



LAKE CHELAN COLLABORATIVE

MEETING 5 – LAKE CHELAN WATERSHED RESTORATION PLAN

SEPTEMBER 23, 2026

1:00 PM TO 4:00 PM



Welcome and Overview

Write your answer on the white board:

How has the Little Giant Fire impacted you or prompted thoughts about wildfire-related goals that should be addressed in the plan?

Introductions

- Name and Affiliation

Agenda

Agenda Item

Recap of Last Meeting/AIS Subcommittee Update

Lake Chelan Water Supply (Part 1)

Presentation on the Lake Chelan Reserve

Panel Discussion with Water Supply Managers

BREAK

Lake Chelan Water Supply (Part 2)

Presentation and Discussion on Planning Horizon and Projects

Wrap Up & Timely Topics

Lake Chelan Toxics DDT Study

Woody Debris Waterway Assessment

Recap of June Meeting

- Review of tribal land acknowledgement language and watershed plan outline
- LCC workplan discussion
- Presentation from Chelan PUD on the Lake Chelan FERC License
- Presentation from LCRI/Anchor QEA on Ecology-funded DDT monitoring study
- Update from Ecology on the Lake Chelan Coordinated Cost Reimbursement Program
- Update from USFS on 2026 Recreation and Wildfire Season
- Updates on the watershed plan communication and outreach efforts

Updates from AIS Subcommittee

- Final watercraft inspection plan complete
- Draft Lake Chelan AIS Management Plan in progress, plan to share with AIS subcommittee for review the week of September 28th
- AIS Subcommittee meeting October 29th 2 PM – 4PM virtual and at the Chelan Fire Hall
- Community outreach event October 29th 5:30 – 7 PM at the Chelan Fire Hall



LAKE CHELAN RESERVE

History and Next Steps

Dan Haller, Geosyntec Consultants

OVERVIEW

**“Far” History – 1925 to 2015,
predates modern coordination**

**“Near” Future – What’s likely to
happen between 2025 and 2030?**

1925–2015

2015–2025

2025 and 2030

2030

**“Near” History – 2015 to 2025, modern
coordination between Ecology, Chelan
PUD, and Chelan County**

**“Far” Future – What might the
Reserve Look like post 2030?**

SETTING THE STAGE

Where are we now? There is room to be optimistic.

- Anyone who wanted water right permits had/has an opportunity to get their application processed—a rarity in the State.
- Reserve accounting is being tracked annually—something that hasn't happened for decades.
- Chelan PUD's hydropower right has been protected.
- Chelan County has enough water for near-term rural growth.
- LCRD, Chelan County, and City of Chelan are all likely to receive enough water to support at least mid-term growth.
- This Watershed Plan Update will provide a forum for evaluating long-term needs and project development in Lake Chelan.

“Far” History

1925 to 2015



FAR HISTORY – 1925 TO 2015

1925 (Priority Date). Certificate 319 (4,000 cfs for hydropower) and Certificate 500 (640,000 acre-feet for storage) authorized.

CERTIFICATE OF WATER RIGHT

(For rights perfected under original enlargement or secondary permits.)
(In accordance with the provisions of Chapter 117, Laws of Washington for 1917, and the regulations of the State Hydraulic Engineer thereunder.)

This is to certify, that Chelan Electric Company, of Spokane,
State of Washington, has made proof to the satisfaction of the State Supervisor of
Hydraulics of Washington, of a right to the use of the waters of Chelan River
a tributary of Chelan Lake, for the purposes of power
under Reservoir Permit No. 57, of the State Supervisor of Hydraulics, and
that said right to the use of said waters has been perfected in accordance with the laws of Washington,
and is hereby confirmed by the State Supervisor of Hydraulics of Washington and entered of record in
Volume 1, at Page 500, on the 6th day of May, 1931; that
the right hereby confirmed dates from July 22nd, 1925; that the amount of water to
which such right is entitled and hereby confirmed, for the purposes aforesaid, is limited to an amount
actually beneficially used for said purposes, and shall not exceed 640,000 ^{acre} ~~cfs~~ feet per second.

CERTIFICATE RECORD No. 1, PAGE No. 319

STATE OF WASHINGTON, COUNTY OF Chelan

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(In accordance with the provisions of Chapter 117, Laws of Washington for 1917, and the regulations of the State Hydraulic Engineer thereunder.)

This is to certify, that Chelan Electric Company, of Spokane,
State of Washington, has made proof to the satisfaction of the State Supervisor of
Hydraulics of Washington, of a right to the use of the waters of Chelan River
a tributary of Chelan Lake, for the purposes of hydro-electric power,
under Appropriation Permit No. 526, of the State Supervisor of Hydraulics, and
that said right to the use of said waters has been perfected in accordance with the laws of Washington,
and is hereby confirmed by the State Supervisor of Hydraulics of Washington and entered of record in
Volume 1, at Page 319, on the 14th day of March, 1926; that
the right hereby confirmed dates from July 22nd, 1925; that the amount of water to
which such right is entitled and hereby confirmed, for the purposes aforesaid, is limited to an amount
actually beneficially used for said purposes, and shall not exceed 4000 cubic feet per second.

WHAT DID THAT PROVISION MEAN?

1960 to 1985: Dispute arose over how to interpret this language.

- **Issue:** Is 33,000 acre-feet inclusive of “all existing rights” or are “all existing rights” additive to 33,000 acre-feet?
 - If the latter, how much were “all existing rights”?

"This appropriation shall be subject to all existing rights and to the reservation of not to exceed 33,000 acre feet each year for irrigation and domestic use on lands bordering and near the Lake. This 33,000 acre feet or such part of it as may be required for beneficial use on said lands to be so used only under permits issued through this office as by statute provided; and unless and until all of said 33,000 acre feet is covered by valid appropriation, any unappropriated balance thereof shall be available for use of the Chelan Electric Company, and its successors and assigns under this permit. The water thus reserved may be appropriated for diversion only above the proposed dam of the Chelan Electric Company."

LITIGATION AND SETTLEMENT

1985 to 1992: Chelan PUD v. Ecology litigation began in 1985, settled in 1992.

WHEREAS, a dispute has existed for several years between the District and the Department as to whether the 33,000 acre feet per year of water identified in Water Permit No. 584 includes water rights in existence prior to July 22, 1925, the priority date of the District's rights, and

WHEREAS, the Department estimates that 12,000 acre feet per year of water was appropriated prior to July 22, 1925 and has contended that said 12,000 acre feet per year of water was exclusive of the aforesaid 33,000 acre feet per year of water, a position rejected by the District, and

WHEREAS, the aforesaid dispute resulted in the District instituting a civil suit in the Thurston County Superior Court against the Department in 1985 in an effort to have the court determine the extent of the District's water rights in Lake Chelan, and

1992 AGREEMENT

- Settled 1985 Litigation
- New 65,000 acre-feet total reserve interpretation
 - 33K + 12K + new 20K = 65,000 acre-foot reserve
- Subject to notice and specific transfer mechanisms

RESOLUTION NO. 92-9285

A RESOLUTION AUTHORIZING THE DISTRICT TO EXECUTE AN AGREEMENT CONCERNING WATER RIGHT CERTIFICATE NO. 319 (LAKE CHELAN) WITH THE DEPARTMENT OF ECOLOGY, STATE OF WASHINGTON AND TO APPLY TO THE FEDERAL ENERGY REGULATORY COMMISSION FOR AUTHORITY TO IMPLEMENT AGREEMENT

PUBLIC UTILITY DISTRICT NO. 1 OF
CHELAN COUNTY, WASHINGTON

BY Bruce L. Capps GENERAL MANAGER/CEO

STATE OF WASHINGTON, ACTING BY AND
THROUGH THE DEPARTMENT OF ECOLOGY

BY [Signature] Representative

1992 AGREEMENT PROVISIONS

- “Existing rights” (senior to Certificate 319) are estimated to be 12,000 ac-ft/yr
- Adding 12,000 ac-ft/yr to 33,000 ac-ft/yr, Certificate 319 “shall be interpreted by the parties to be subject to . . . a total estimated amount of 45,000 ac-ft/yr” for use within Lake Chelan Basin
- District agrees to make available an additional 20,000 ac-ft/yr by transferring portions of Certificate 319 for use within Lake Chelan Watershed, WRIA 47
- The entire 45,000 ac-ft/yr must be allocated before Ecology can transfer any portion of the 20,000 ac-ft/yr
- Water rights transferred (post 1925) will be regulated as junior to District’s right
- District can withdraw any portion of the 20,000 ac-ft/yr that has not been transferred (but transfers are final once they happen)
- Ecology “shall administer” the transfers of the 20,000 afy, and pursuant to the District’s approval
- Transfers will be processed under RCW 90.03.380 but must also meet the criteria for new water rights under RCW 90.03.290

1997 – LEGISLATURE AMENDED RCW 90.03.80

- 1992 Agreement contemplated transfer authority from hydropower right to other uses
- But Legislature changed the law 5 years later to make that more challenging by adding a new consumptive use test called ACQ
 - *RCW 90.03.380(1)(a) A change in the place of use, point of diversion, and/or purpose of use of a water right to enable irrigation of additional acreage or the addition of new uses may be permitted if such change results in no increase in the annual consumptive quantity of water used under the water right.*

2012 TO 2015 NEW PERMITTING FOCUS OCCURS

- **2012** – Legislature requires Ecology to issue at least 500 permits a year
- **2013 - 2014** – Chelan County works with Ecology on a coordinated cost reimbursement permit program for Lake Chelan
- **2014** – RH2 determines not enough water in reserve to meet all applicant requests
- **2014 - 2015** – Wildfires and Ecology request letter to Chelan PUD starts new dialogue

2014 ECOLOGY LETTER & 2015 PUD RESPONSE

November 25, 2015

Ms. Sage Park
Regional Director
Central Region Office
Washington Department of Ecology
1250 W. Alder Street
Union Gap, WA 98903-0009

Re: Lake Chelan water supply

Dear Ms. Park:

In December 2014, Ecology proposed reallocation of 1,000 acre-feet per year from the water right held by Public Utility District No. 1 of Chelan County, in order to provide water for domestic use within the Lake Chelan basin under the April 29, 1992 Agreement Concerning Water Right Certificate No. 319 between Ecology and the District ("1992 Agreement"). The District has asked Ecology to prepare a detailed written description of its proposal and understand you are working on it.

ECOLOGY'S REQUEST NOT THAT SIMPLE . . .

- PUD wasn't sure all 65,000 acre-feet had been allocated already
 - If not, transfer of 1,000 ac-ft not needed
- Ecology had not kept up with accounting requirements since 1992
- New changes to the law had occurred (ACQ)
- Some accounting assumptions were left unresolved and needed closure
- Agreed to meet and work the issue

WHAT ACCOUNTING ISSUES WERE UNRESOLVED?

- Ecology had not shared accounting since 1992—no common understanding
- Water associated with unquantified claims
- Water duty / annual quantity if missing
- Ecology accounting included areas in WRIA 47 not draining to Lake Chelan
- Permit exempt wells not tracked
- Suggestion of unauthorized surface diversions
- New changes to the law had occurred
- Permits not certified
- Storage certificate volume not accurate

“Near” History

2015 to 2025

(after a whole bunch of
meetings, progress!)

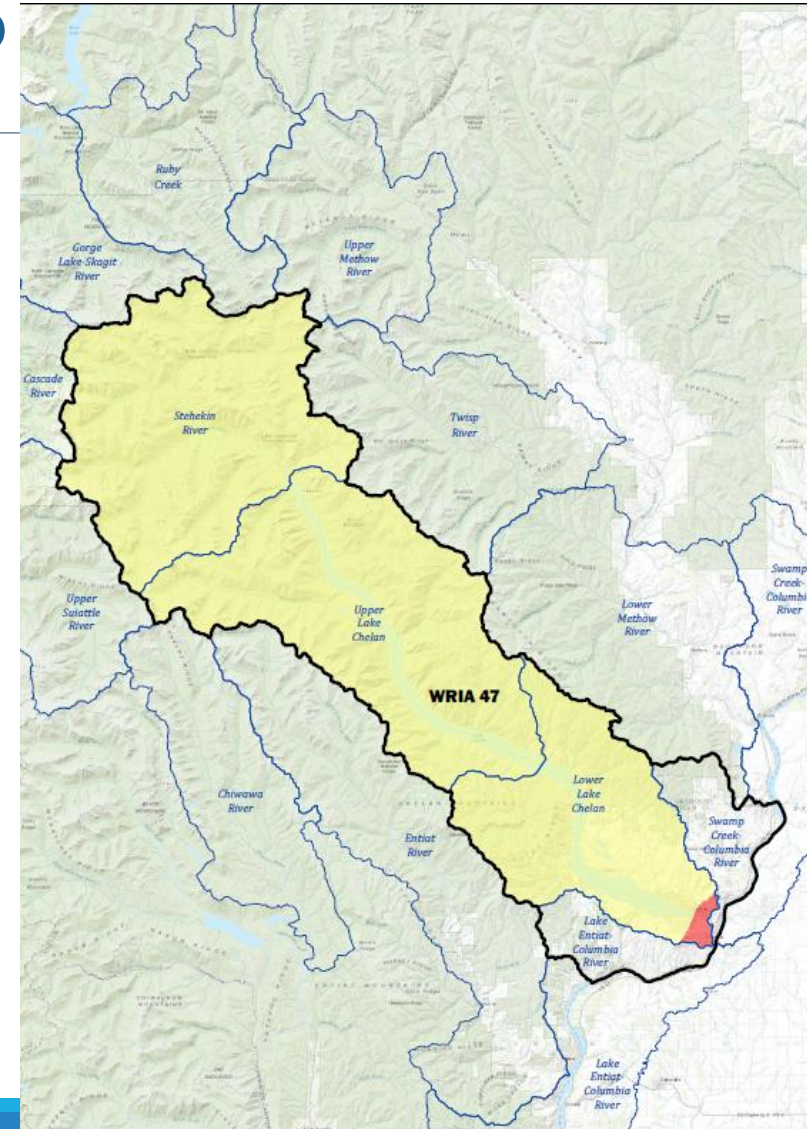


2015 TO 2025, A LOT OF PROGRESS MADE . . .

- **2015 to 2017** – Ecology, Chelan PUD, and County coordination
- **2017** – Amendment to 1992 Agreement (>5,000 acre-feet available)
- **2017 to 2025** – Annual accounting performed by Ecology and peer reviewed by Chelan PUD
- **2022 to 2023** – Subsidized certification program run, some participation, more remain
- **2019 to 2025** – Ecology cost-reimbursement permitting, dozens of permits
- **2025** – Launching Watershed Plan Update

WHAT'S IN 2017 AMENDMENT?

- Ecology website for transparency
- Clarified spatial extent of reserve
- Clarified storage right based on operating band rather than outdated volume
- Permit exempt wells included
- The 20K portion of reserve issued as secondary permits from reservoir, not transfers



WHAT'S IN 2017 MOU?

- Formalized annual Reserve Review cycle
- Claims subject to 5,500 ac-ft total debit
- Standard water duties if undefined (3.5 acre-feet/acre irrigation, 1 acre-foot domestic)
- Error correction case-by-case
- Exclusions (geography, duplicates, nonconsumptive)
- Updates as rights change (reserve accounting is not static)

Climate Change

- 2021 WSU Columbia River Basin Long Term Water Supply and Demand Forecast
- The key vulnerabilities in Lake Chelan were **increasing high supply, decreasing low supply, decreasing minimum flows, and earlier supply timing**
- **By 2040:**
 - Water supply during low flow years is projected to decrease by 46,000 ac-ft
 - Water supply during high flow years is projected to increase by 72,000 ac-ft
 - Timing of surface water supplies is shifting earlier in the season
 - Lowest 7-day average flow once every 10 years is anticipated to decrease by 10 cfs

Panel Introduction

Goal: Hear from the largest water supply managers within the basin and their near- and long-term water supply plans and pending reserve applications.

- Department of Ecology (Heather Simmons and Christopher Kossik)
- Chelan PUD (Alene Underwood)
- Chelan County (Mike Kaputa)
- City of Chelan (Travis Denham)
- Lake Chelan Reclamation District (Dan Haller on behalf of Rod Anderson)

Chelan County

MIKE KAPUTA, DIRECTOR

CHELAN COUNTY NATURAL RESOURCES DEPARTMENT

Chelan County

- Chelan County implemented its formal Water Mitigation Program on April 1, 2021, to protect senior surface water and groundwater water rights and to ensure water reliability for new domestic uses.
- This program ensures Chelan County is compliant with state law by making a determination that water is both physically and legally available when building permits are issued.
- The County issues “mitigation certificates” as a part of the building permit process

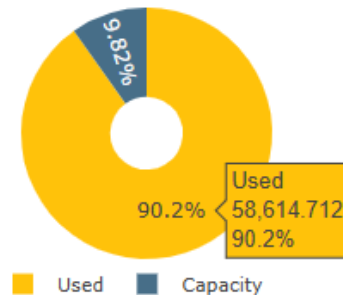
Chelan County

- RH2 (2020) Study
 - Historical groundwater exempt uses that predate the County's mitigation requirements = 124 ac-ft
 - For a 50-year planning horizon, an estimated 333 ac-ft of mitigation will be required for new permit exempt uses.
- Lake Chelan Planning Committee adopted a standard debit of 0.5 ac-ft of total use per residence (including outdoor use) for all new mitigation
- 200 gpd (0.22 afy) for indoor only use

Chelan County

- The County tracks mitigation debits in a custom accounting software

Lake Chelan Reserve



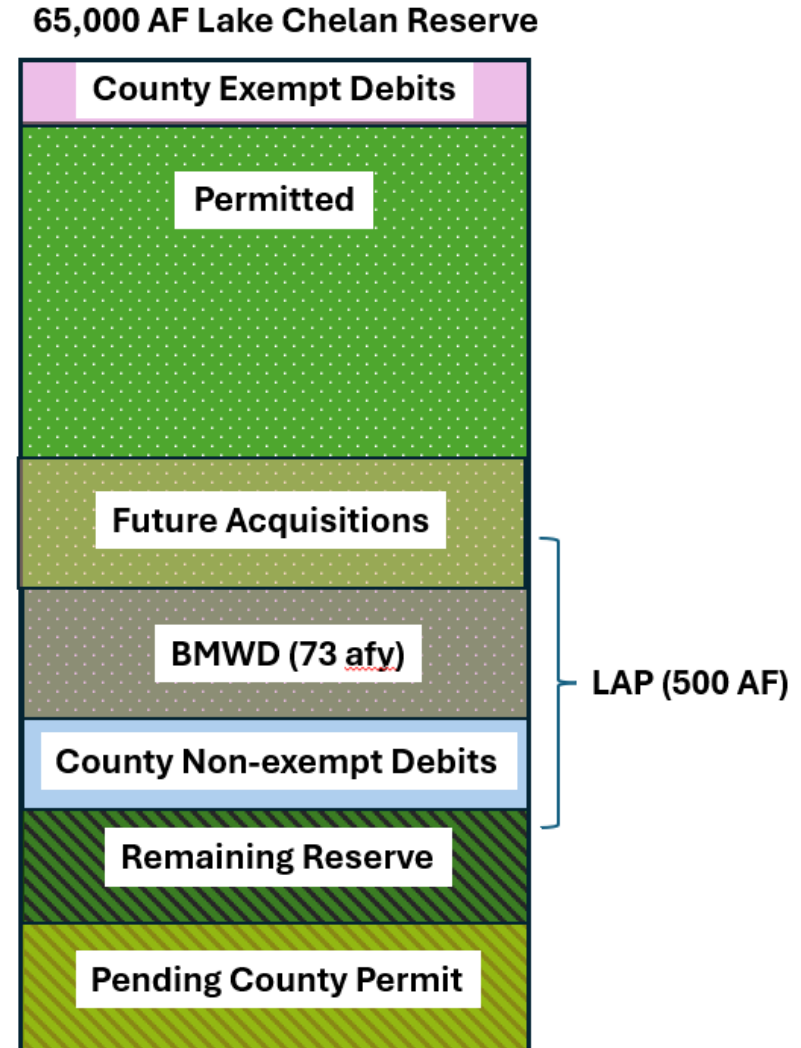
Reserve		
Total Capacity:	65000 AFT	
Used/Debited:	58614.712 AFT*	(90.18%)
Remaining:	6385.288 AFT	(9.82%)

Debits		
Exempt:	174.169 AFT*	(117 debits*)
Permitted:	58440.543 AFT*	(1 debits*)
Estimated Capacity for New Exempt Wells:	12786	

*Includes debits from: Lake Chelan Large Area Permit, 500 Ac-Ft

Chelan County

- Debits directly to the Reserve for now, other water rights later
 - Groundwater is permit exempt
 - Surface water is permitted through 500 AF Large Area Permit
- 2020 Bear Mountain Water District acquisition (73 afy)
 - Managed under a trust water rights agreement with Ecology



Chelan County

In partnership with Ecology -

- Helped initiate the **Lake Chelan Coordinated Cost Reimbursement program**
 - Ecology has issued ~22 permits through this program so far
- Applied for and was issued a **Large Area Permit**
 - Allows the County to issue mitigation certificates for small residential surface water uses from Lake Chelan as an alternative to permits through Ecology
 - Thus far, the County has issued 17 mitigation certificates
- Lead a **Voluntary Coordinated Certification Program**
 - Certified 16 water rights and made an additional 69 acre-feet available for the reserve

Chelan County

- Chelan County has three pending applications for the reserve (1 groundwater and 3 surface water) submitted in 2019, 2020, and 2022.
- The goal of these applications is to set aside a portion of the reserve for future rural uses.
- The 2022 County application proposed additional purposes of use beyond just domestic (industrial, commercial, municipal, agricultural, etc.), which would give the County additional flexibility in the types of uses they can mitigate for.

Department of Ecology

HEATHER SIMMONS, SECTION MANAGER

CHRISTOPHER KOSSIK, PERMITTING UNIT SUPERVISOR

Chelan PUD

ALENE UNDERWOOD, NATURAL RESOURCES DIRECTOR

City of Chelan

TRAVIS DENHAM, P.E.
CITY ENGINEER



Outline

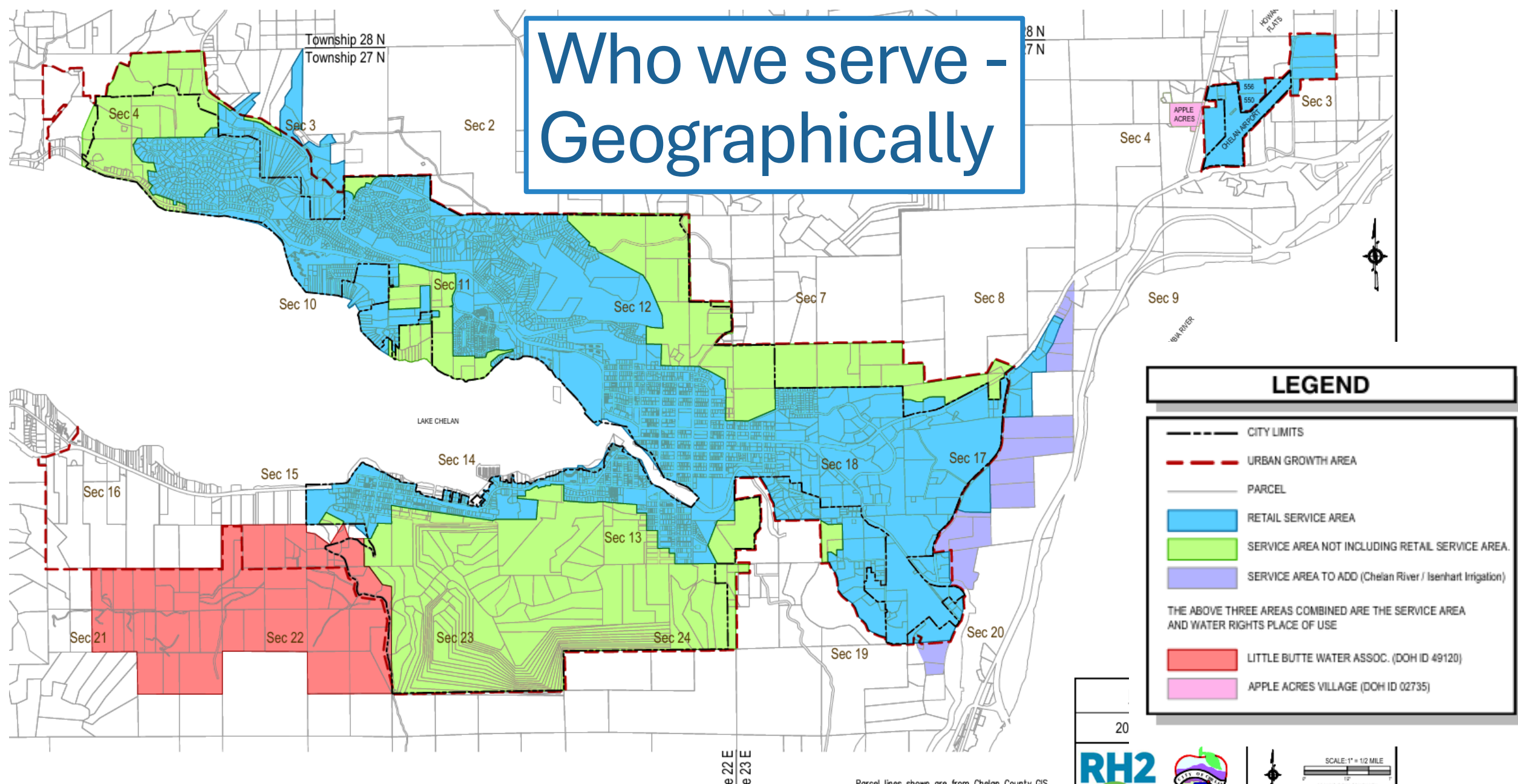
- Who we serve (population and geographically)
- Our authority to serve
- Water Supply Challenges
- Water Use Efficiency Goals

Who we serve - Population

Year	Service Area Population	ERUs ⁽¹⁾	Projected Average Day Production ⁽²⁾		Projected Max Day Production ⁽³⁾		Projected PHD ⁽⁴⁾
			gpd	ac-ft/yr	gpd	gpm	gpm
2018	4,211	3,487	1,786,800	2,001	3,389,600	2,350	4,700
2019	4,263	3,523	1,805,400	2,022	3,424,900	2,380	4,760
2020	4,316	3,560	1,824,200	2,043	3,460,600	2,400	4,800
2021	4,370	3,597	1,843,200	2,065	3,496,600	2,430	4,860
2022	4,424	3,635	1,862,500	2,086	3,533,200	2,450	4,900
2023	4,479	3,673	1,882,000	2,108	3,570,200	2,480	4,960
2024	4,535	3,711	1,901,800	2,130	3,607,800	2,510	5,020
2028	4,765	3,870	1,983,200	2,221	3,762,200	2,610	5,220
2038	5,392	4,304	2,205,500	2,470	4,183,900	2,910	5,820

2026 Actual Max Day Production = 2,230 gpm (July 22nd)

Who we serve - Geographically



e 22 E
e 23 E

Parcel lines shown are from Chelan County GIS

Authority To Serve – Water Rights

- Domestic Water Rights
- Irrigation Water Rights
- Sufficient water rights based on current projections
- Completed a Water Rights Self Evaluation in 2022

Water Rights Adequacy

Year	Inst. Withdrawal Qi = 4,488 gpm		Annual Withdrawal ⁽¹⁾ Qa = 4,283 ac-ft/yr	
	Maximum Day Production (gpm)	Surplus (+)/ Deficit (-) (gpm)	Average Day Production (ac-ft/yr)	Surplus (+)/ Deficit (-) (ac-ft/yr)
2018	2,350	2,138	2,001	2,282
2024	2,510	1,978	2,130	2,153
2028	2,610	1,878	2,221	2,062
2038	2,910	1,578	2,470	1,813

(1) Annual Withdrawal limited by Ecology determination.

Authority To Serve – Water Rights

- New developments in the UGA are required to transfer water rights or pay a fee in lieu.

Chelan Municipal Code	Policies
CMC 13.40 Water Rights Transfers	This Chapter establishes policies in order to acquire water rights necessary to sustain proposed developments within the City's UGA. Additionally, this Chapter establishes policies regarding the water rights within annexed areas to be transferred to the City. This Chapter also establishes the amount of rights to be transferred the costs associated with the transfer of rights and the form of transfer acceptable to the City.

Water Supply Challenges

- Emergency Preparedness
- Fluctuating turbidity values
- Single point of diversion

Water Use Efficiency Goals

- Updated every 3-5 years by Council adoption
- Increase mindfulness
- “10 Easy Ways to Conserve Water”

Water Use Efficiency

- Reduce ADD by 5 percent
 - Notify customers of unusually high-water use
 - Consumption history on water bill
- Maintain distribution system leakage below 10 percent
- Ongoing education for water use efficiency practices
- Completed water conservation rates evaluation
- Evaluated water reclamation opportunities
- Leakage Three-year average 2023-2025 = 2.2%

Lake Chelan Reclamation District

DAN HALLER, GEOSYNTEC (ON BEHALF OF LCRD)

Planning Horizon and Projects

DAN HALLER AND KELSEY MACH, GEOSYNTEC

Planning Horizon

Option 1: 20 Years

- Everyone at the table is likely to end up with at least 20 yrs of water from the reserve through the CCRP

Option 2: Longer term planning (~50 years)

- What happens when the existing reserve is fully allocated?
- Identifying projects to get started on now

2012 Watershed Plan

Water Quantity Recommended Actions

- Improve the documentation of beneficial water use, inchoate rights, municipal water supply, irrigation water use, and irrigation return flow to update water balance estimates and monitor the effects of changes in water use to improve estimates of future water availability in WRIA 47.
- Initiate surface water and groundwater monitoring in the Wapato, Manson, and lower Lucerne sub-basins to provide data to support water quality and habitat monitoring and improvement plans in WRIA 47.
- Use improved water balance estimates to support implementation of water quality studies and water quality management.
- Promote joint comprehensive analysis and prioritization of future municipal/domestic use by large and small Group A systems, Group B systems, future irrigation use, and future commercial/industrial use.
- Evaluate regional growth patterns, regional demands, inchoate water rights and water system connections for future/expanded service areas.
- Evaluate potential future irrigation demands and transfers of water rights following conversion of agricultural land prior to transfer for other purposes.
- Prioritize and establish quantities for the current 20,000 af Chelan PUD water right reservation and any future Chelan PUD water right reservations when needed.
- Identify an adequate domestic water and fire-fighting supply as airport and planned developments proceed in the Howard Flats sub-basin.

Water Supply Strategies

Make the existing bucket stretch further

- Conservation
- Improved accounting
- More feasible but lesser additional water supply potential
- Alluvial water storage projects

Make the bucket bigger

- More storage
- Alternative sources
- Feasibility more uncertain, studies needed

Conservation

- Irrigation efficiency improvements (County-managed Voluntary Stewardship Program)
- Promote metering of water use (Smart metering programs/EyeOnWater, large water users)
- Address conveyance losses (minimal)
- Public outreach to promote conservation-minded water use
- Implementing water conservation incentives
 - Ex. lawn buy-back program (Icicle Strategy model)

Improved Water Accounting

“Paper” exercise

- Improve water use estimates
 - Emerging data from domestic metering pilots and improved agricultural demand.
 - Does 0.5 acre-feet per home and 3.5 acre-feet per acre allocation make sense still?
- Enforce certification of permits
 - 2022 certification program tried incentive based
 - Submitted CWREs for 16 out of 80 existing permits which opened up ~69 ac-ft available within the reserve.
 - Offer streamlined certification for single residential uses
- Audit of existing certificated water rights
 - Are water rights still using full authority?
 - Metering enforcement
- TAP process on applicants after reserve is fully allocated
 - Make sure applications are “real” as new water becomes available
- Adjudication

Policy

- As new water becomes less available, the transfer market will become more active.
- Develop structured framework for avoiding out-of-basin transfers and avoiding cost escalation.

Data Gaps

- What is the conservation potential?
 - Audit of farms to target priority properties for water conservation efforts and consider potential benefit to water quality issues (DDT, nutrient loading).
 - Conveyance system losses – is this an issue?
- How much future demand potential is there?
 - Build out analysis
- Comprehensive storage evaluation
 - Identify opportunities for alluvial water storage or infrastructure projects
- Columbia River pump exchange feasibility study

Group Discussion

- What projects or strategies resonated or didn't resonate?
- Are there any water supply projects or strategies that were not included that should have been?

Wrap Up and Timely Topics

Tentative December Meeting Topics

Next LCC Meeting – December 16, 2026, 1PM-4PM

ALS Subcommittee Meeting – October 29, 2026, 2PM-4PM

- ALS Management Plan and Watercraft Inspection Plan (CCNRD and Meadow Run)
- Fisheries or Wildfire / County Fire Susceptibility Study
 - Preference?

Other suggested topics?

Lake Chelan Toxics Characterization Update

- Phase 1 closeout summary
- New subcommittee for Phase 2 (pending Ecology funding agreement)

Woody Debris Waterway Assessment

- New subcommittee
- First meeting earlier today
- Discussed:
 - Impacts, priorities and goals
 - Outreach needed to additional agencies/stakeholder
- Next steps
 - Consultant selection process
 - Next meeting in November
- Updates to follow at future LCC meetings

Woody Debris Waterway Assessment

Additional participation needed

- USFS
- USACE
- Chelan County Planning Dept
- WDFW
- Chelan PUD
- Wapato Point
- Shoreline Watercraft
- Chelan Shores
- Lady of the Lake