

WRIA 55, PAG Meeting #1

Little Spokane River Basin Water Bank Feasibility Study

October 15, 2014

Presented by



with

Carlstad Consulting
Cascadia Law Group
Washington State University

PAG Meeting #1 Agenda

- Introductions, Agenda Check, Operating Guidelines
- Overview of Scope and Decisions
- Regulatory Overview
- Water Banking Policy, Framework Summary
- Open Discussion
- Decision-Making
- Closing, Expectations for PAG Meeting #2

PAG Operating Guidelines

- Equal representation & participation
- Consensus desired, but not required
- Representation of individual organizations expected
- Collaborative problem solving
- Respectful communication

Our Approach

- Understand stakeholder goals
- Assemble water bank information pros/cons
- Screen data for WRIA 55 applicability
- Introduce options to PAG
- Evaluate water bank seeding options
- Develop water demand and market analysis
- Vet detailed analysis with PAG preferred alternative development
- Finalize report and summarize next steps

WRIA 55 PAG Workplan

Meeting 1 (October 15, 2014):

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

Meeting 2 (January 21, 2014):

- Define bank size
- Determine seeding options
- Determine data gaps
- Determine market conditions

Meeting 3 (May 27, 2015):

- Review bank pros/cons
- Confirm data gaps
- Advisory vote to move forward on further implementation

Technical Memorandums

- Prior to PAG Meeting 1:
 - Legal, Regulatory, and Policy Framework
- Prior to PAG Meeting 2:
 - Streamflow and Water Transfer Framework
 - Future Water Demand Evaluation
 - Potential Availability of Water Rights
- Prior to PAG Meeting 3:
 - Water Market Evaluation
 - Draft Feasibility Report and Implementation Plan

Regulatory Overview—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

Regulatory Overview

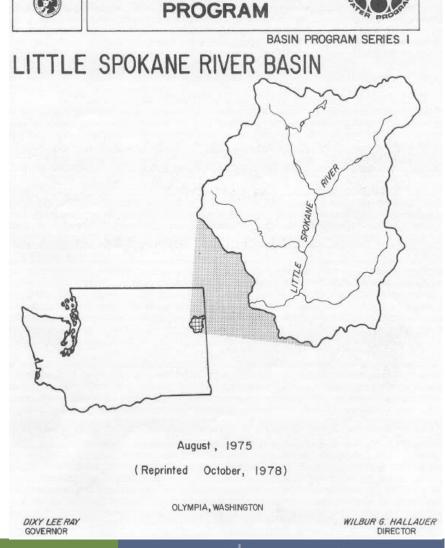
- 1975 WRIA 55 Basin Plan
- 1976 Instream Flow Rule (WAC 173-555)
- Domestic Exemption Uncertainty
- State / County Planning / Permitting Authority
- Impairment Guidance

Regulatory Overview

- The WRIA 55 PAG is not expected to resolve regulatory uncertainty.
- The WRIA 55 PAG is convened to determine whether a water bank would provide a planning and permitting tool in spite of and to manage regulatory uncertainty.

Regulatory Overview—Basin Plan

- 1975 Basin Report
- Basis for WAC 173-555
- Provides clarifying guidance beyond rule
- Uncertainty regarding influence today



WATER RESOURCES
MANAGEMENT

Regulatory Overview— WAC 173-555

CHAPTER 173–555 WAC WATER RESOURCES PROGRAM IN THE LITTLE SPOKANE RIVER BASIN, WRIA 55

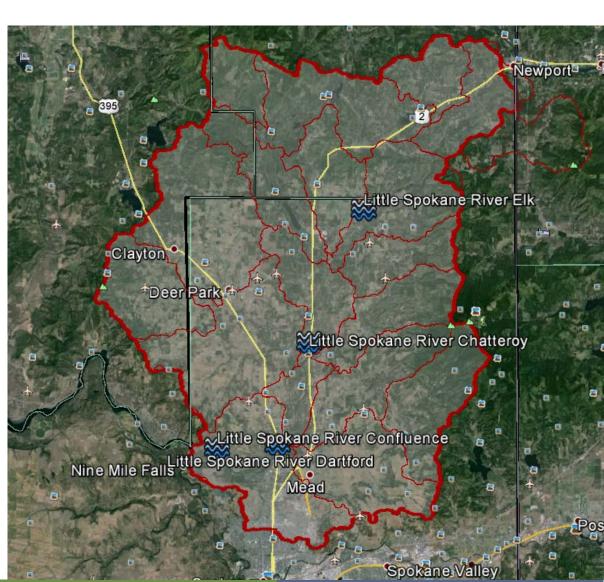
Last Update: 6/9/88

173-555-010	General provision.
173-555-020	Definition.
173-555-030	Establishment of base flows.
173-555-040	Future allocations—Reservation of surface water for beneficial uses.
173-555-050	Priority of future water rights during times of water shortage.
173-555-060	Streams and lakes closed to further consumptive appropriations.
173-555-070	Effect on prior rights.
173-555-080	Enforcement.
173-555-090	Appeals.
173-555-100	Regulation review.

WAC

Regulatory Overview—WAC 173-555

- Baseflows for 4 Stations
- Reserve of surface water
- Tributary closures, except domestic and stock
- Spokane Rule Amendments



Regulatory Overview—Permit Exemption

- Stockwater (no limit)
- Non-commercial lawn/garden (1/2 acre)
- Single or group domestic (5,000 gpd)
- Industrial use, including irrigation (5,000 gpd)
- All exemptions apply to a single project (but can include multiple wells)

Regulatory Overview— State / County Planning/Permit Authority

- County and State have shared regulatory authority
 - County has increased responsibilities in permitting and planning, Ecology in advisory role
- Adequate legal and physical availability required for county permitting
- Ownership of adjacent parcels a factor in defining a project

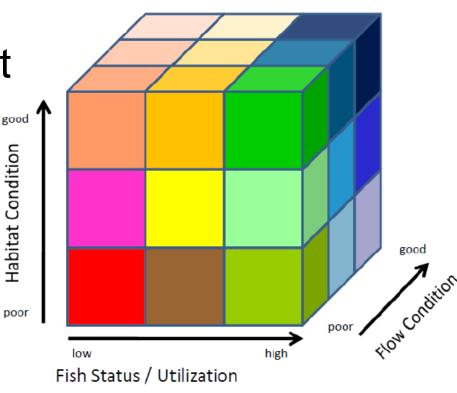
Regulatory Overview— Impairment Guidance

 Instream flows are a right with priority based on establishment by rule
 2011 WDFW Instream Atlas

 A reduction in instream flow may be impairment

 Base flows should consider the functions and values behind the base flow numbers

OCPI



Questions for Ecology and AG's office

- Does WAC 173-555 apply to groundwater?
- Does the 1975 WRIA 55 Basin Plan affect the rule?
- Can the water bank provide new appropriations in closed tributary basins?
- Can the bank be managed in subareas based on the stream gages or on a more localized basis?
- Can a suite of mitigation options be part of the bank?

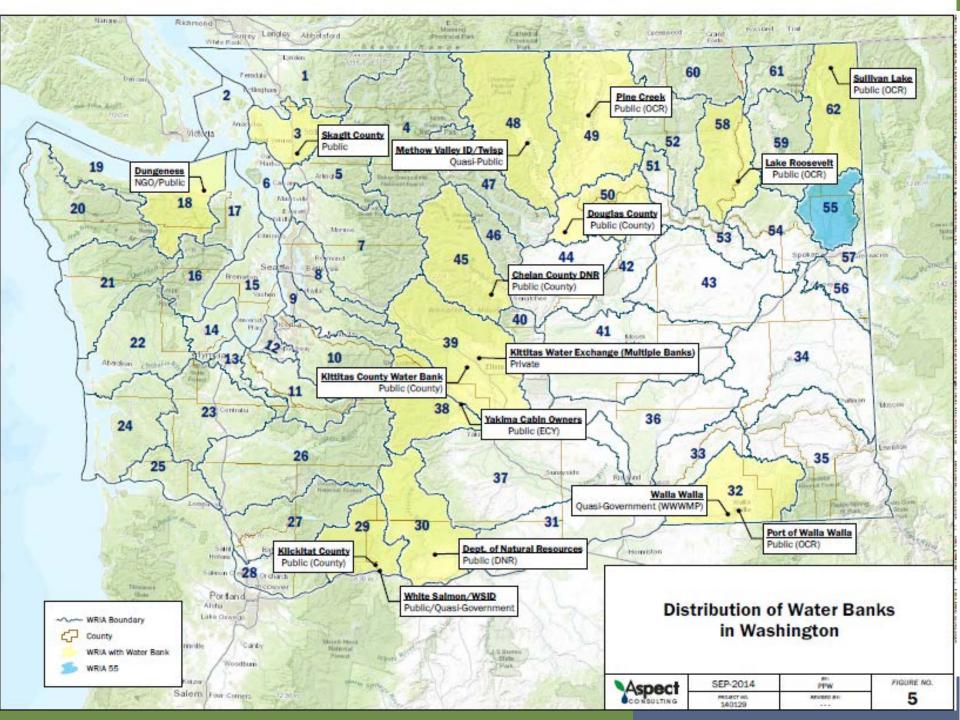
Questions on Regulatory Overview





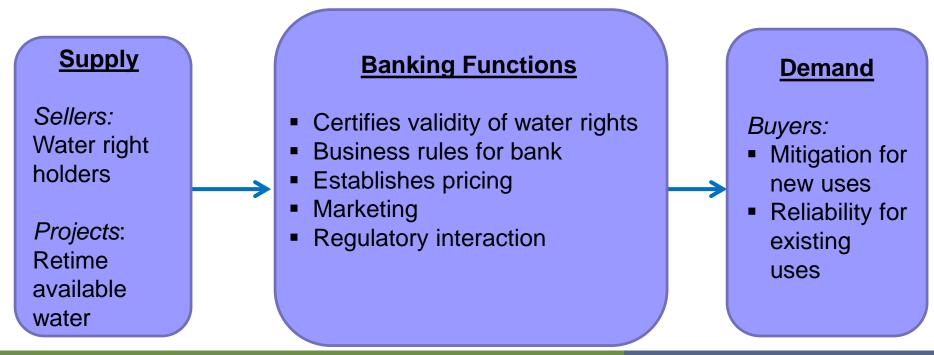
WRIA 55 PAG Goal

Distill the wide ranging options for water banks (regulatory, structural, operational, financial, legal, and political) into a focused recommendation endorsed by the PAG and appropriate for WRIA 55.



What is a Water Bank?

Water banks redistribute water right authority between sellers and buyers.



Why are Water Banks Formed?

- To mitigate for out-of-priority use
- To mitigate for new uses
- In response to regulatory pressure
- Because the rules of water banking can be more favorable than conventional transfers
- For profit
- For transaction efficiency
- For instream objectives

Types of Water Banks

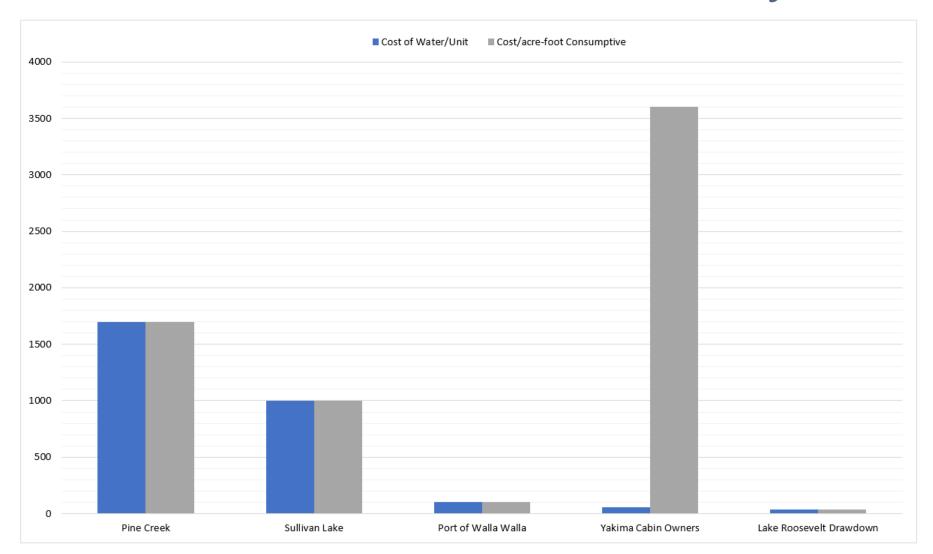
- Public
- Private
- Quasi-Government / NGO
- One (Seller) to Many (Buyer)
- One (Seller) to One (Buyer)

Water Banks Pricing and Transaction Summary

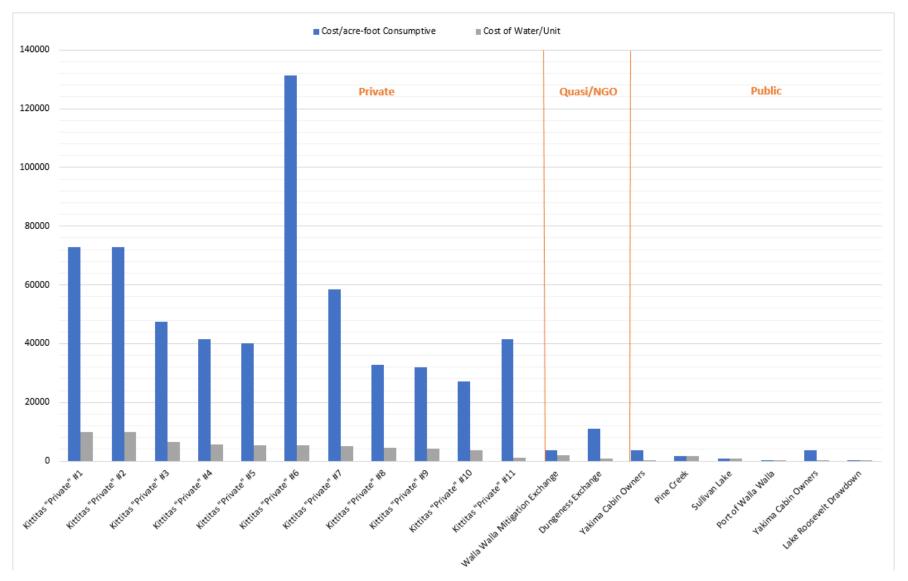
Table 5: Summary of Cost of Water for Public/Private Water Banks

	Cost of Water/Unit	Cost/acre-foot	Units Transacted				
Public							
Average	\$580	\$1,290	46				
Minimum	\$35	\$35	0				
Maximum	\$1,700	\$3,600	200				
Sum	-	-	230				
Quasi-Government/NGO							
Average	\$1,500	\$7,350	27				
Minimum	\$1,000	\$3,600	3				
Maximum	\$2,000	\$11,100	50				
Sum	-	-	60				
Private							
Average	\$5,620	\$54,345	62				
Minimum	\$1,250	\$27,000	1				
Maximum	\$10,000	\$131,200	329				
Sum	-	-	700				

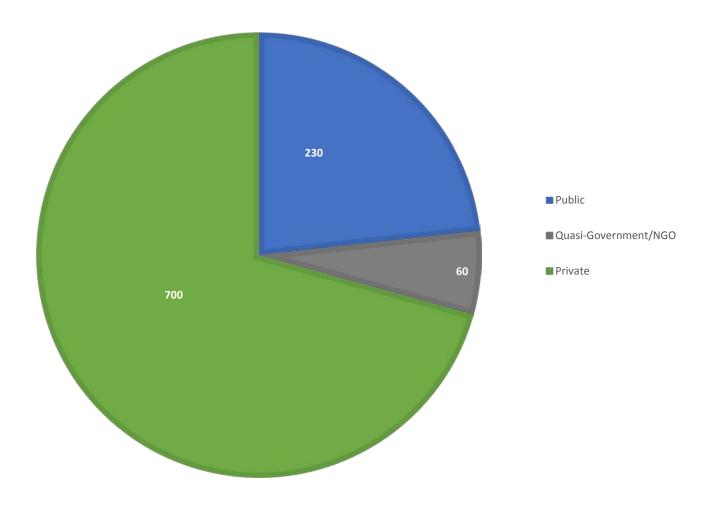
Public Water Bank Summary



Water Bank Pricing Summary



Water Bank Transaction Summary



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

Water Bank Business Rules

- Who to serve (Purpose? Existing? New?)
- Where to serve (All? Mainstem? Tributary?)
- Units of measurement (Total use? Consumptive use?
- Unit size (indoor only, lawn size)?
- Pricing?
- Marketing (Voluntary? Required? Phased?)
- Any seeding restrictions?

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Answers to these questions help define how much water and where it is needed to seed a bank.

Open Discussion





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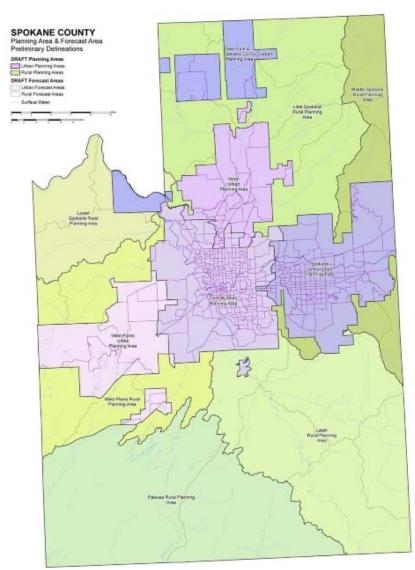
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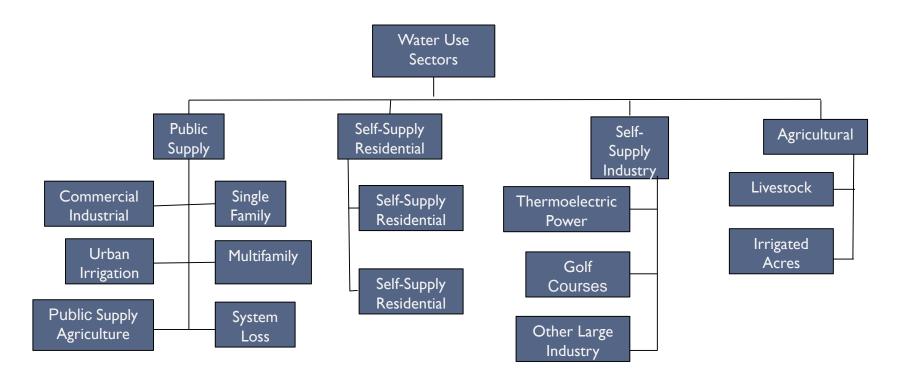
Evaluation Using Demand Model

- Powerful tool already available that enables "what-if" scenarios
- Can be readily expanded to Stevens and Pend Oreille portions of WRIA 55
- Customized water use estimates by sector and geography

Stevens and Pend Oreille County areas will need to be added.



Demand Evaluation: Specific Water Use Sectors



- 1. Identify water use sectors of interest for water bank feasibility analysis.
- 2. Consider:
 - How might demand drive interest in water bank?
 - How might water bank change the characteristics of water uses?

Stevens County Population Growth

Population per square mile

0-25

26-50

51-75

76-100

101-250

251-500

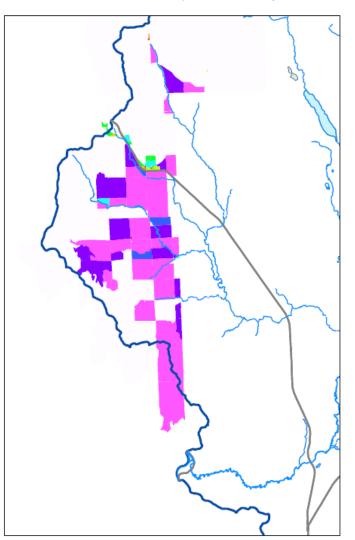
501-750

751-1000

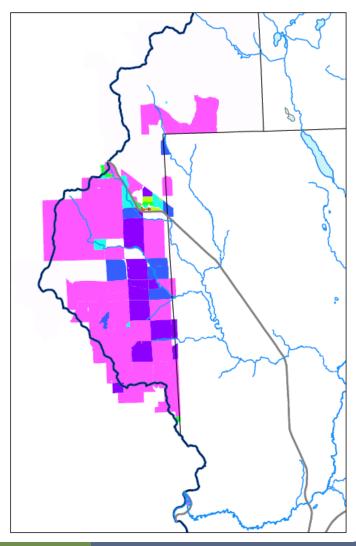
1000-2000

2000+

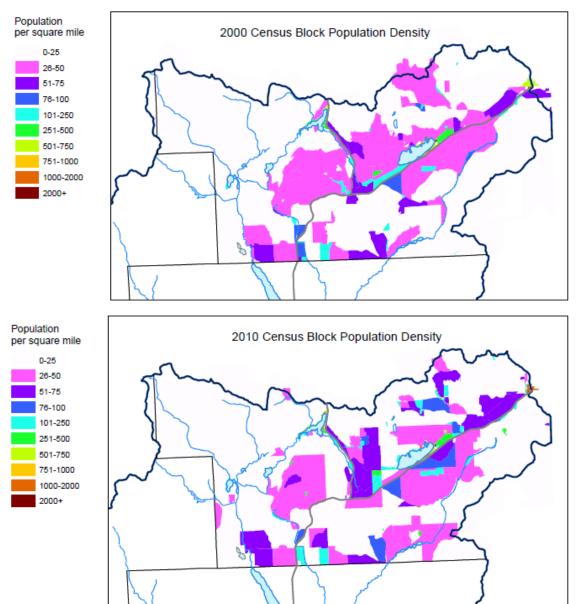




2010 Census Block Population Density



Pend Oreille County Population Growth



Questions?



