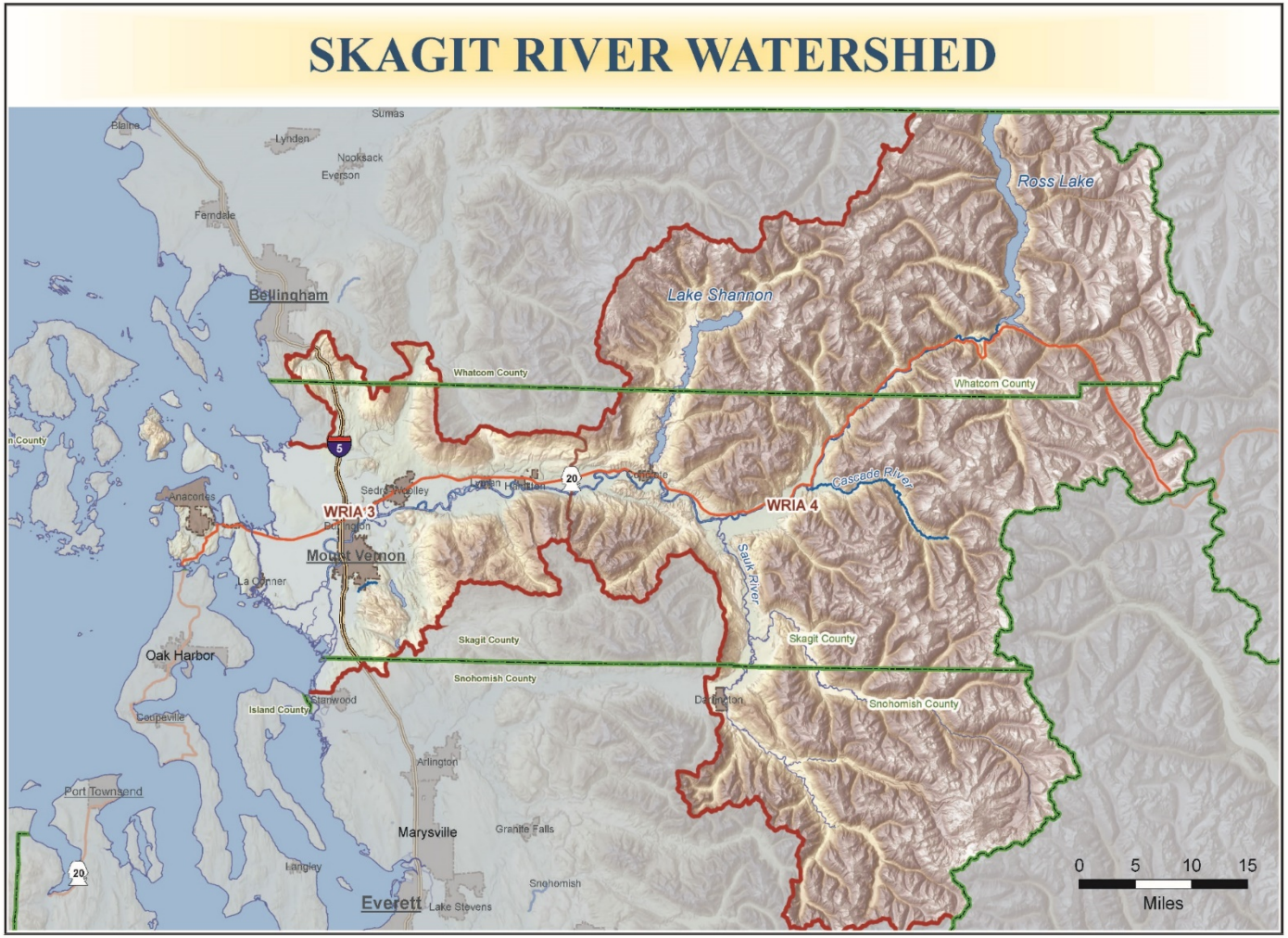
The Skagit River Mitigation Plan

July 13, 2020

John Rose & Buck Smith

NWRO - Water Resources Program

Skagit River Watershed



Skagit River

- 3rd largest river in Western US.
- Only river to host healthy populations of all 5 native species of salmonid fish.
- Some of these species have seen declining populations (Fall Chinook, Steelhead) in recent years and listed as threatened on the Endangered Species list.
- 50-60% of Puget Sound Chinook produced in the Skagit Watershed.

History of the Skagit Instream Flow Rule

- **Early 1990's -**Skagit PUD begins to investigate expanding its water supply in the Judy Reservoir area.
- **1996** – the Memorandum of Agreement
  - To provide a mechanism of coordinated water management of resources for the entire Skagit Basin
  - To establish an Instream Flow Rule to protect fisheries resources
  - To avoid litigation of water resources with the Skagit Basin between the Parties to this agreement

History of the Skagit Instream Flow Rule Continued

- **1999** Final Skagit ISF scientific report released.

  Ecology hold public workshops, hearings and review period for comments.
- **April 14, 2001** Skagit Instream Flow Rule Enacted.
- **2003** – Skagit County sues Ecology.
- **2006** – Amendment to Skagit Instream Flow rule enacted – Swinomish Tribe sues Ecology.
- **July 2011** Reservation in Carpenter-Fisher basin used up, Ecology closes basin to new use.
- **Oct 2013** Supreme court rules in Swinomish tribe's favor.
- **November 2014** -stakeholders petition Ecology to repeal rule, Ecology denies petition.

Report of Examination

DEPARTMENT OF ECOLOGY
State of Washington

WR Doc ID: 6802377

STATE OF WASHINGTON
REPORT OF EXAMINATION
FOR WATER RIGHT APPLICATION

PRIORITY DATE	WATER RIGHT APPLICATION NUMBER
8/19/2019	S1-28885

APPLICANT NAME AND MAILING ADDRESS	DIVERSION SITE & RELEASE SITE LOCATIONS
Washington Water Trust 1500 Westlake Ave North Seattle, WA 98109	Seattle City Light facilities: Gorge Dam & Reservoir – Diablo, WA 98283 Gorge Powerhouse Property - Newhalem, WA 98267

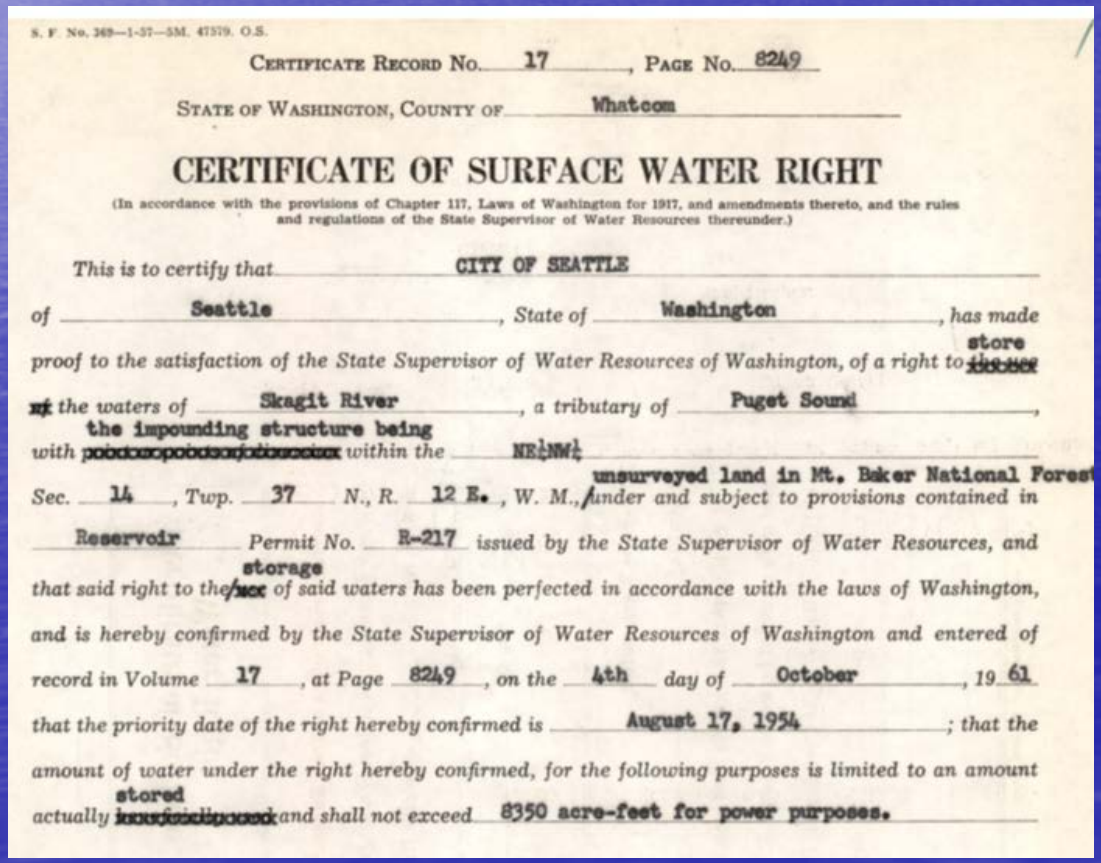
Instantaneous Rate and Annual Quantity Authorized for Diversion and Release

DIVERSION AND RELEASE RATE (cfs)	ANNUAL QUANTITY (ac-ft/yr)
0.5	Approximately 362

cfs = Cubic Feet per Second; ac-ft/yr = Acre-feet per Year

This is a Secondary Use Right

Associated Water Right - the Primary Use Water Right			
CERTIFICATE	Qi (cfs)	Qa (ac-ft/yr)	REMARKS
8249	Not applicable	Storage of 8350	Gorge Reservoir storage



S. F. No. 369—1-57—5M. 47579. O.S.

CERTIFICATE RECORD NO. 17, PAGE NO. 8249

STATE OF WASHINGTON, COUNTY OF Whatcom

CERTIFICATE OF SURFACE WATER RIGHT

(In accordance with the provisions of Chapter 117, Laws of Washington for 1917, and amendments thereto, and the rules and regulations of the State Supervisor of Water Resources thereunder.)

This is to certify that CITY OF SEATTLE

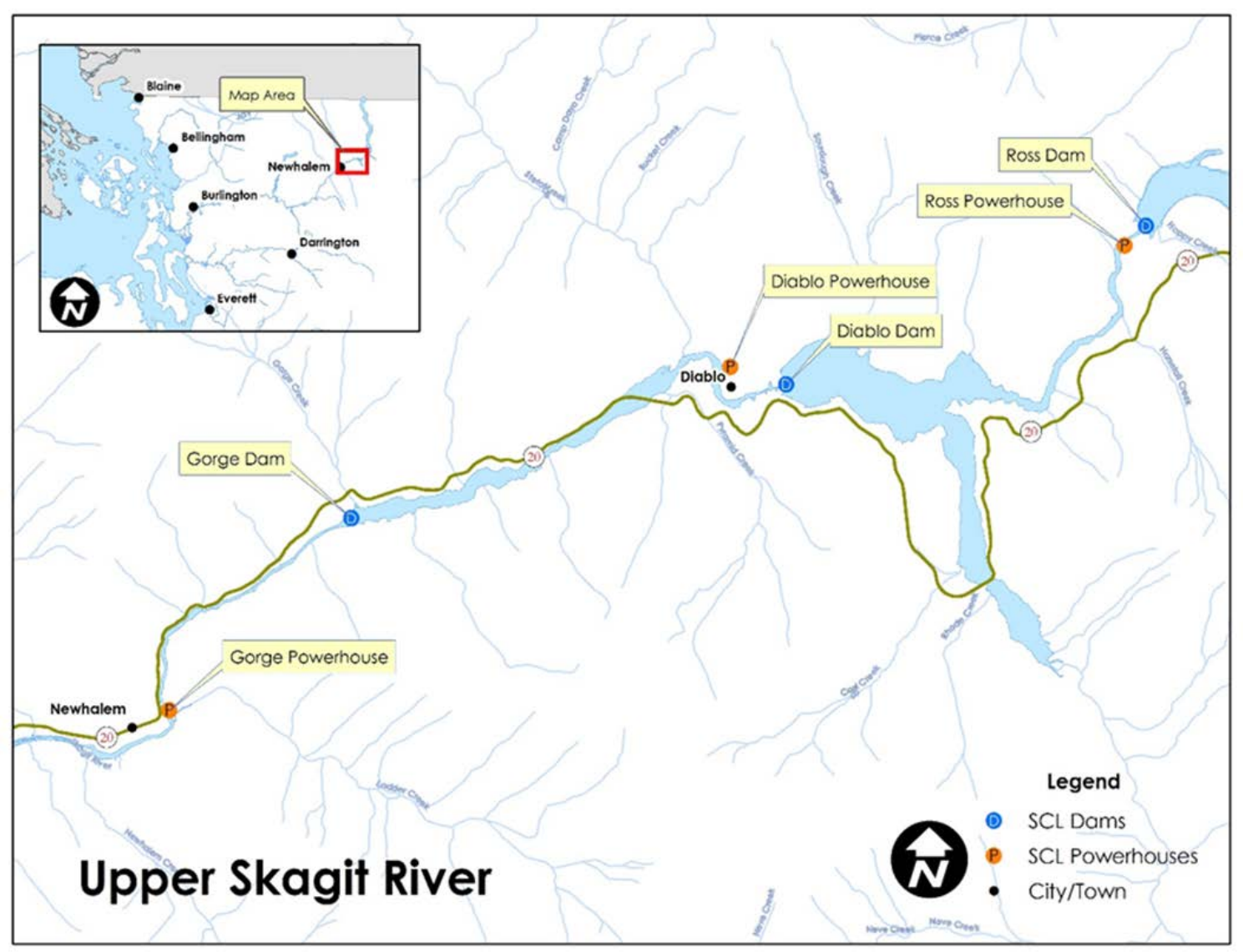
of Seattle, *State of* Washington, *has made proof to the satisfaction of the State Supervisor of Water Resources of Washington, of a right to* ~~the use~~ store ~~of~~ *the waters of* Skagit River, *a tributary of* Puget Sound, *with* ~~pppppppppppppppppp~~ the impounding structure being *within the* NE¼NW¼ *Sec.* 14, *Twp.* 37 *N., R.* 12 E., *W. M.,* unsurveyed land in Mt. Baker National Forest *under and subject to provisions contained in* Reservoir *Permit No.* R-217 *issued by the State Supervisor of Water Resources, and that said right to the* ~~use~~ storage *of said waters has been perfected in accordance with the laws of Washington, and is hereby confirmed by the State Supervisor of Water Resources of Washington and entered of record in Volume* 17, *at Page* 8249, *on the* 4th *day of* October, 19 61

that the priority date of the right hereby confirmed is August 17, 1954; *that the amount of water under the right hereby confirmed, for the following purposes is limited to an amount actually* ~~xxxxxxxxxxxx~~ stored *and shall not exceed* 8350 acre-feet for power purposes.

Secondary Use Right Details

- Diverted from SCL's Gorge Reservoir
- Transported via an existing power tunnel
- To a gate valve and piping system up-gradient of SCL's Gorge Powerhouse
- 0.5 cfs metered release into the river
- Provides continuous additional supply for instream flow augmentation & mitigation
- Will be conveyed into the Trust Water Rights Program after one year

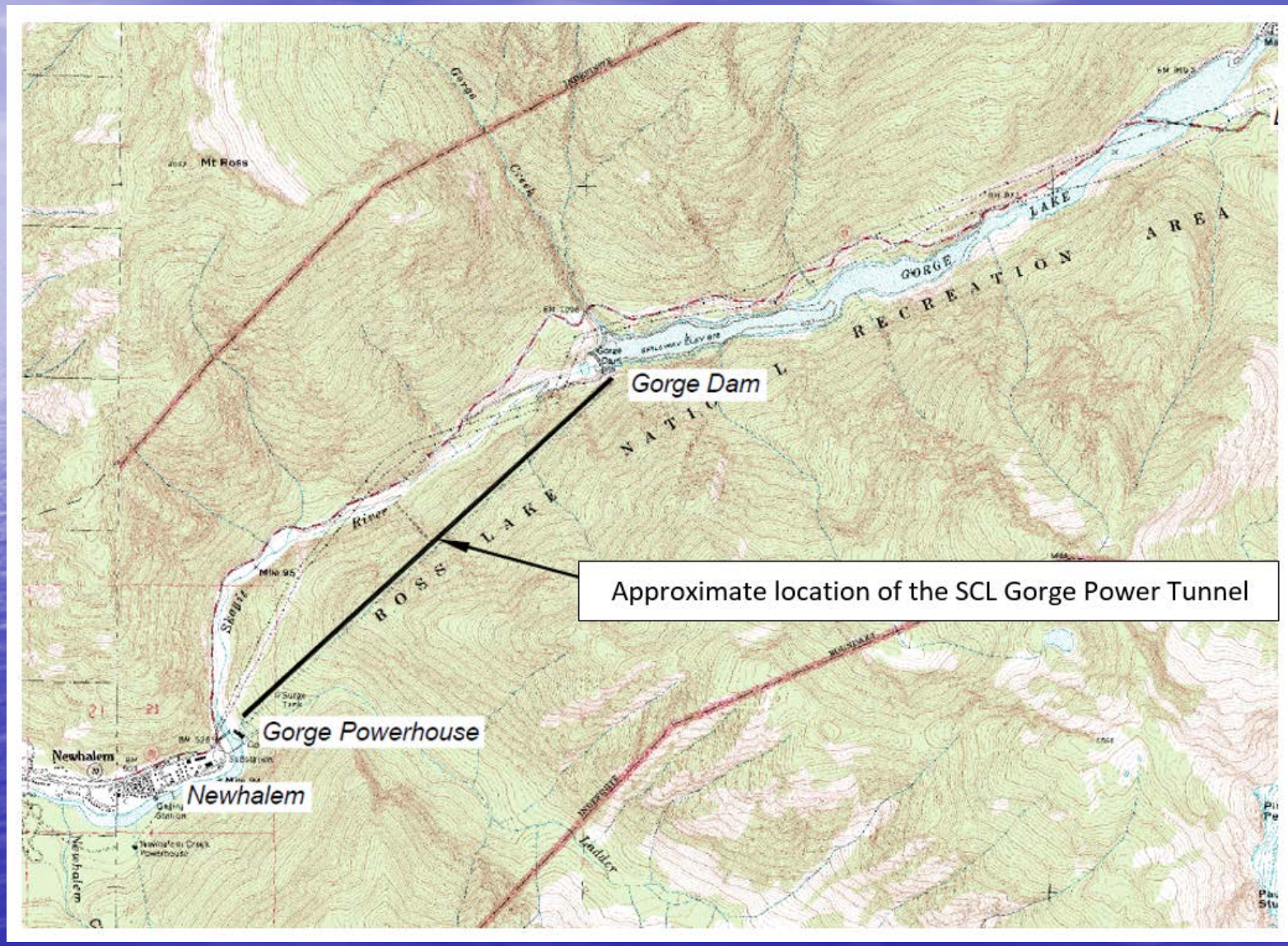
SCL's Skagit River Hydro Project



SCL Gorge High Dam

POD - Gorge Reservoir Intake

SCL Gorge Power Tunnel Map



Portal into a Construction Adit

The Point of Release

Mitigation Plan Purpose

- Mitigation for potential impairment to the Skagit River when flows drop below the minimum levels set in WAC 173-503
- Flows unmet an average of 95 days/year
- Mitigation water is year-round, both when flows are met and unmet
- This will be a net streamflow benefit to the river

Mitigation Plan Details

Two subsets of users:

(1) Mitigated water for parcels that were issued a building permit between 2001 and the court's decision in 2013, on the assumption that water was available

(2) A limited quantity of mitigation water for prospective future users within the "Green Zone" of the "Middle Skagit River Basin"

Reservation Users

- ≈ 410 Skagit River Basin homes and businesses built between April 14, 2001 and October 3, 2013, needing mitigation
- Allocated 0.5 ac-ft/yr per connection
- Using approximately 205 ac-ft/yr of the 362 ac-ft/yr purchased
- Water stays in the river permanently
- Mitigation area is the entire Skagit River Basin (WRIAs 3 & 4)

Future Users

- Only for Future User parcels within the Middle Skagit River Basin, with wells located within the “Green Zone”
- Approximately 157 ac-ft/yr is available for new permit-exempt withdrawals
- Mitigation for average consumptive use
- A maximum of 981 new connections
- Must install a remote-read metering system

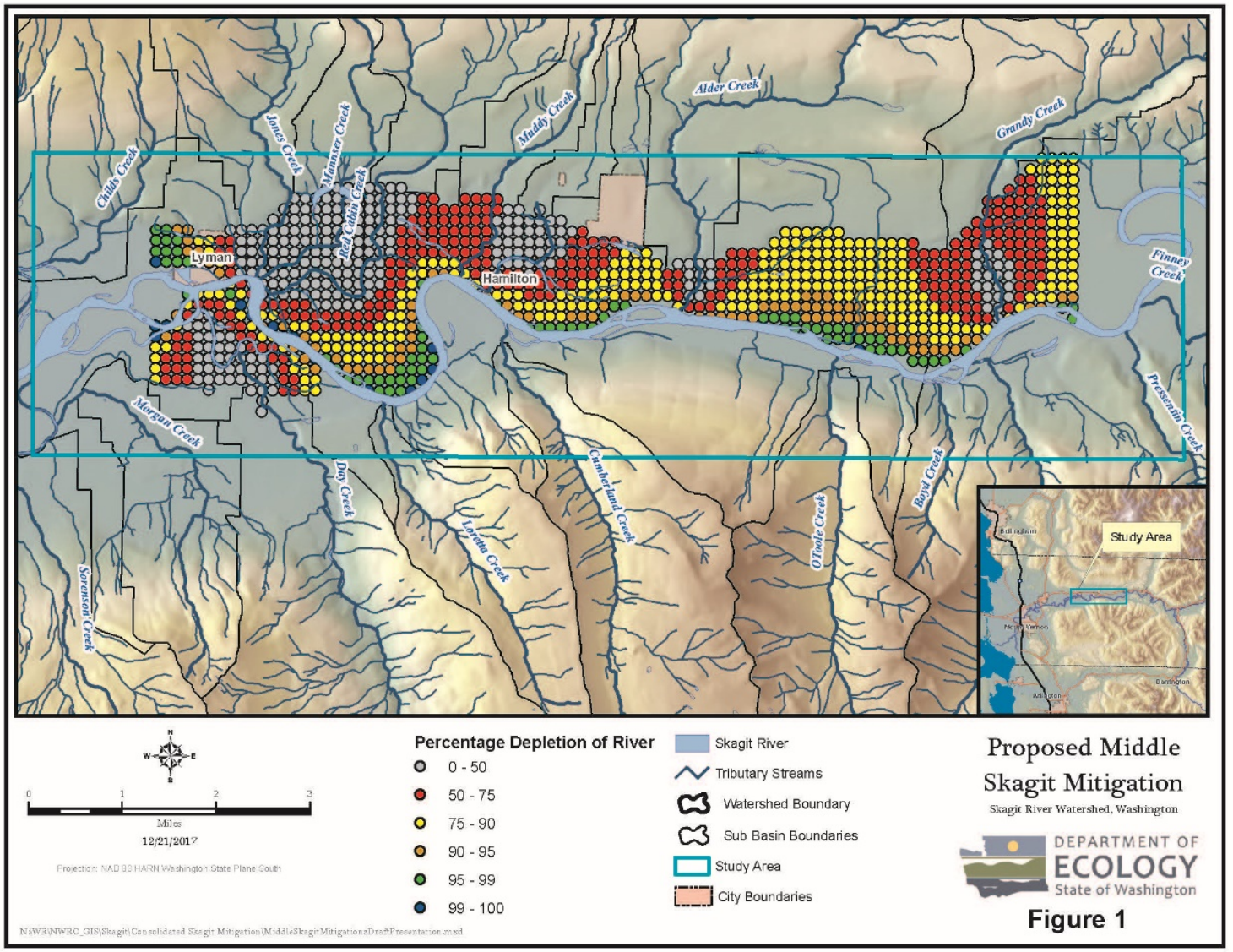
Accounting

- Ecology will use an online platform
- Public can track the mitigation program
- Quarterly website updates
- Ecology will issue an annual report that:
  (1) Shows the balance of water available
  (2) Identifies any new mitigation water
  (3) Accounts for any changes in debited consumptive use (e.g., a residence switches from septic to sewer)

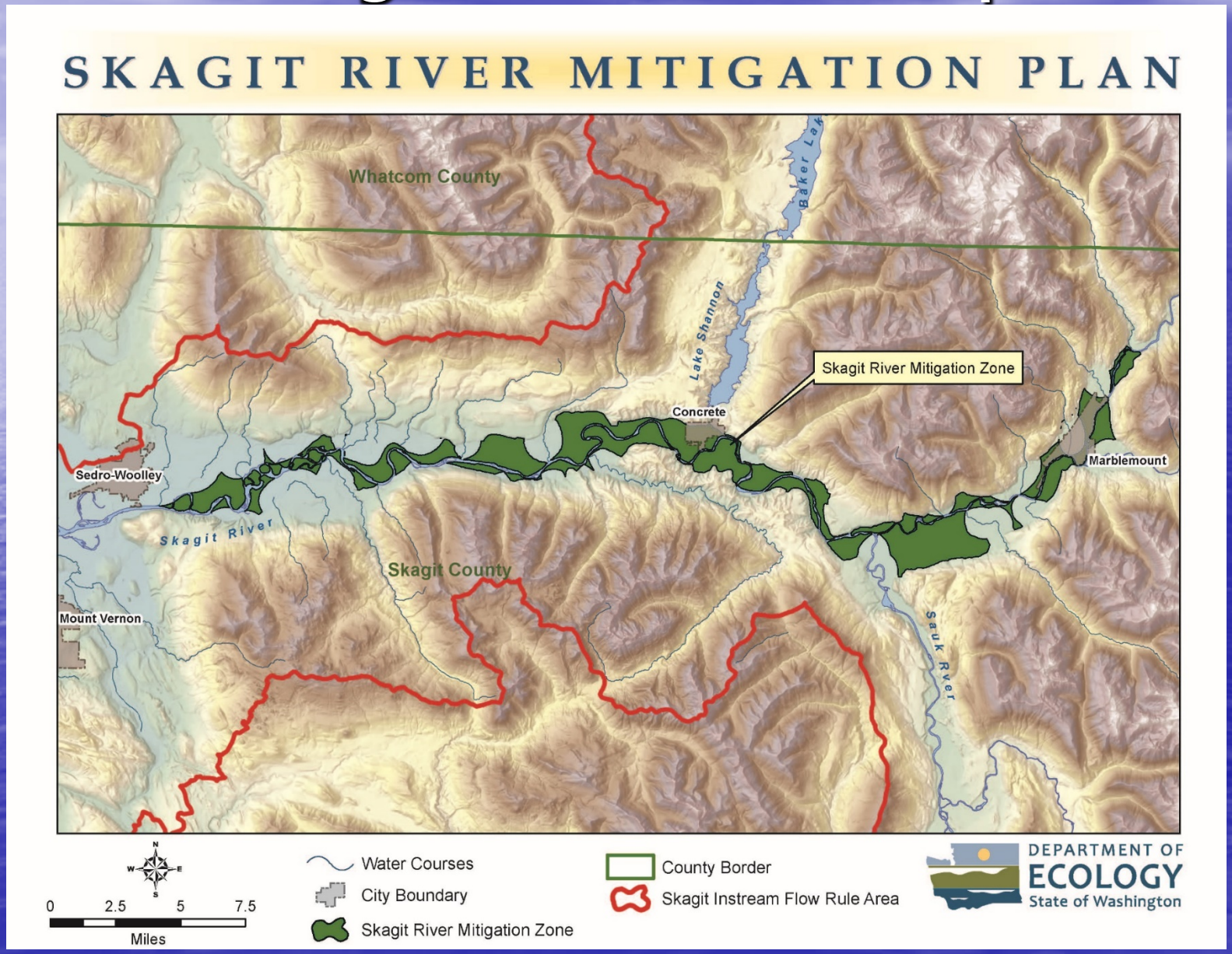
Skagit River Basin Delineation Zone

- HDR hired to develop groundwater model
  - Identify aquifers with the highest recharge to the Skagit River
  - To determine how groundwater wells would deplete Skagit River and nearby tributaries.
- Model Results
  - confirmed that groundwater moves from the adjacent alluvial aquifer to recharge the main stem Skagit River and lower tributary reaches.
  - simulated the effect of depletion on the Skagit River and its tributaries from groundwater wells tapping the alluvial aquifer

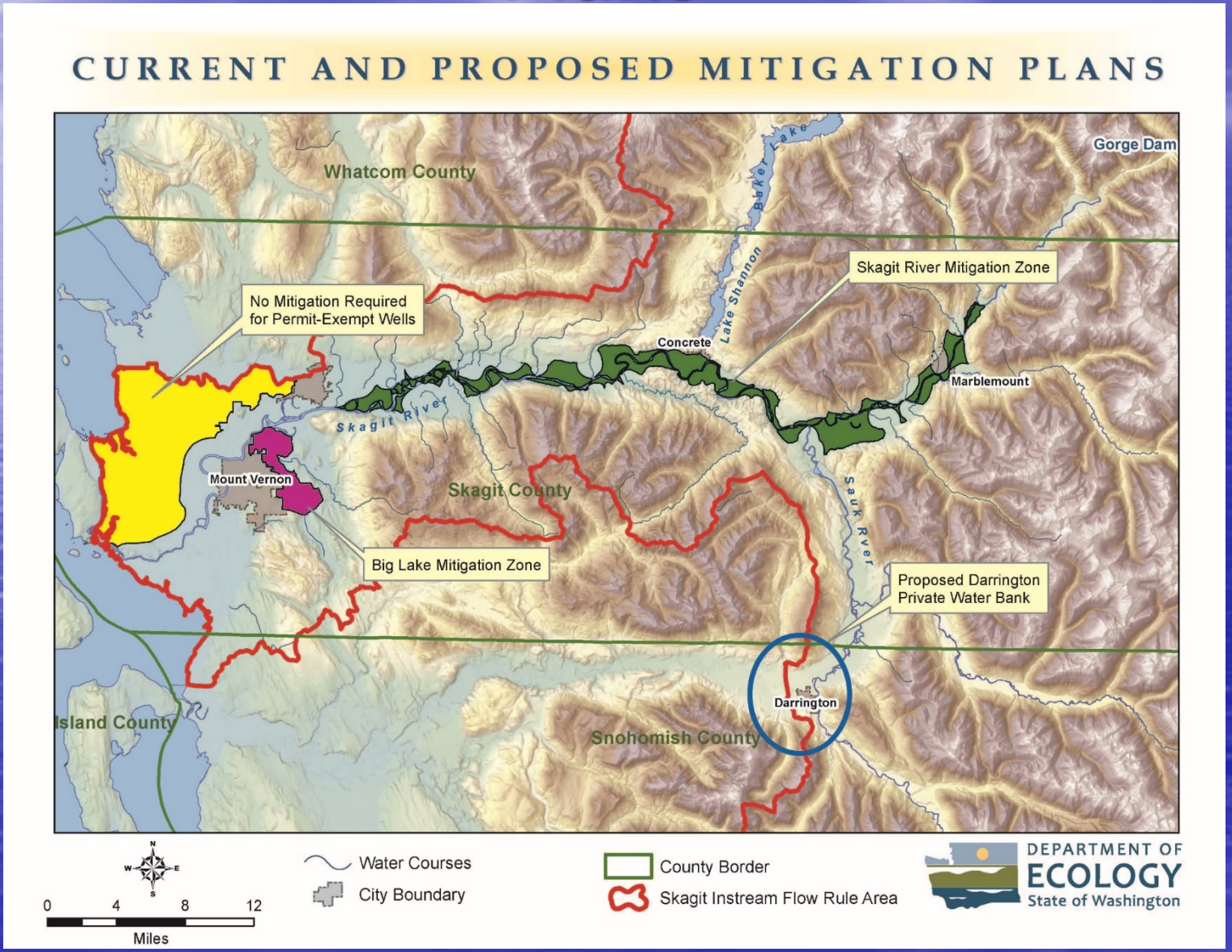
HDR Model Results



Mitigation Zone Map



Current and Proposed Mitigation Plans



Finis!

And now for the QUESTIONS!