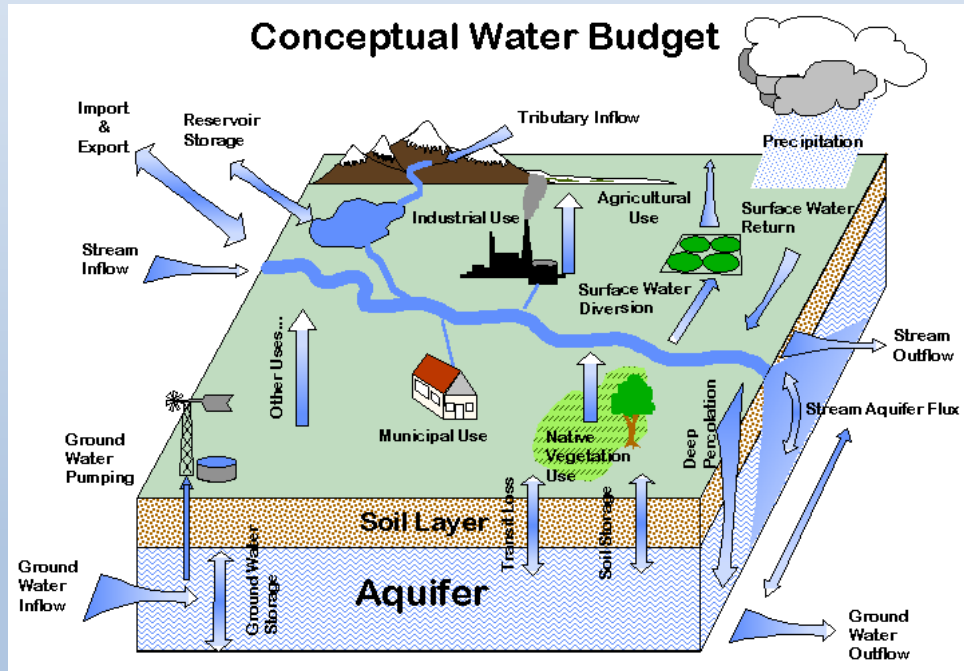


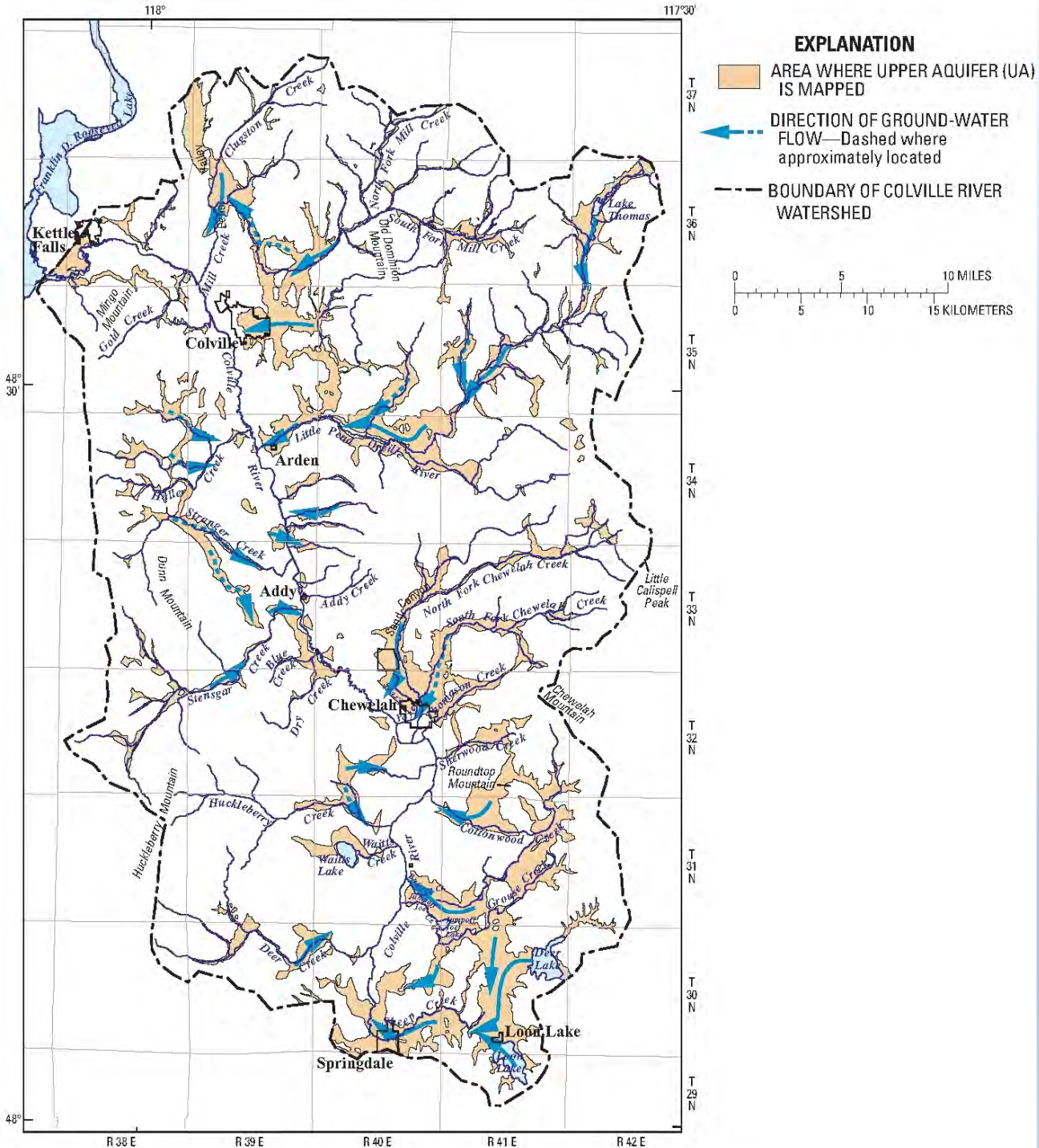
Where is Future Demand

- Primarily on the main Colville River Valley floor (Colville N & Colville S subbasins).
- Sheep Creek (headwaters, Development/Growth around Loon Lake)
- Mill Creek (rural, agricultural growth)



Overview of Conceptual Hydrogeologic Budget





UPPER UNCONFINED AQUIFER

USGS STUDY COMPLETED IN 2003
(Kahle and others)

- Primary Geologic Units of:
 - Qgf, Qal, Qgd, Qs
 - Typically <100 feet thick
 - Discontinuous on main C.R. valley floor
 - Hydraulically connected to surface water

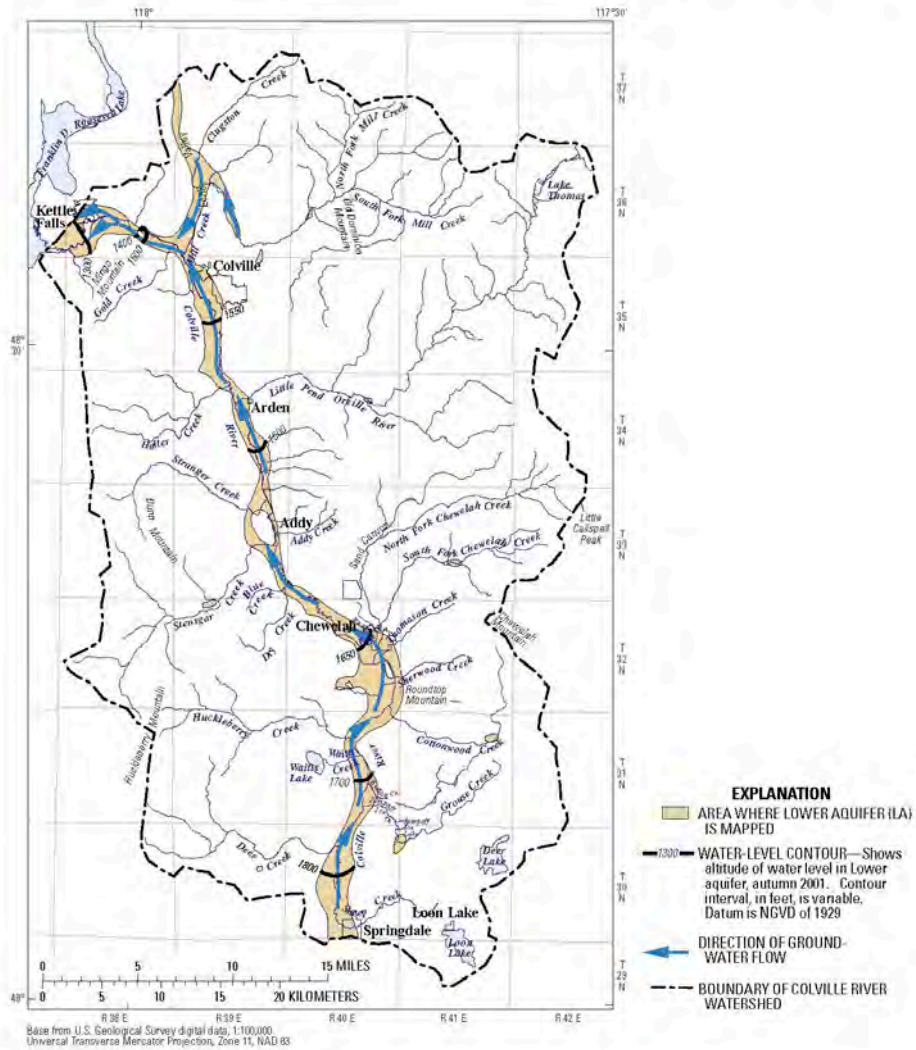
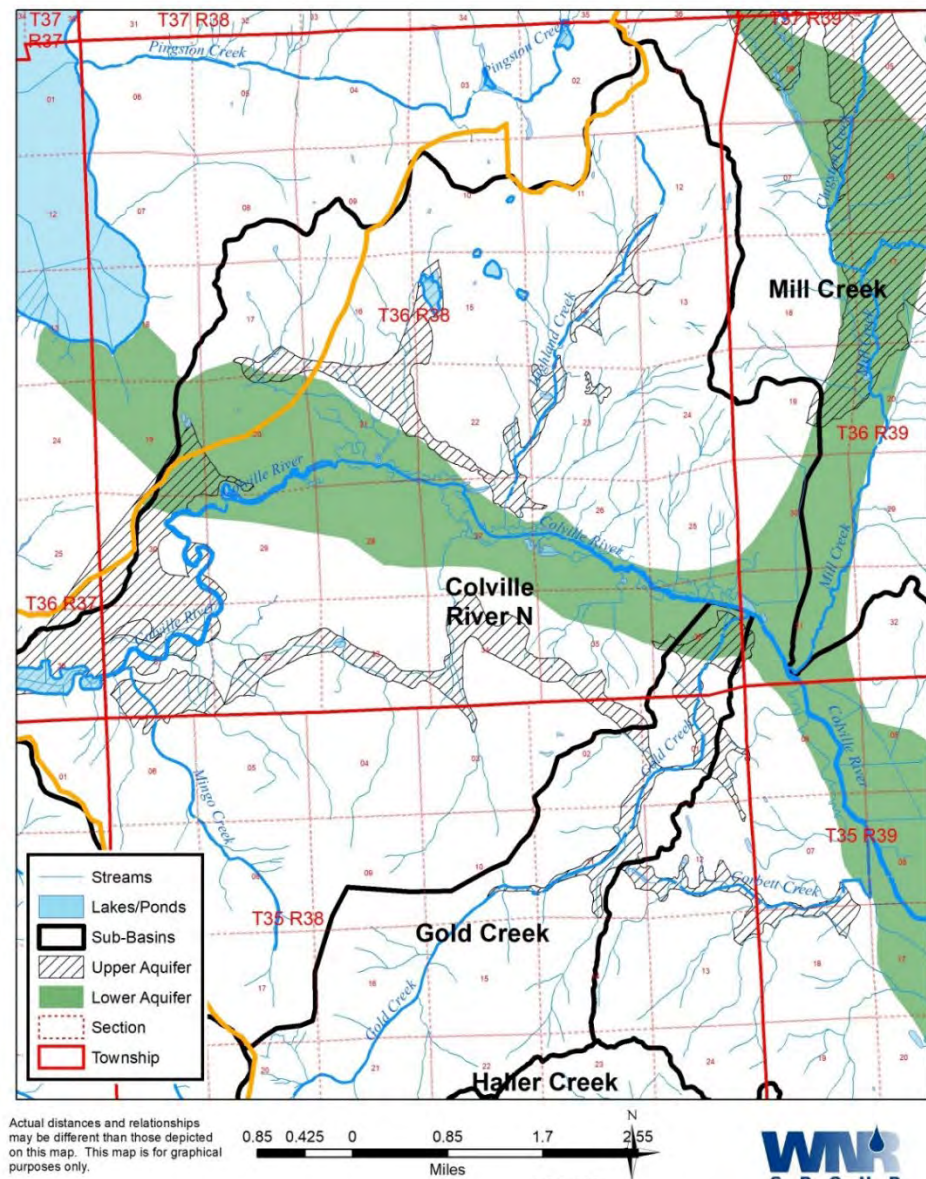


Figure 5. Areal extent, water-level altitudes, and direction of ground-water flow in the Lower aquifer in the Colville River Watershed, Stevens County, Washington. (From Kahle and others, 2003.)

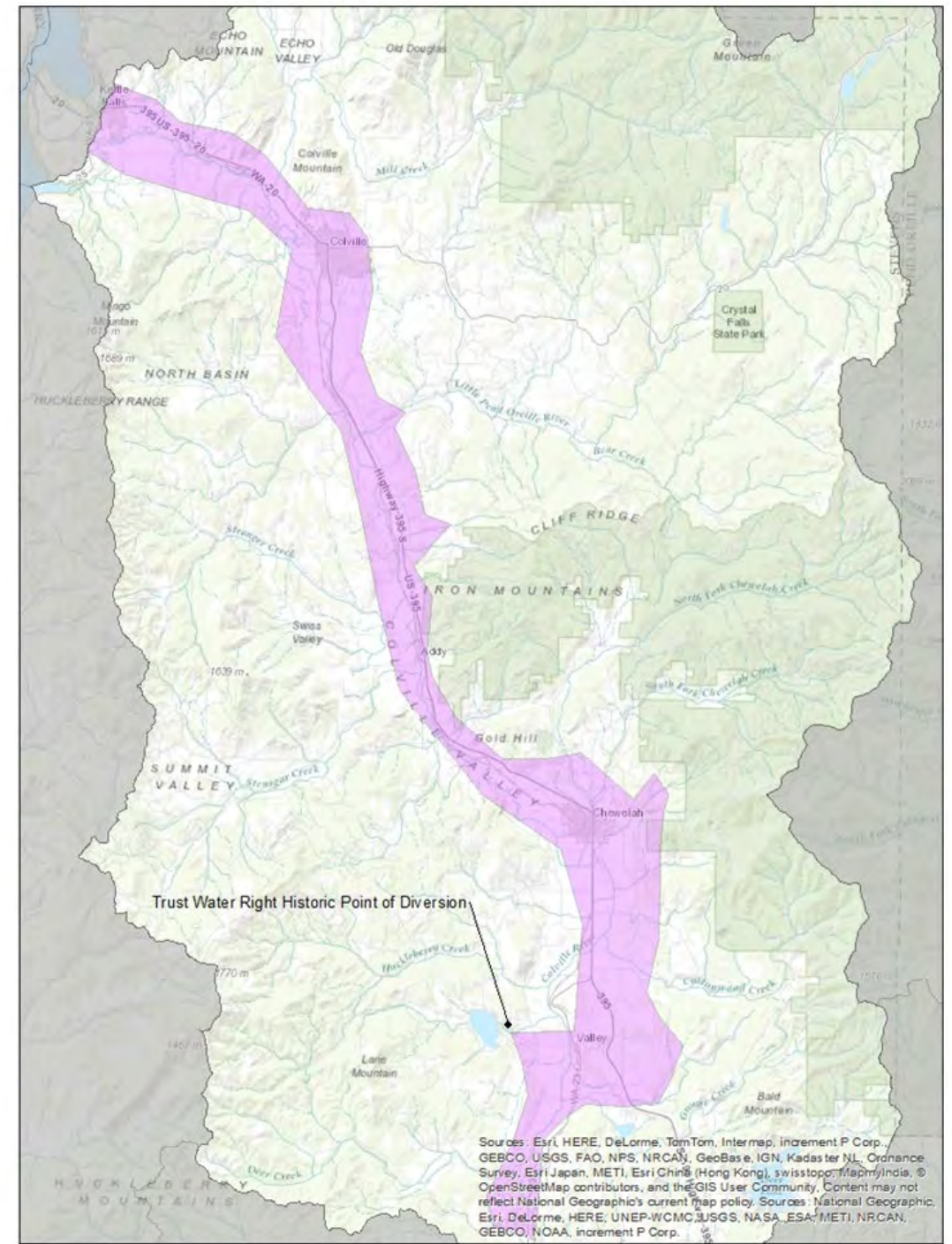


Change in Understanding of Lower Aquifer Connection to Columbia River

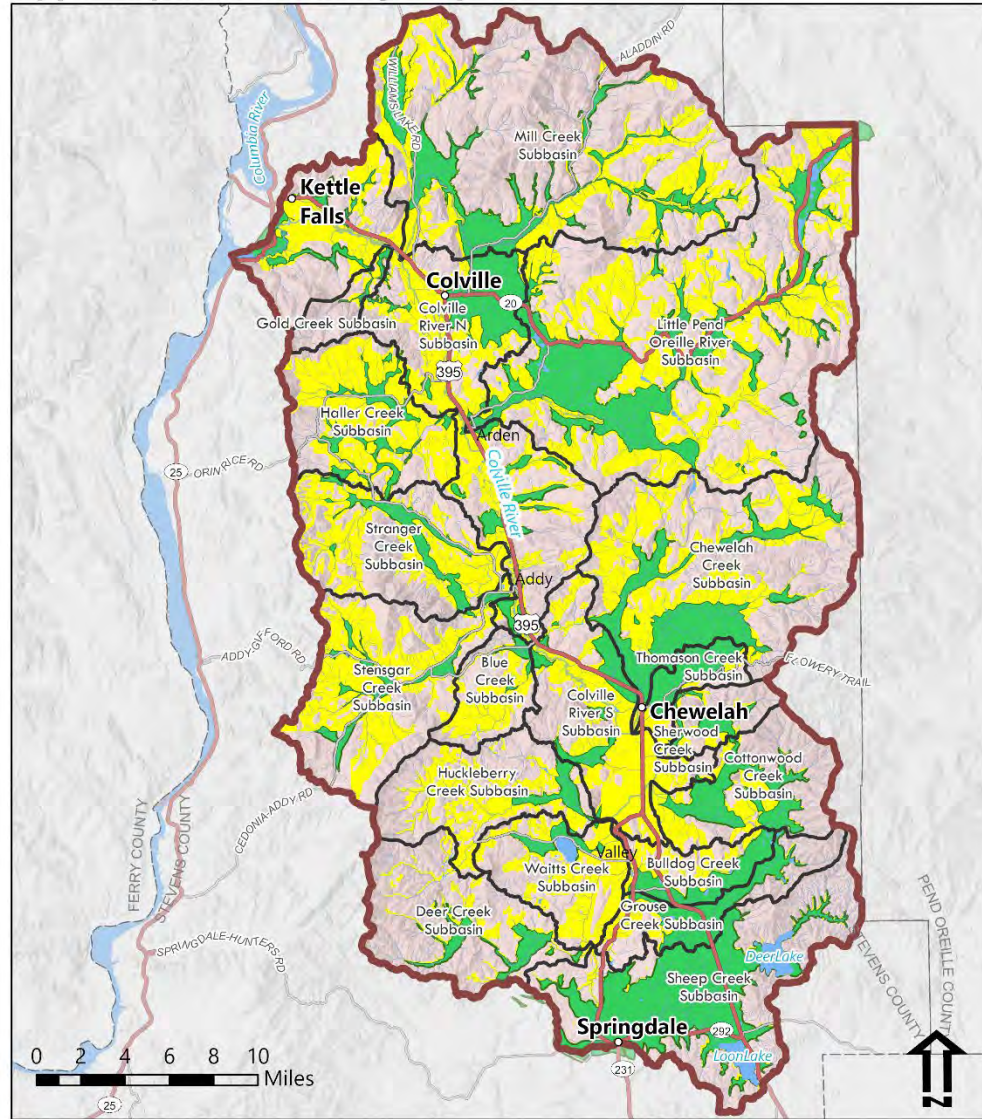


MEYERS FALLS –

- No Lower Aquifer
- USGS Flow Gauge (River Mile 5.0)



Upper Aquifer Suitability Map



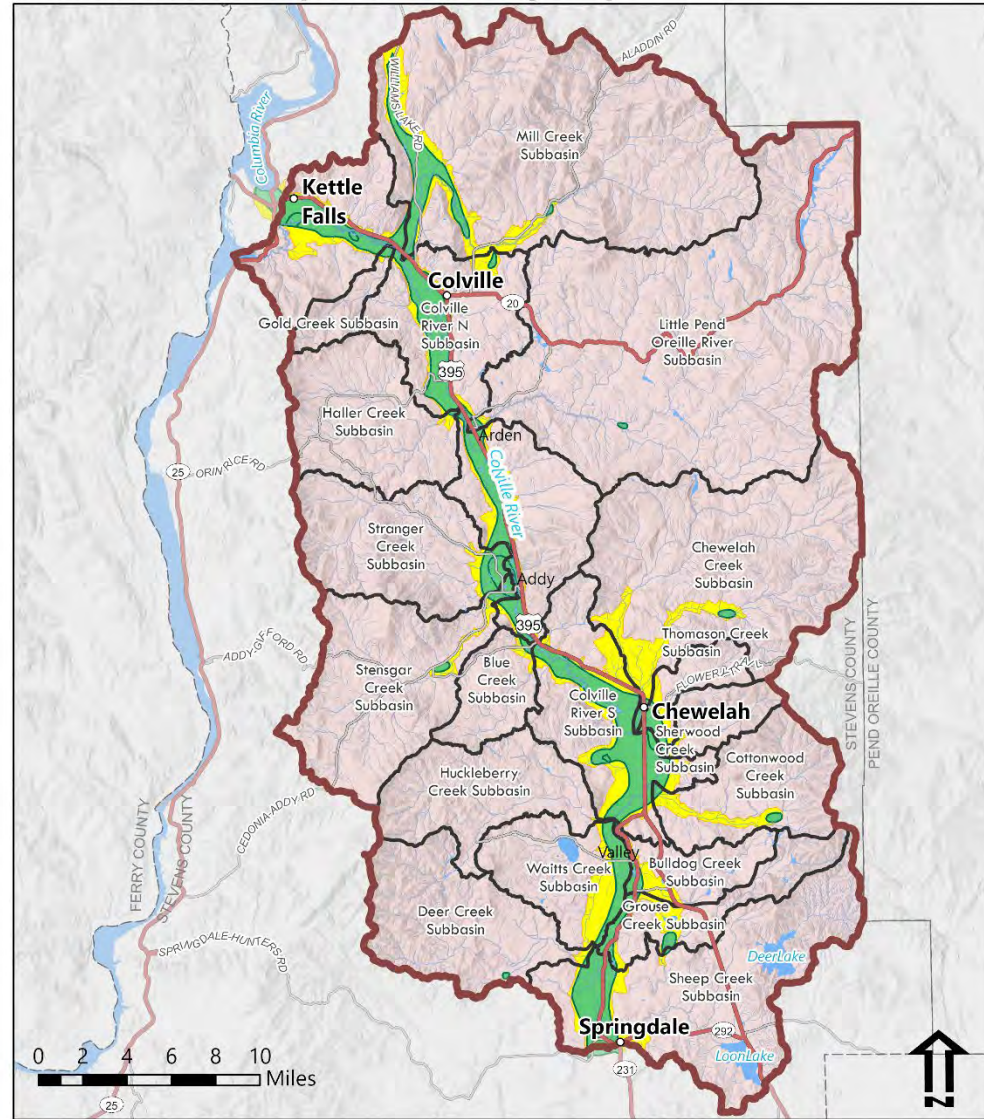
- Upper aquifer as documented in USGS Colville River Hydrogeology Report (WRIR 03-4128)
- Zone requiring additional studies to determine presence of upper aquifer
- Bedrock as documented in WRIA 59 90.94 Watershed Plan Addendum
- Sub-basins

Map produced by Stevens County Planning

Disclaimer:
 This GIS Data is deemed reliable but provided "as is" without warranty of any representation of accuracy, timeliness, reliability or completeness. These map documents do not represent a legal survey of the land and are for graphical purposes only. Use of this Data for any purpose should be with acknowledgment of the limitations of the Data, including the fact that the Data is dynamic and is in a constant state of maintenance, correction, and update.



Lower Confined Aquifer Suitability Map



- Lower confined aquifer documented in Colville River Hydrogeology Report (WRIR 03-4128)
- Zone requiring additional studies to determine presence of lower confined aquifer
- Zone where it is inferred that lower confined aquifer is not present
- Sub-basins

Map produced by Stevens County Planning

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WATER BANKING OPERATION

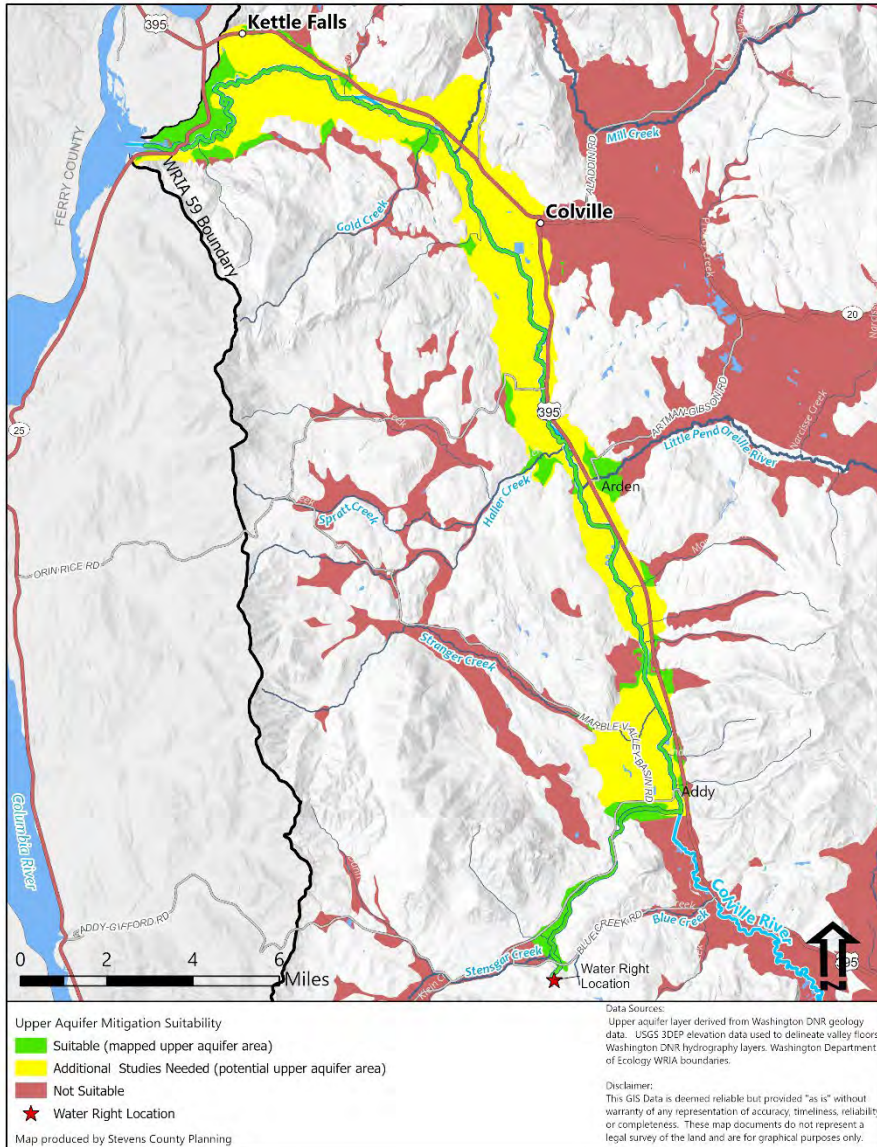
Ecology's Acceptance into the State Trust Water Right Program

- Trust Water Right Agreement between Ecology and the Water Right Holder
 - Water Right holder conveys Water Right in exchange for and in accordance with Agreement:
 - Identifies the water right's attributes and consumptive use
 - Identifies Ecology's restrictions of using the water right for mitigation
 - Identifies the mitigation suitability map
 - Terms and conditions for selling mitigation to third-parties
 - Management of the Water Rights
 - Contract terms
 - Annual Reporting Requirements
- Executed by all parties, and typically recorded with the Deed conveying the water right to the State Trust Water Right Program
- WRIA 59: We started to work with Ecology to establish TWA during the initial change for the underlying water right that seeded the Bank (in 2023).
 - Still waiting for Ecology's final review. Hoping to have it fully established in summer 2024.

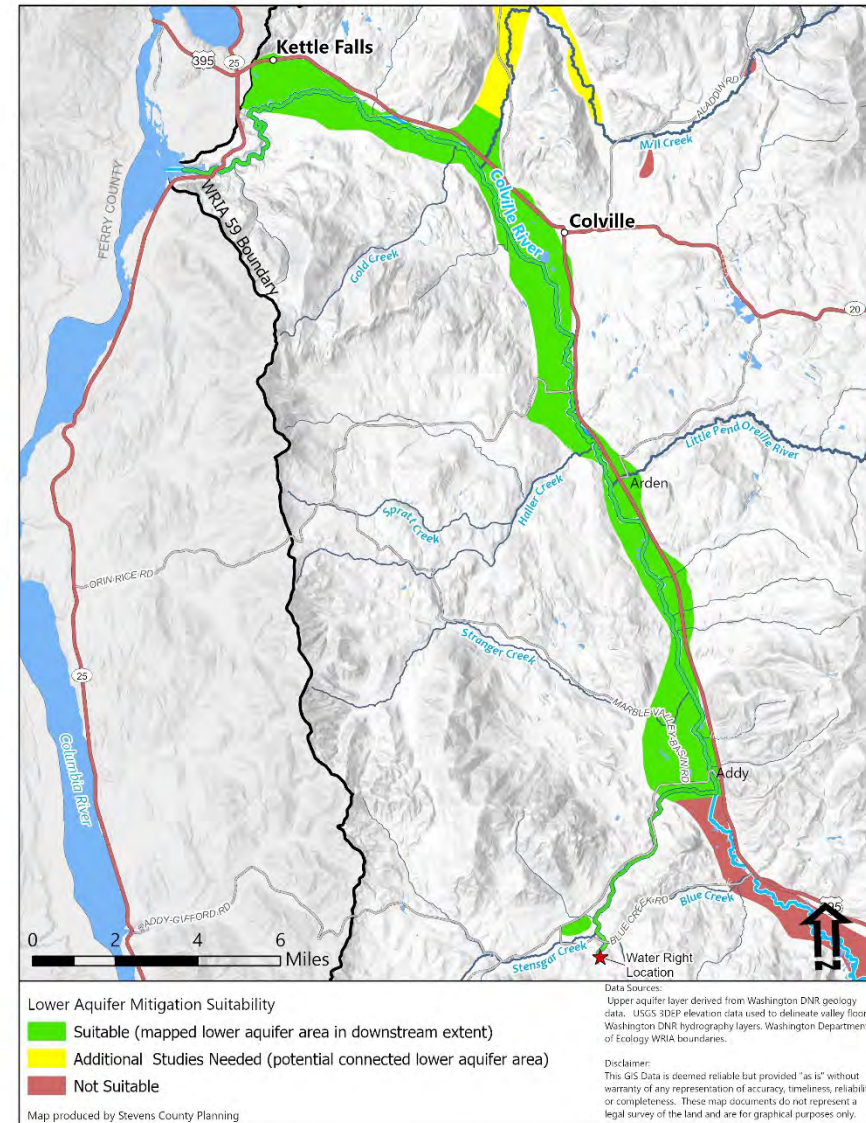


EXISTING WATER RIGHT SEEDING WRIA 59 WATER BANK

Upper Aquifer Mitigation Suitability Map - Downstream Extent



Lower Aquifer Mitigation Suitability Map - Downstream Extent



HOW TO ACQUIRE WATER RIGHTS FOR BANK-Grant Funding: Purchase and Sale Agreement

Ecology Water Bank process

Purchase and Sale Agreements for Water Rights

- Purchase Price is based on a value per acre foot of consumptively used water, as approved by the Washington Department of Ecology;
- Agreement contingent upon obtaining Ecology Water Banking grant funding;
- Agreement contingent upon obtaining Ecology's approval to transfer the Water Right to the State Trust Water Right Program.
- 2/3 of Consumptive Use will be allowed for the Water Bank, 1/3 to permanent instream flows.

Processing through the Conservancy Board or Cost Reimbursement Contract

- Stevens County Water Conservancy Board extent and validity review
- Local involvement in the processing brings more information to the local water user community
- Work with Ecology for approval and designation of mitigation zones



FUTURE SEEDING OF WATER BANK

WRIA 59 Bank Currently have two water rights under Purchase & Sale agreements

- Currently seeking funding through the Water Banking grant funding;
- Agreement contingent upon obtaining Ecology's approval to transfer the Water Right to the State Trust Water Right Program.
- Will conduct change process through the Stevens County Water Conservancy Board.

Also Reviewing a third water right in headwaters

- Currently conducting preliminary Extent & Validity analysis
- Negotiating a Purchase & Sale agreement

Several others identified if potential future funding becomes available



WRIA 59 WATER BANK MANAGEMENT TEAM

- **Erik Johansen**, Land Services Director, Stevens County;
- **Adam Cares**, Natural Resource Planner, Stevens County Land Services
- **Gene St.Godard, P.G., L.Hg., CWRE**; Principal Hydrogeologist, Water & Natural Resource Group, Inc.;
- **Jessica Kuchan**, Attorney, Confluence Law, PLLC;



QUESTIONS????????

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MEYERS FALLS -H2OYearAvg (cfs)

