

MEMORANDUM

Project No.: 140129

May 18, 2015

To: Mike Hermanson – Spokane County Utilities

cc: Rob Lindsay – Spokane County Utilities

From: Carl Einberger, LHG, Aspect Consulting, LLC
Dan Haller, PE, Aspect Consulting, LLC

Re: **Summary of Policy Advisory Group Meeting #3 (4/29/15)**
Little Spokane Water Banking Feasibility Study

Background

Spokane County (the County), in conjunction with Stevens and Pend Oreille Counties, is evaluating the use of a water bank to address existing and potential regulatory constraints on existing and new water use, in Water Resource Inventory Area (WRIA) 55, the Little Spokane Watershed.

Considerable uncertainty exists regarding the future legal, regulatory, and policy environment that regulation of water resources in WRIA 55 will be subject to. In response to this uncertainty, the County is pursuing a water banking feasibility study to explore options for providing more certainty to existing and new water uses in the basin.

As part of this process, the County has convened a Policy Advisory Group (PAG) to allow interagency and stakeholder coordination and evaluation of alternatives for water banking in the watershed. Aspect Consulting LLC (Aspect) has been engaged by the County to provide consulting services for the Little Spokane Water Banking Feasibility Study. Aspect has been coordinating and moderating PAG meetings for the County.

Overview of Meeting Agenda

The third PAG meeting for this Feasibility Study occurred on April 29, 2015, at the Riverside Fire Station (Spokane Fire District 4). The following agenda was covered in the meeting:

- Overview of key elements of project, work in progress, and ongoing schedule
- Tri-County cooperative approach for water bank development and management
- Update on Pend Oreille Diversion Appraisal Study
- Review of Watershed Planning Implementation and Flow Achievement Grant Application for continued development of a WRIA 55 water bank
- Update on water rights review for bank seeding
- Open discussion and closing, expectations for PAG meeting #4

Aspect also prepared a PowerPoint presentation to guide the meeting discussion (attached).

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PAG Attendees

A list of PAG members present at PAG Meeting #2 follows:

Mike Hermanson – Spokane County Utilities
Rob Lindsay – Spokane County Utilities
Todd Mielke, Spokane County
Ethan Vodde, Spokane County
Karen Skoog, Pend Oreille County
Mike Lithgow, Pend Oreille County Community Development
Don Dashiell, Stevens County
Erik Johansen, Stevens County Land Services
Rusty Post, Department of Ecology
Ty Wick, Spokane County Water District #3
Dick Price, Stevens PUD
Susan McGeorge, Whitworth Water District
Ken Merrill, Kalispel Tribe Natural Resources Department

Dan Haller and Carl Einberger of Aspect attended in their roles as the County's consultants on this project. Dan served as the moderator of the meeting, and Dan and Carl led portions of the meeting discussion.

Meeting Summary

Key topics addressed in the discussion are summarized below, and additional information can be found in the attached presentation:

- An overview the Feasibility Study was presented for the benefit of new attendees. The overview included:
 - Reasons for considering water banking in WRIA 55 and water banking incentives.
 - A review of the approach for the Feasibility Study, and the ongoing schedule status for additional PAG meetings and study deliverables.
 - A review of the demand analysis conducted for WRIA 55.
 - Estimates of pre- and post-instream flow rule permit exempt wells.
 - Alternatives for water bank seeding.
 - Water rights screening for bank seeding.
- Key tasks in progress were summarized, including:
 - Bank seeding appraisal work, including additional water rights assessment and an appraisal study for a potential Pend Oreille source.
 - Coordination among Spokane, Pend Oreille, and Stevens County for water bank management
 - Market evaluation (regional evaluation of water pricing, extrapolation of existing data to WRIA 55)
 - Development of bank structure
- County departments potentially affected by water banking were discussed.

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- Additional discussion of the market evaluation occurred, included sources of data for the analysis to develop a qualitative evaluation of level of certainty and applicability to WRIA 55.
- Examples of existing cooperative agreements that could provide a model for Tri-County water banking were discussed, and key elements of a successful agreement were outlined.
- Additional discussion of structural options for the water bank were discussed, and questions posed to the PAG, including:
 - Do the counties view the historic watershed management process as successful?
 - Is the NE Tri-County Health District a potential model for a cooperative organization with a clear mission?
 - What experiences do the counties have with contracting work with NGOs?
 - What experiences do the counties have with contracting administrative work with private companies (as opposed to project-based work)?
 - Would a strong state-led banking model be supported?
- Basin management approaches were reviewed, including gage management and consumptive use considerations.
- Discussion of additional work on water rights screening was summarized, including ranking of the water rights for further evaluation.
- Water right acquisition approaches were reviewed.
- Incentives for bank seeding with a Pend Oreille source were discussed, including:
 - Water is considered available by Ecology
 - Limited interruptibility (i.e. more reliability)
 - Proximity of headwaters of Little Spokane
 - Opportunities for both supply and mitigation
 - Initial work indicates potential feasibility of project
- Clarification of tasks included in the current Pend Oreille Appraisal Study was presented. The study does not include any detailed design work, and is limited to an appraisal only. Tasks include:
 - Develop alternatives and demand assessment for quantities
 - Analysis of land use, ownership, available hydrogeologic/hydrologic information
 - Field reconnaissance
 - Permitting evaluation
 - Appraisal-level cost estimates
 - Water right application(s)
- The pending Watershed Planning Implementation and Flow Achievement Grant application to continue development of a water bank in WRIA 55 was reviewed. A detailed list of tasks included in the grant application is presented in the attached PowerPoint presentation.

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Since the PAG meeting, the grant application has been submitted to Ecology and is pending review. Key tasks include:

- Stakeholder collaboration
 - Public outreach
 - Develop and finalize water bank operational framework
 - Water right acquisition outreach
 - Water right procurement
 - Tributary basin bank management technical support
 - Pend Oreille field investigations/data analysis
- Open discussion among the PAG was conducted during and at the end of the meeting. Key discussion points included:
 - Physical water availability and responsibility for assessing this within each county. County departments will need to be educated regarding management of the water banking process.
 - Filing and recording of mitigation certificates.
 - Potential future issues on legality of exempt wells, and risk from litigation or regulatory changes.
 - Potential impacts to Tri-County workloads and general fund. Key factor will be addressing and mitigating fiscal liability and burden.
 - Additional discussion on management structures, including Watershed Management Partnerships and board of joint control, and use of an enterprise fund.
 - Recognition that development of a management structure will be needed following completion of the Feasibility Study.
 - The need to guard against use of a water bank for speculation and mitigation certificate ‘flipping’.
 - Linkages between streamflow and bank performance, and rationale for seeding with water rights senior to the instream flow rule.
 - Ecology noted unlike some other states, Washington does not have different priority rules during times of drought.
 - The need to be in the lead for obtaining water rights should a bank be established, with the goal of minimizing speculation.
 - Based on PAG recommendations, the water rights figures will be updated to indicate levels of ‘priority for further review’, since the current work is not a full extent and validity analysis.
 - The meeting was adjourned. The next PAG meeting is scheduled for June 17, 2015.

Attachments:

Attachment 1 – PAG Meeting #3 PowerPoint Presentation

S:\Little Spokane Water Bank 140129\PAG\LSWB PAG Meeting 3 summary.docx



WRIA 55, PAG Meeting #3

Little Spokane River Basin Water Bank Feasibility Study

April 29, 2015

Presented by



with

Carlstad Consulting

Cascadia Law Group

Washington State University

PAG Meeting #3 Agenda

- Overview of Water Banking Feasibility Study
- Overview of Work Conducted since 2nd Meeting
- Tri-County Cooperative Approach for Water Bank Development and Management
- Update on Pend Oreille Diversion Study
- Review of Watershed Planning Implementation and Flow Achievement Grant Application
- Update on Water Rights Review for Bank Seeding
- Closing, Expectations for PAG Meeting #4

Why Water Banking in WRIA 55?

- 1976 Instream Flow Rule (WAC 173-555)
 - Is not met in most water years
 - Closed tributaries
 - Created interruptible rights
 - Has uncertainty with respect to groundwater
- Increased County legal availability responsibility
- New clarity from Courts on rule interpretations (Hirst Decision, etc.)
- Emerging Ecology water availability guidance and Instream Flow Rule interpretations

Water Banking Incentives

- Current hold on new water rights permits
- Potential regulation of exempt wells
- Source of permitted water for new rural subdivisions/cluster developments (Campbell and Gwinn consistency)
- Source of water for currently interruptible water rights

Little Spokane Water Banking Feasibility Study

- Legal, Regulatory, and Policy Framework
- Future Water Demand Evaluation
- Potential Availability of Water Rights for Bank Seeding
- Water Market Evaluation
- Evaluation of Pend Oreille Source for Bank Seeding and Habitat Improvement
- Bank Structure and Water Transfer Framework

WRIA 55 PAG Meetings

Meeting 1 (October 15, 2014):

- Accept operating guidelines
- Understand regulations/risk
- Define banking preferences
- Agree on demand approach

Meeting 2 (January 15, 2014):

- Demand evaluation
- Supply evaluation
- Bank seeding options

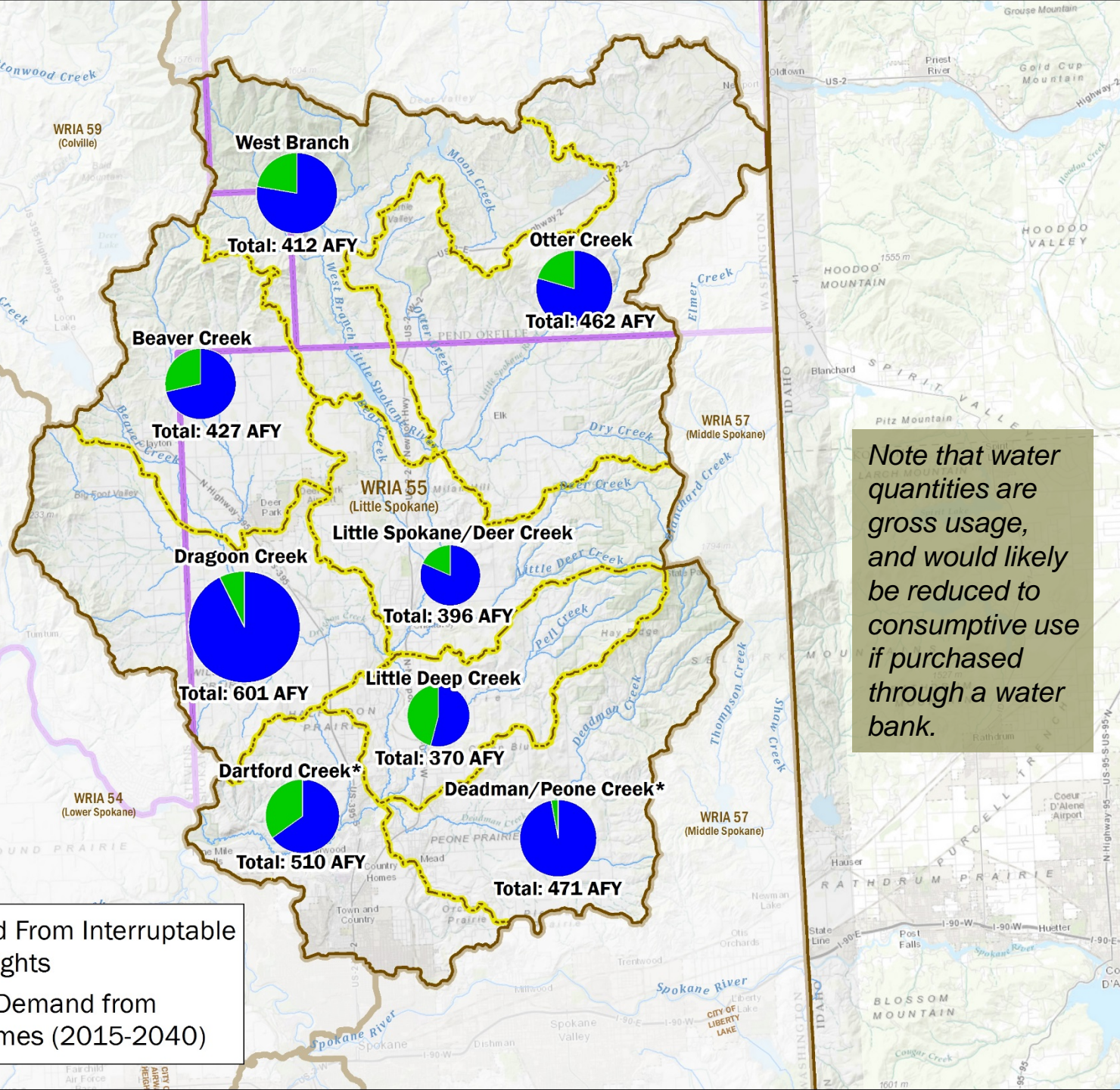
Meeting 3 (April 29, 2015):

- Tri-County management approaches
- Update on water rights screening
- Update on Pend Oreille appraisal study

Meeting 4 (May 27, 2015):

- Draft Feasibility Study
- Market conditions
- Pend Oreille appraisal study
- Review bank pros/cons
- Recommended next steps
- Ongoing water banking activities

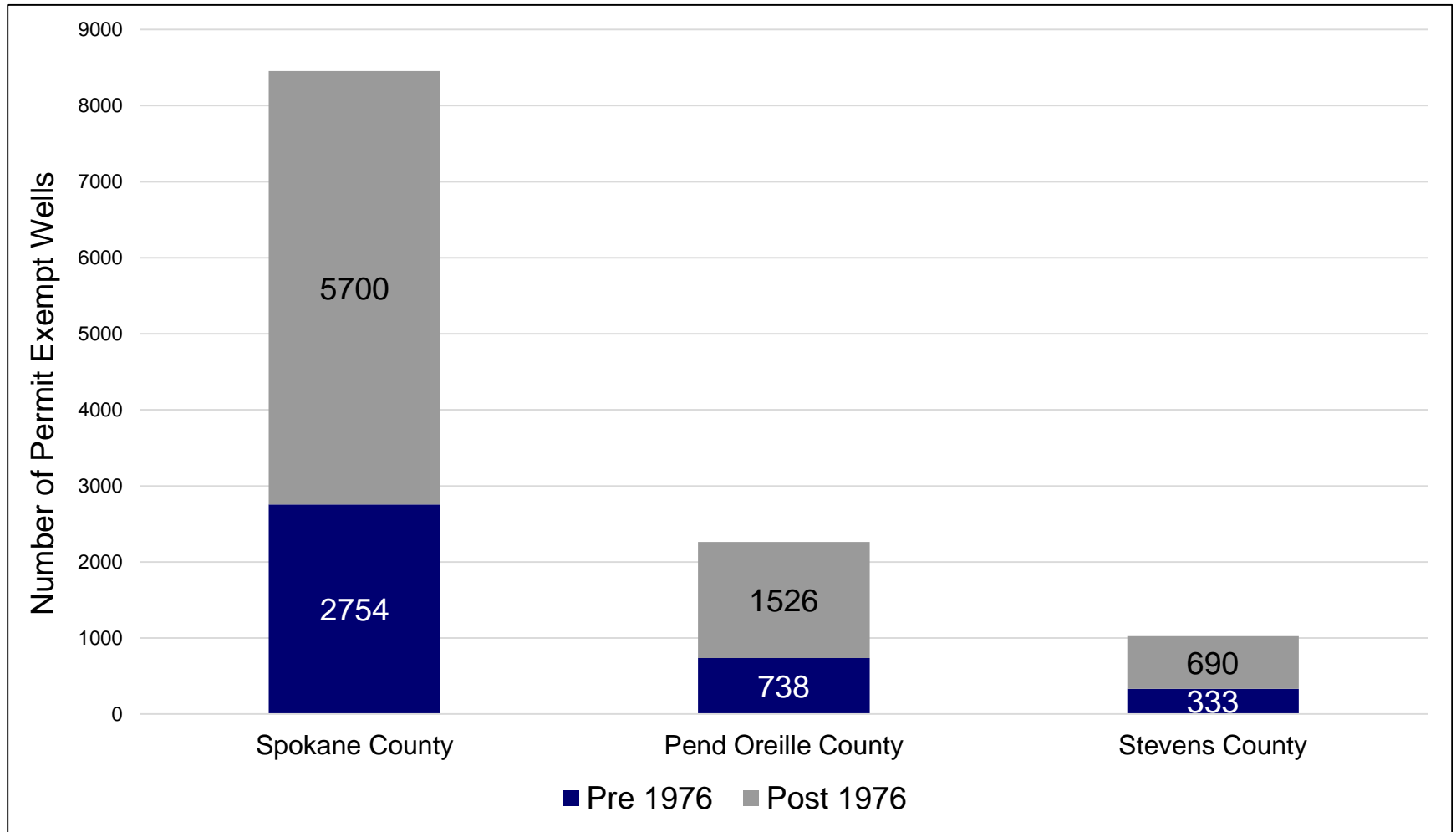
Geographic Distribution of Potential Future Water Demand for Self Supplied Homes with Permit Exempt Wells and Interruptible Surface Water Rights



Note that water quantities are gross usage, and would likely be reduced to consumptive use if purchased through a water bank.

- Possible Demand From Interruptible Surface Water Rights
- Forecasted New Demand from Self Supplied Homes (2015-2040)

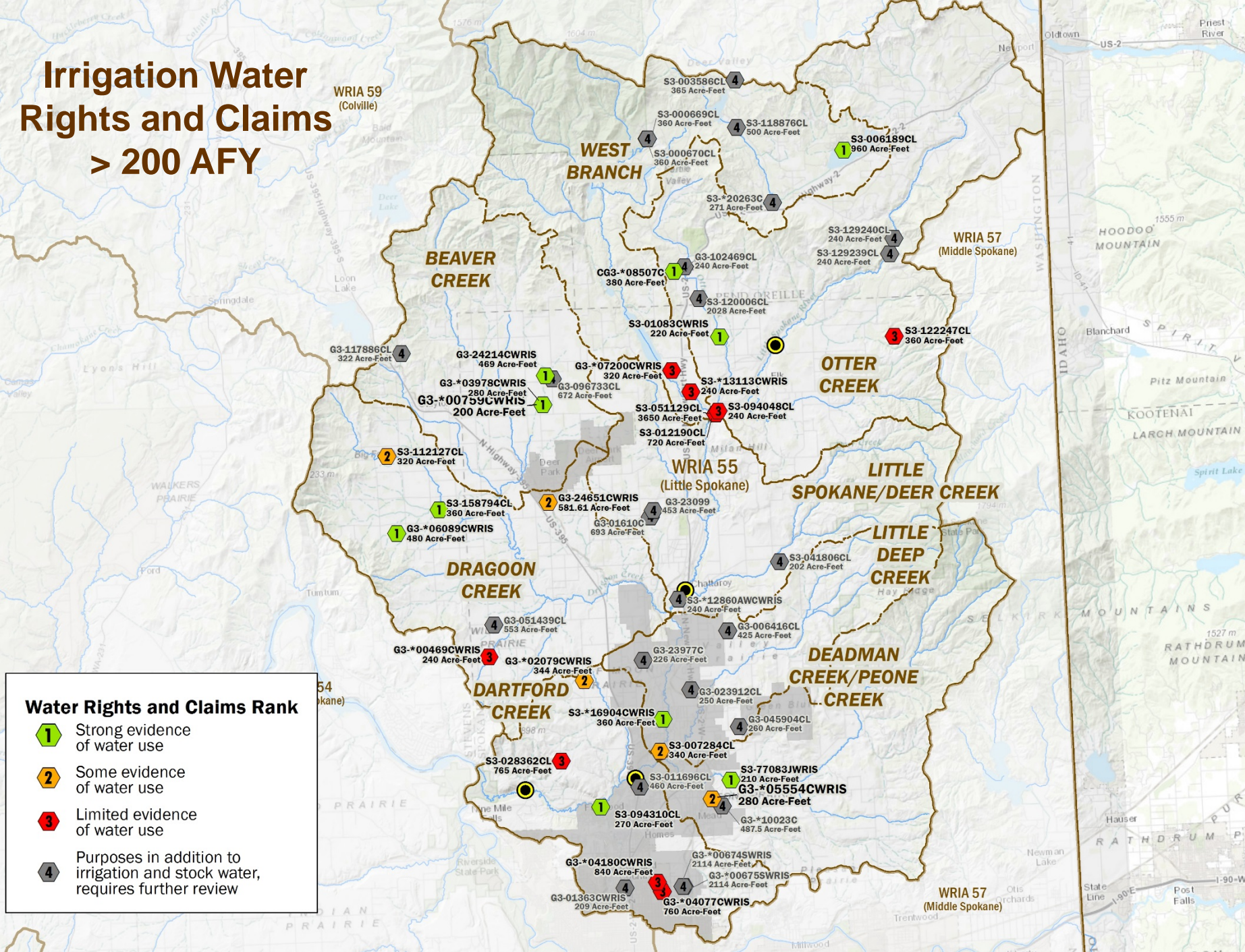
Estimate of Pre- and Post-Instream Rule Permit Exempt Wells in WRIA 55



Water Bank Seeding

- In-Kind (water for water)
 - Acquisition of pre-rule water rights (non-interruptible) that have proven extent and validity
 - Interbasin transfers (Pend Oreille example)
 - Storage (reservoirs, SAR, ASR)
 - Conservation
- Out-of-Kind (habitat focused)
 - Restoration of instream and riparian habitat

Irrigation Water Rights and Claims > 200 AFY



Water Rights and Claims Rank

- 1 Strong evidence of water use
- 2 Some evidence of water use
- 3 Limited evidence of water use
- 4 Purposes in addition to irrigation and stock water, requires further review

Key Tasks in Progress

- Bank seeding appraisal work:
 - Ongoing water rights assessment
 - Appraisal level analysis of alternatives for Pend Oreille transfer
- Coordination among Spokane, Pend Oreille, and Stevens County for water bank management
- Market Evaluation (Regional evaluation of water pricing, extrapolation of existing data to WRIA 55)
- Development of bank structure and focus areas

County Departments Potentially Affected by Water Banking

	Formation	Operations	Management
Stevens County			
Land Services	X	X	
Auditors		X	X
Treasurers	X	X	
Public Works		X	X
Assessor		X	
Pend Oreille			
Planning	X	X	
Auditors		X	X
Treasurers	X	X	
Public Works		X	X
Assessor		X	
Spokane County			
Building and Planning	X	X	
Auditors		X	X
Treasurers	X	X	
Utilities	X	X	X
Assessor		X	
Spokane Regional Health District		X	X

Market Evaluations

- Cost of Water and Cost of Administration
 - Existing Bank Data
 - Published Sources
 - Recent Water Right Transactions
 - Connection Fees in WRIA 55
 - Cost of Water Supply Development (Water Rights and Infrastructure)
- Qualitative evaluation of level of certainty and applicability to WRIA 55

Tri-County Cooperative Agreement

- Cooperative agreement will allow structural task to move forward.
- Examples:
 - Quad Cities Permit and MOA's
 - White Salmon, Bingen, Port of Klickitat Regional System
 - Klickitat County, Benton County, Ecology Switzler Reservoir
 - Methow Valley Irrigation District, Twisp, Ecology Water Supply Project

Key Elements of a Successful Agreement

- Permitting Responsibilities
- Shared Benefits
- Shared Risks
- Shared Financing
- Coordinated Outreach

What is a Water Bank?

Water banks redistribute water right authority between sellers and buyers.



Structural Options for Integrated Water Supply Development

- Separate Multi-Representation Legal Entity
- Nominal County Lead with Supporting County Administration
- State Administration
- Contractual Options (NGO's, Private Administration)

Structural Options For Water Bank

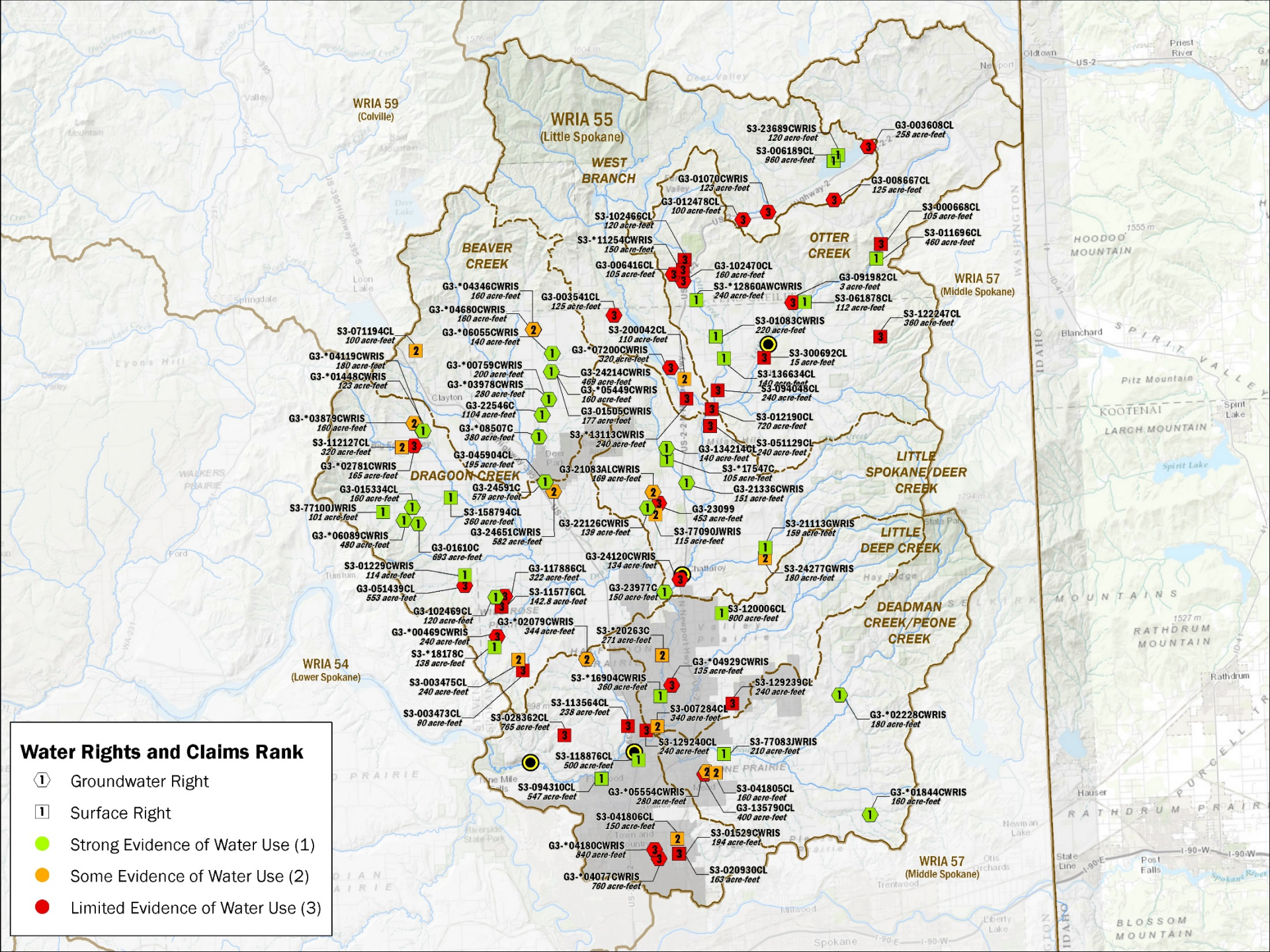
- Do the Counties view the historic watershed management process as successful?
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Water Bank Seeding

- In-Kind (water for water)
 - Acquisition of pre-rule water rights (non-interruptible) that have proven extent and validity
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Basin Management Approaches

- “One Bucket”
 - Yakima Basin – Managed to Parker Dam and Total Water Supply Available
- Wenatchee Basin reservation
 - Consumptive use; Accounting based on critical low flow month (Sept)
 - Habitat projects and instream flow augmentation sufficient for basin-wide management.
- “One Molecule”
 - Drop for drop mitigation (Dungeness)
- Applicability/uncertainty for use of Out-of-Kind Mitigation



Water Rights and Claims Rank

- ① Groundwater Right
- ① Surface Right
- Strong Evidence of Water Use (1)
- Some Evidence of Water Use (2)
- Limited Evidence of Water Use (3)

Water Right Acquisition

- Rank 1: 12,400 ac-ft/yr
- Rank 2: 6,500 ac-ft/yr
- Rank 3: 9,900 ac-ft/yr
- Other smaller water rights: 28,800 ac-ft/yr
- Caveat: Full extent and validity analysis has not been completed – screening level only

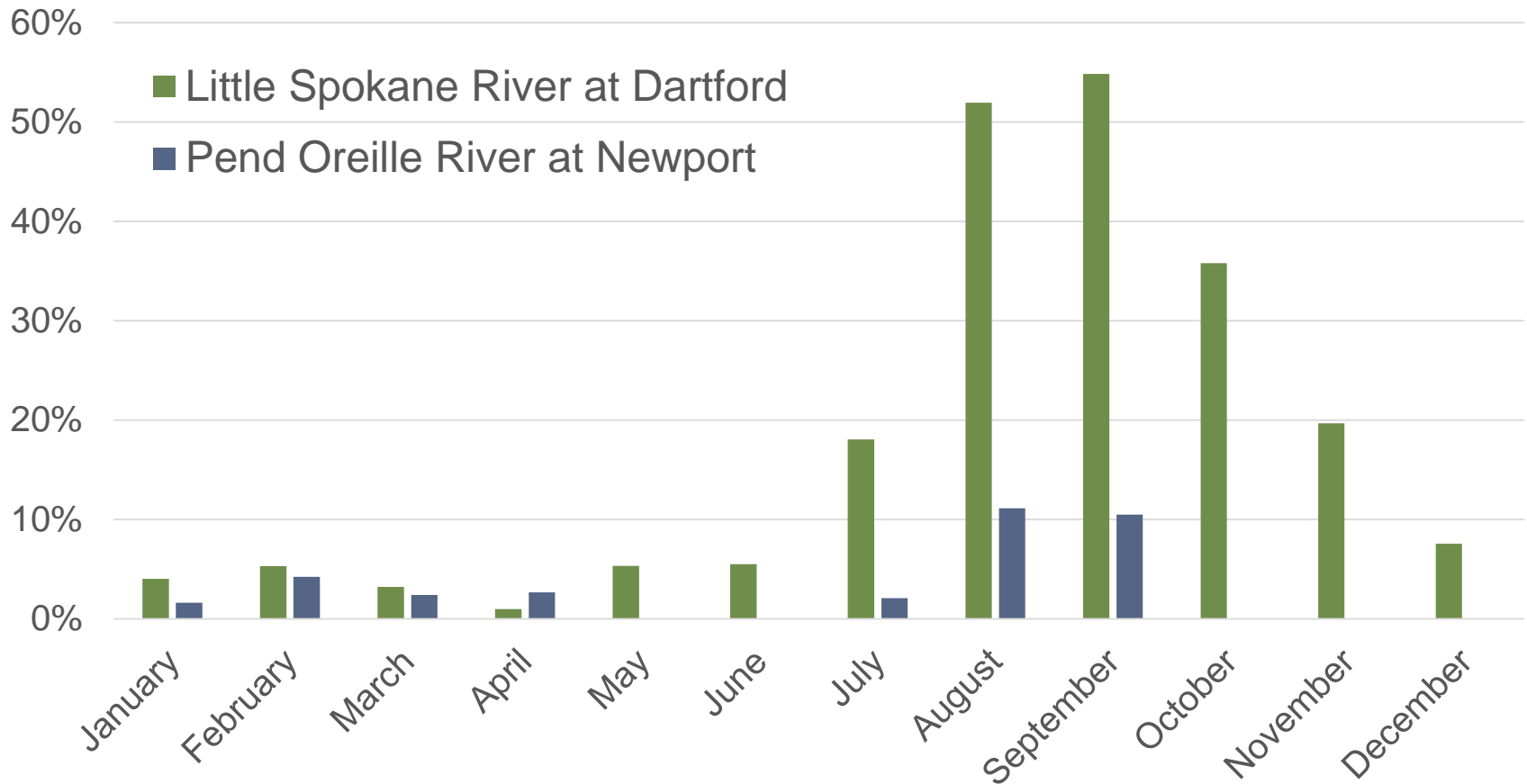
Water Right Acquisition

- Contact water right holders directly
- Inform water right holders and public through workshops on water banking project
- Monitor real estate listings
- Auction mechanisms
- 3rd Party Brokers
- Network with purveyors, conservation districts, and notify conservancy board

Pend Oreille Source Incentives

- Water is considered available by Ecology
- Limited interruptibility = more reliability
- Proximity of headwaters of Little Spokane
- Opportunities for both supply and mitigation
- Initial work indicates potential feasibility of project.

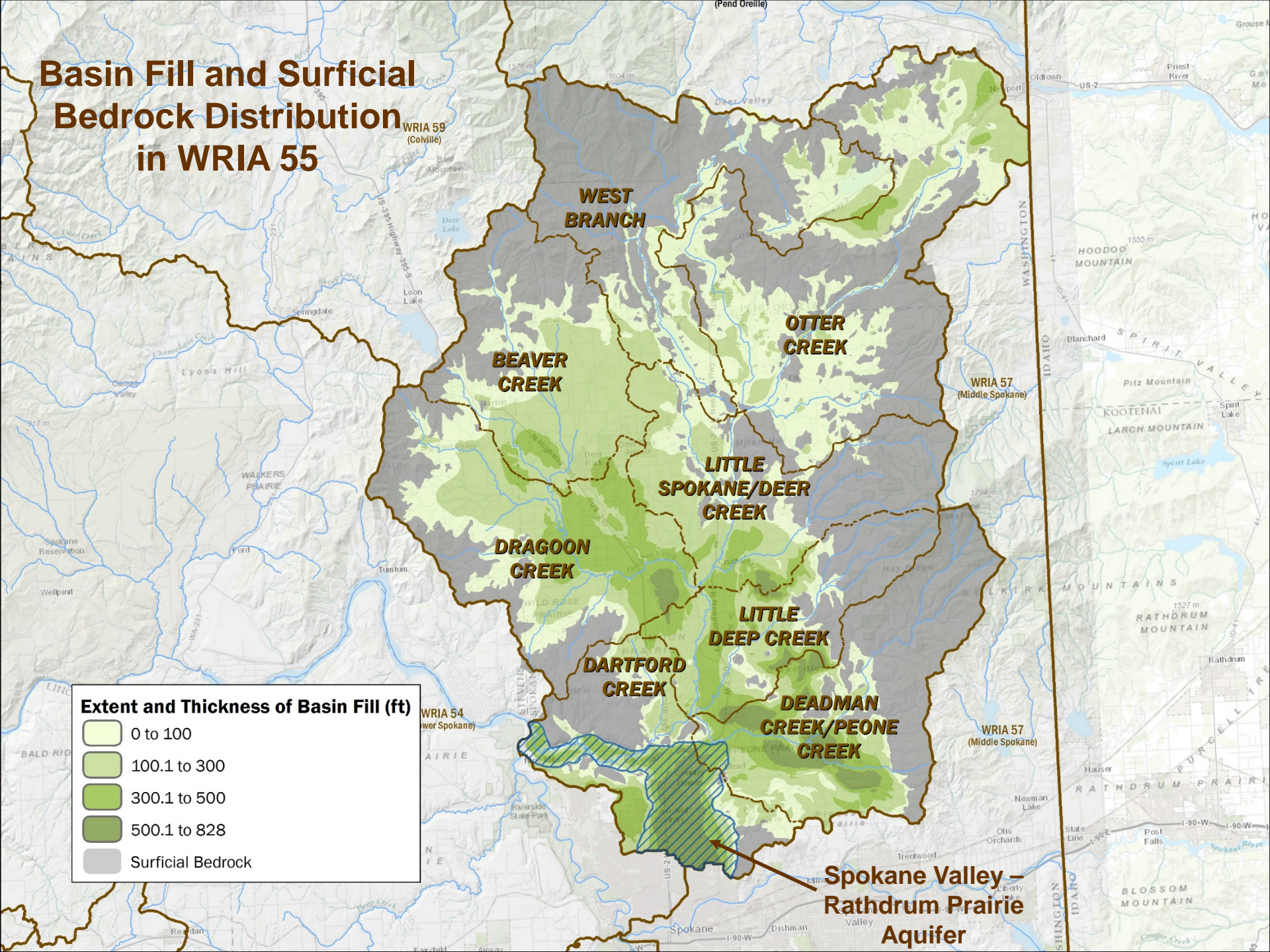
Frequency Below Base/Recommended Flows



- **Minimum instream flow range Little Spokane at Dartford = 115 to 250 cfs**
- **WDFW recommendation (SWSL) for Pend Oreille at Newport = 7,700 cfs**

Note: Graph shows percentage of days in which a 7-day moving average of mean daily flow did not meet base flow/curtailment flow, 1993 - 2013

Basin Fill and Surficial Bedrock Distribution in WRIA 55



WEST BRANCH

BEAVER CREEK

OTTER CREEK

LITTLE SPOKANE/DEER CREEK

DRAGOON CREEK

LITTLE DEEP CREEK

DARTFORD CREEK

DEADMAN CREEK/PEONE CREEK

Extent and Thickness of Basin Fill (ft)

- 0 to 100
- 100.1 to 300
- 300.1 to 500
- 500.1 to 828
- Surficial Bedrock

Spokane Valley - Rathdrum Prairie Aquifer





Pend Oreille Appraisal Study

- Develop alternatives and demand assessment for quantities
- Analysis of land use, ownership, available hydrogeologic/hydrologic information
- Field reconnaissance
- Permitting evaluation
- Appraisal-level cost estimates
- Water right application(s)
- Study does not include any detailed design work – limited to appraisal level

Watershed Planning Implementation and Flow Achievement Grant Application

- Stakeholder Collaboration
 - Existing PAG would continue
 - Technical Advisory Group would be established and facilitate effective communication to PAG

- Public Outreach
 - Public meetings/workshops in each County
 - Respond to inquires from interest groups/others
 - Mailers to watershed property owners
 - Development and maintenance of project website

- Develop and Finalize Water Bank Operational Framework
 - Complete tri-County agreement to establish water bank framework
 - Establish funding and policy guidelines
 - Address water bank accounting and long-term water bank management
 - Establish agreement between Ecology and Counties on mitigation requirements/bank credits

Watershed Planning Implementation and Flow Achievement Grant Application (cont.)

- **Water Right Acquisition Outreach**
 - Public outreach to key water right holders
 - Establish portfolio of interested water right holders
 - Prioritize water rights for purchase

- **Water Right Procurement**
 - Conduct due diligence on water rights identified for purchase
 - Complete water right transfers, including purchase costs.

- **Tributary Basin Bank Management Technical Support**
 - Historical flow research and analysis
 - Review of available hydrogeologic information
 - Assessment of data on aquatic habitat needs
 - Prioritization of areas for further study
 - Aquatic habitat field investigations
 - Evaluate groundwater/surface water interaction:
 - Streamflow flow and temperature measurements/seepage runs
 - Installation and monitoring of near stream piezometers
 - Private/public well water level measurements
 - Isotope comparison of surface water and groundwater to evaluate hydraulic connection

Watershed Planning Implementation and Flow Achievement Grant Application (cont.)

- Pend Oreille Field Investigations/Data Analysis – Little Spokane Headwaters
 - Establish gaging stations
 - Stream geomorphology/hydrology assessment, including road crossings
 - Water quality data review, sampling, and analysis
 - Evaluate groundwater/surface water interaction:
 - Streamflow flow and temperature measurements/seepage runs
 - Installation and monitoring of near stream piezometers
 - Private/public well water level measurements
 - Isotope comparison of surface water and groundwater to evaluate hydraulic connection

- Pend Oreille Field Investigations/Data Analysis– Pend Oreille Source
 - Install test well(s) and conduct aquifer testing
 - Water quality data review, sampling, and analysis (nutrients, PCBs, etc.)
 - Evaluate groundwater/surface water interaction:
 - Monitoring/water quality testing during aquifer testing
 - Review of existing well data
 - Development of conceptual hydrogeologic model of Pend Oreille River and adjacent aquifer
 - Limited numerical groundwater/surface water flow model if appropriate

Watershed Planning Implementation and Flow Achievement Grant Application (cont.)

- **Pend Oreille Source – Pre-Design Evaluations**
 - Update existing data review and data gap analysis
 - Evaluate land access options (contact with property owners, physical limitations, right-of-way issues)
 - Coordination with City of Newport and other entities as required
 - Evaluate reclaimed water options
 - Evaluate potential water quality impacts
 - Evaluate potential impacts on future water allocations from the Pend Oreille River
 - Final assessment of preferred alternative (groundwater or surface water source)
 - Establish conveyance approach
 - Develop additional mitigation options (wetland enhancement, instream flow augmentation)

- **Pend Oreille Source - Preliminary Engineering Design**
 - Conveyance system, road crossing modifications
 - Stream channel modifications
 - Wetland/habitat enhancement
 - Wellfield (or pump station) design
 - Detailed cost estimates

- **Pend Oreille Source – Permitting Evaluation/Scoping**
 - Establish necessary permits based on alternative selection
 - SEPA and other permit scoping/planning
 - Agency consultations
 - Pursue water rights permitting

PAG Meeting 4 – May 27, 2015

- Draft Water Banking Feasibility Study (May 19th)
- Draft Memo on Pend Oreille is due in Early June, but detailed update will be provided
- Key discussion: Structural/management approach to water bank

Open Discussion

