



Streamflow Restoration Planning Updates

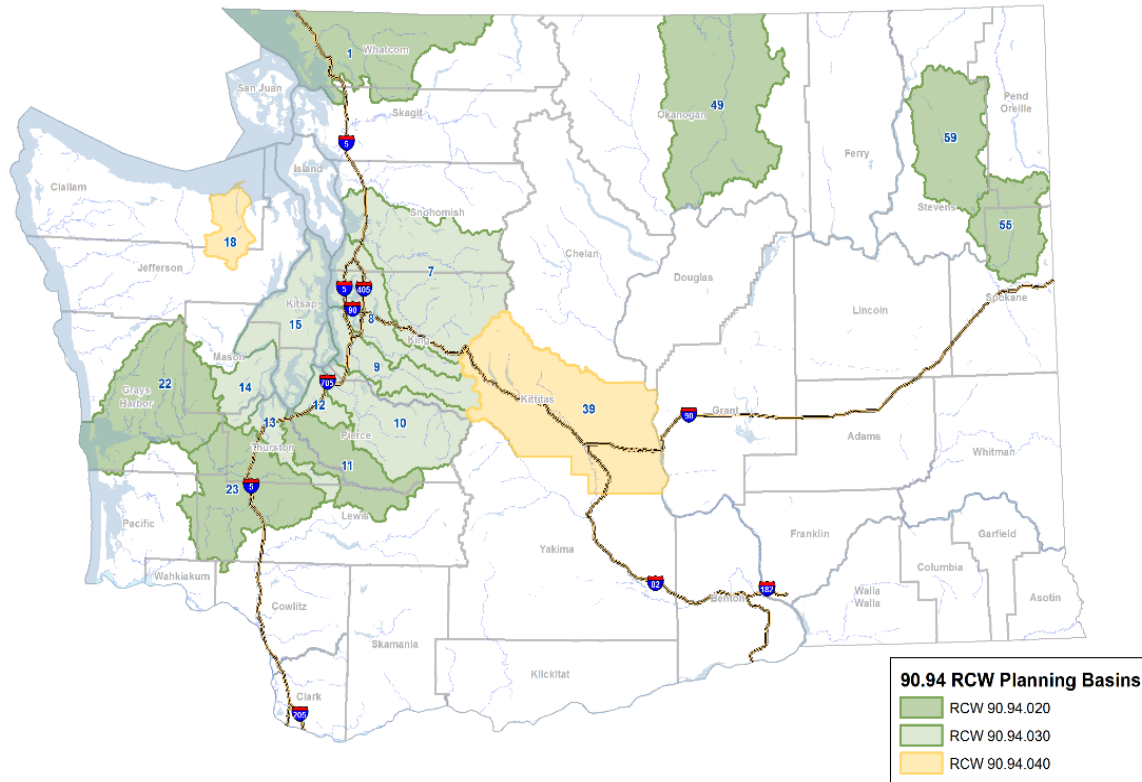
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What is Streamflow Restoration - RCW 90.94?



Law Affecting 15 Watersheds in WA...

- Existing or newly-created watershed groups directed to develop watershed plans.
- Plans must:
 - Project the number of **new domestic permit-exempt (PE) wells** during the 20-year planning horizon (2018-2038) and estimate the **consumptive use (CU)**.
 - Identify projects and actions to offset the estimated consumptive use, and provide reasonable assurance of meeting **Net Ecological Benefit (NEB)**.
- 3 legislative target dates for 15 watersheds (*Feb 1, 2019, Feb 1, 2021, & June 30, 2021*)
- \$300M to support streamflow restoration efforts (*statewide competitive grant program 2018-2033*).
- In Ecology's Southwest Region:
 - Ecology led the planning processes in WRIAs 10, 12, 13, and 14.
 - Planning Units led the planning process in WRIAs 11 and 22/23.

PE Well Projections and Consumptive Use Estimates

Number of New PE Wells Over Planning Horizon (2018-2038)

Outdoor Consumptive Use Factors:

- Average outdoor irrigated area (lawn size).
- Irrigation requirements for turf grass.
- Water application efficiency (75%)
- Consumptive use factor (80%).

Indoor Consumptive Use Factors:

- Average people per household.
- Gpd per person water use.
- Consumptive use factor (10%).



WRIA 10, 12, 13, 14 Plan Recommendations



Net Ecological Benefit (NEB) is defined as “the outcome that is anticipated to occur through implementation of projects in a plan to yield offsets that exceed impacts within a) the planning horizon; and b) the relevant WRIA boundary” (Ecology Final NEB Guidance, 2019).

Types of Projects and Actions

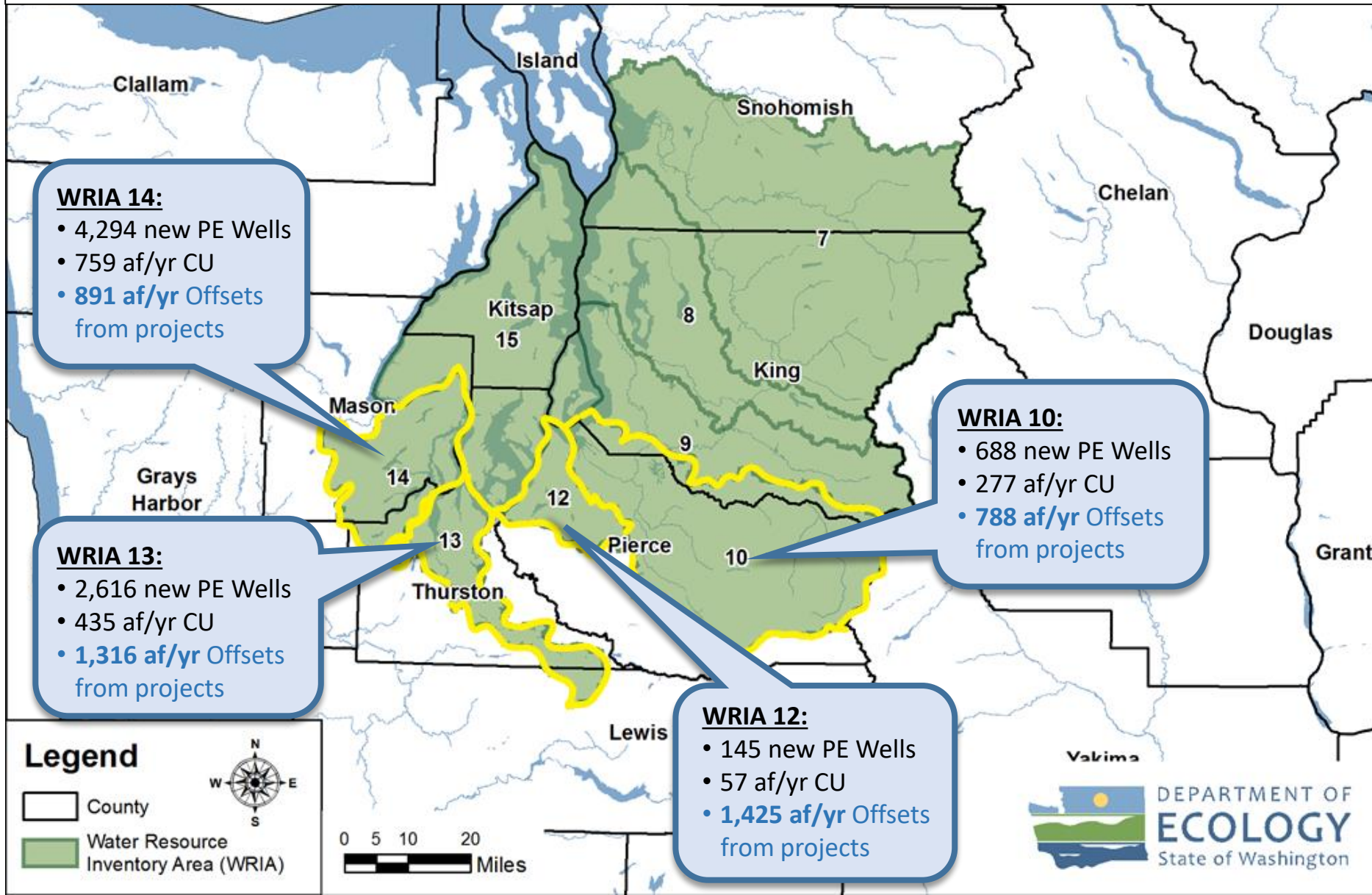
- Water Right Acquisition Offset Projects
- Non-Acquisition Water Offset Projects
- Habitat and Other Related Projects
- Regulatory Action/Policy Recommendations

Adaptive Management

- Committees included adaptive management components to help address uncertainty and provide more reasonable assurance for plan implementation. Examples include:
 - Project and action tracking
 - PE well tracking
 - Reporting
 - Funding

Estimates for SW Region Plans

WRIAs 10, 12, 13, 14



Other information:

- 1 cubic foot per second (cfs) = 724 acre-feet/year (af/yr)
- Average yard size irrigated area: 0.10-0.27 acres
- Average water use per well: 0.17-0.40 af/yr



Status and Steps to Completion for WRIAs 10, 12, 13, 14

- The Committees met over the last 2.5 years to develop watershed plans.
- Final draft plans have been distributed for local review.
- Committee members will meet (virtually) for the final vote on the plans in late April.
 - If all members of the Committee **approve** the plan, the Committee chair will submit the plan to Ecology for review and NEB determination.
 - If the Committee **does not approve the plan, or Ecology cannot adopt the plan**, then RCW 90.94.030 (3)(h) mandates that Ecology prepares the final draft plan and submits it to SRFB who then conducts a technical review of the submitted plan and prepares recommendations. Ecology then considers those recommendations, potentially amends the plan, and then adopts it. Ecology must then initiate rulemaking within 6 months.



What is the Status?

39 Months In...

- Legislative deadline for seven watersheds to address 90.94.020—six were adopted, one was not (*rulemaking in 2020*).
- Remaining eight watersheds working to address RCW 90.94.030 requirements.
 - 1 locally approved plan
 - 7 final votes in April
- Two grant rounds complete (*approximately \$43 M awarded*)

WRIA 1

- 2,150 PE Wells
- 0.28 ac/yard
- 0.18 af/yr/well CU
- 390 af/yr CU
- 3,767 af/yr Offsets
- 2,400 af/yr Offsets (SFR-Funded)

WRIAs 22/23

- 4,555 PE Wells
- 0.074 ac/yard
- 0.11 af/yr/well CU
- 505 af/yr CU
- 3,290 af/yr Offsets
- 2,898 af/yr Offsets (SFR-Funded)

WRIA 11

- 2,987 PE Wells
- 0.2 ac/yard
- 0.25 af/yr/well CU
- 747 af/yr CU
- 1,530 af/yr Offsets

WRIA 49

- 578 PE Wells
- 0.14 ac/yard
- 0.35 af/yr/well CU
- 203 af/yr CU
- 2,786 af/yr Offsets
- 1,200 af/yr Offsets (SFR-Funded)




WRIA 59

- 1,118 PE Wells
- 0.14 ac/yard
- 0.39 af/yr/well CU
- 435 af/yr CU
- 752 af/yr Offsets
- 451 af/yr Offsets (SFR-Funded)

WRIA 55

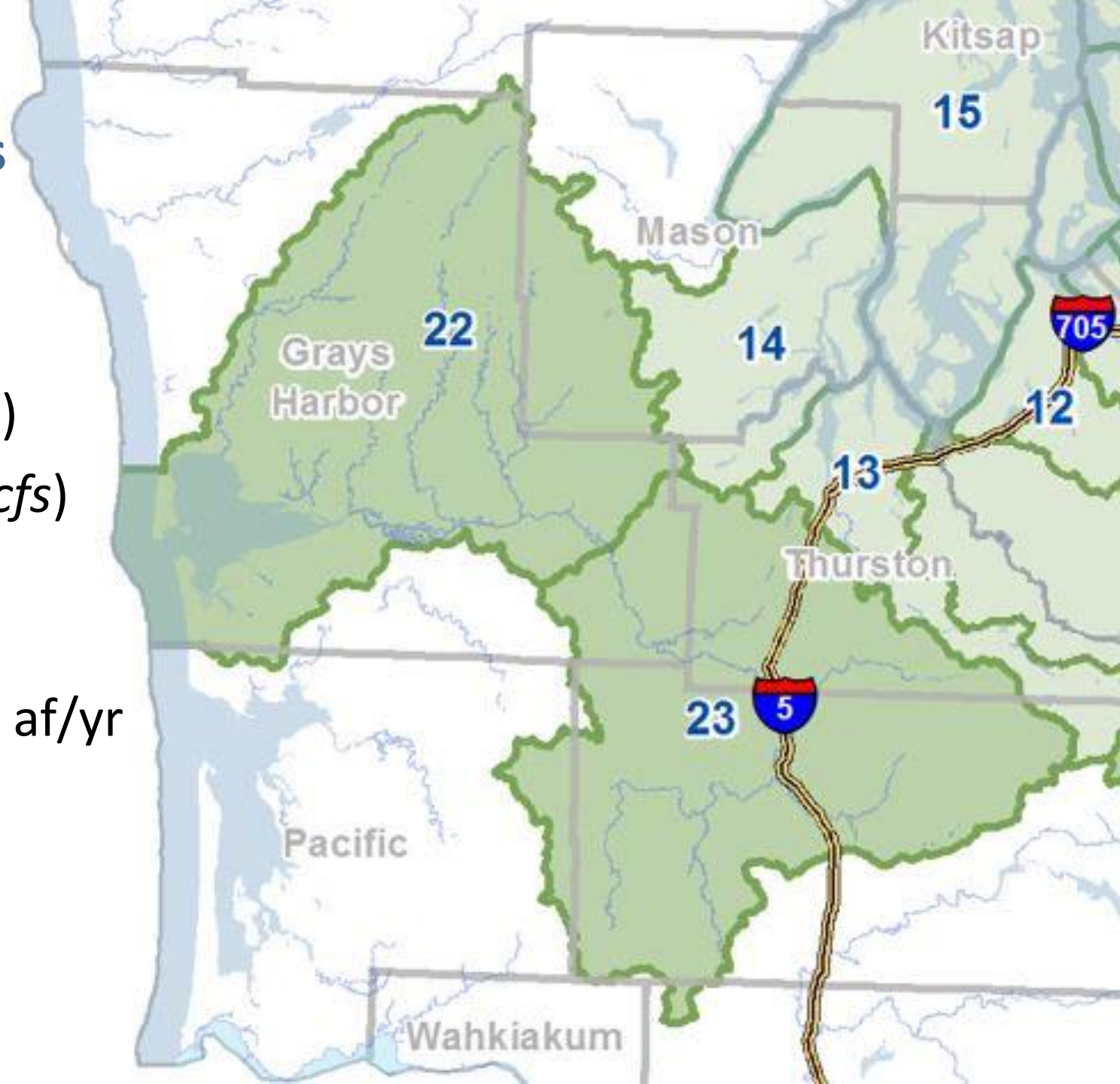
- 2,760 PE Wells
- 0.32 ac/yard
- 0.85 af/yr/well CU
- 2,354 af/yr CU
- 4,082 af/yr Offsets
- 1,880 af/yr Offsets (SFR-Funded)

90.94 RCW Planning Basins

-  RCW 90.94.020
-  RCW 90.94.030
-  RCW 90.94.040

WRIAs 22/23: By The Numbers

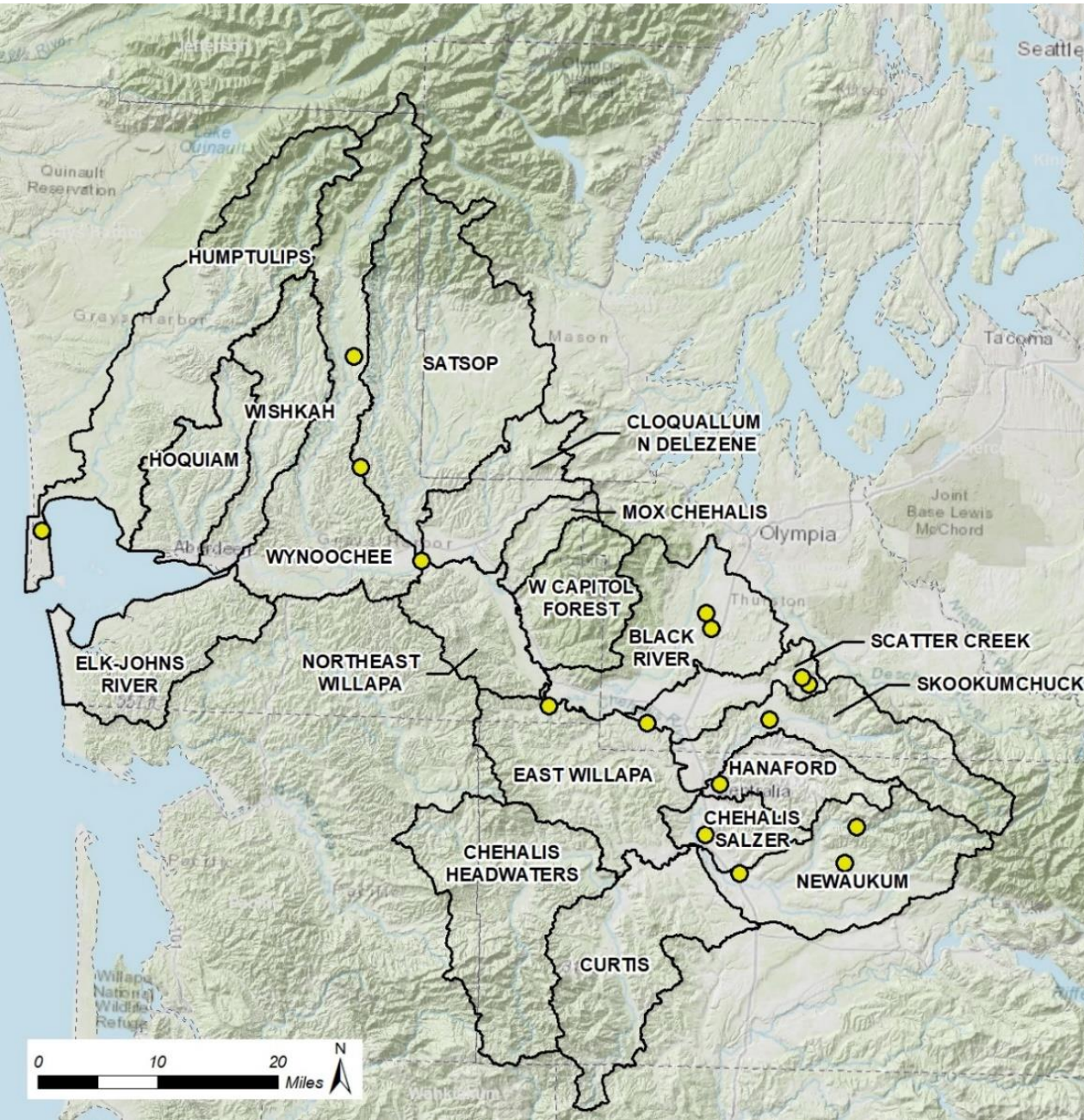
- **Projected PE Wells:** 4,555
- **Avg Yard Size:** 0.074 ac/yard
- **CU/Well:** 0.11 af/yr (*0.00015 cfs*)
- **Total CU/Year:** 505 af/yr (*0.697 cfs*)
- **Total Offsets:** 3,290 af/yr
 - 4.54 cfs
- **SFR-Funded Total Offsets:** 2,898 af/yr
 - 4 cfs



Core Offset Projects

Project ID	Project Name	Credited Water Offset (af/yr)	Certainty of Implementation	Certainty of Water Benefit
Black River		18.7		
B-00	TC #91 Holm Farm Ditch Removal and Floodplain Reconnection	6.8	M	M
B-05	Albany Street Stormwater Pond	11.9	H ¹	M
Chehalis-Salzer		0		
CS-00	Berwick Creek Flood Reduction Restoration (Port of Chehalis)	NQ ²	H	M
CS-03	Flood Hazard Reduction Master Plan and Chehalis Wastewater Treatment Plant Project	NQ	M	M
East Willapa		2.5		
EW-00	Garrard Creek Floodplain Restoration Opportunity Assessment	2.5	H	M
Hanaford		1.5		
H-00	China Creek Phase 2 wetland restoration	1.5	H	M
Humtulsips		0		
HT-00	Ocean Shores Water Reclamation and Reuse ³	0	M	L
Newaukum		286.3		
N-00	City of Chehalis Water Supply Diversion Relocation	280	M	H
N-12	Beaver Dam Analog Pilot Implementation	6.25	H	M
Satsop		0		
S-00	Satsop/Wynoochee Tributary Assessment	NQ	H	M
S-02	Lower Satsop Restoration, Protection, and Aquifer Recharge-Phase II	NQ	H	M
Scatter Creek		78		
SC-01	TC #90 Weins Farm Restoration	5	M	L
SC-02	TC #89 Upper Scatter Creek MAR	26.8	M	M
SC-03	TC #81 Sampson Wetlands Restoration and MAR	46	M	M
Skookumchuck		2,898		
SK-00	TransAlta Water Right Acquisition	2,898	H	H
Wynoochee		0		
WY-02	Satsop/Wynoochee Tributary Assessment	NQ	H	M
Basinwide Concepts		2.5		
BW-00	Beaver Dam Analog Implementation	NQ	M	M
BW-03	Eager Beaver Collaboration	NQ	H	M
BW-05	Stormwater Recharge Opportunity Assessment	2.5	M	M
BW-06	Trust Water Rights Acquisitions	NQ	M	H
Totals		3,290		
1 - Albany Street Stormwater Pond was completed in 2020.				
2 - NQ: Water offset expected; insufficient data to quantify				
3 - Local water benefit from project would not offset projected consumptive use.				

Core Offset Projects by Subbasin



Consumptive Use & Offsets by Subbasin

