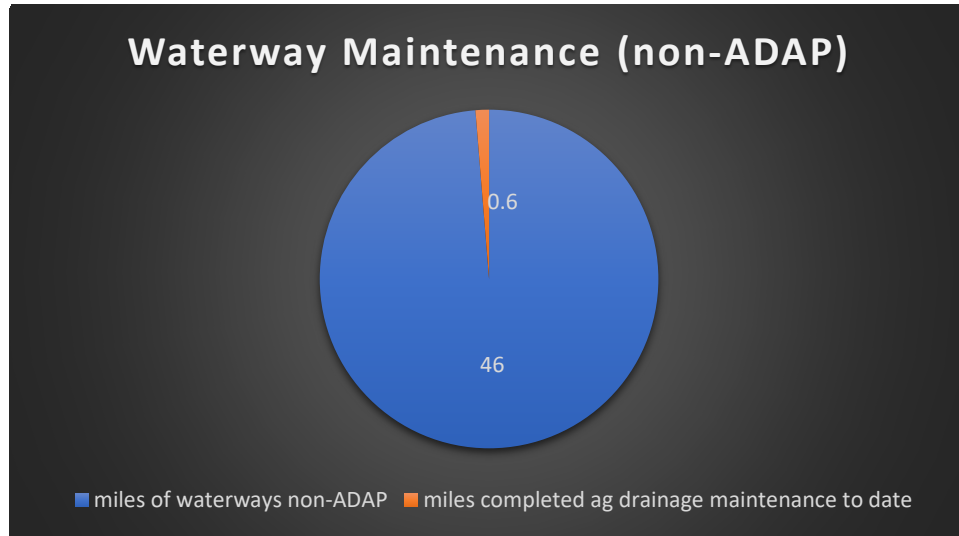


1.1.5: Drainage Maintenance for Non-ADAP¹ Waterways

Current Condition

Desired Condition by 2048

Figure 6. Waterway Maintenance (non-ADAP)



Permitting and processes to maintain all waterways are well defined and landowners can access service providers to improve agriculture drainage and protect farm infrastructure from flooding.

Timeline

- 2024: Complete pilot project to identify regulatory barriers and clarify permitting requirements
- 2025: Monitor flows and further study waterways that may meet ADAP standards. If waterways meet ADAP standards, re-classify as ADAP eligible (update Waterway Classifications Map 8, ADAP eligible waterways Map, and non-ADAP eligible waterways Map 6 & 7)
- 2026: Complete assessment of waterways in the APD
- 2028: Test and secure long-term funding mechanisms for cost-share and overall project funding for waterway maintenance
- 2035: Complete initial maintenance cycle and begin recurring maintenance cycle

There are 156 miles of waterways in the Snoqualmie Valley Agriculture Production District (APD). We are dividing these into three waterway categories for agriculture drainage: 1) 27 miles of the Snoqualmie River along which there are flood gates and culverts, 2) 83 miles of Agriculture Drainage Assistance Program² (ADAP) eligible waterways, and 3) 46 miles (241,659 linear feet) of waterways in the APD that are non-ADAP eligible. In this third category of non-ADAP eligible waterways (specifically excluding the river miles), drainage assessment is needed and may require maintenance for agriculture drainage. These include four perennial streams (see Figure 7) that are being assessed for inclusion in King County’s Integrated Drainage Program (IDP).

There are also three additional streams, several oxbows, and lakes which fall in this category. There are waterways outside the APD (currently unquantified) which also need to be assessed. There is currently no permit available for drainage maintenance in these waterways. However, two pilot projects are underway (2021). These pilots are multi-benefit projects, improving fish habitat, providing flood hazard mitigation *and* drainage improvements. Fish habitat and flood hazard mitigation projects do have a permit process under existing King County Code.

To date, just over half of one mile, or .6 miles total (2,275 linear feet), have been maintained for drainage on Cherry Creek (875 linear feet) and Indian Creek (1,400 linear feet). Indian Creek was completed under allowed flood hazard mitigation for vegetation management of noxious weeds³.

Background

Service Providers

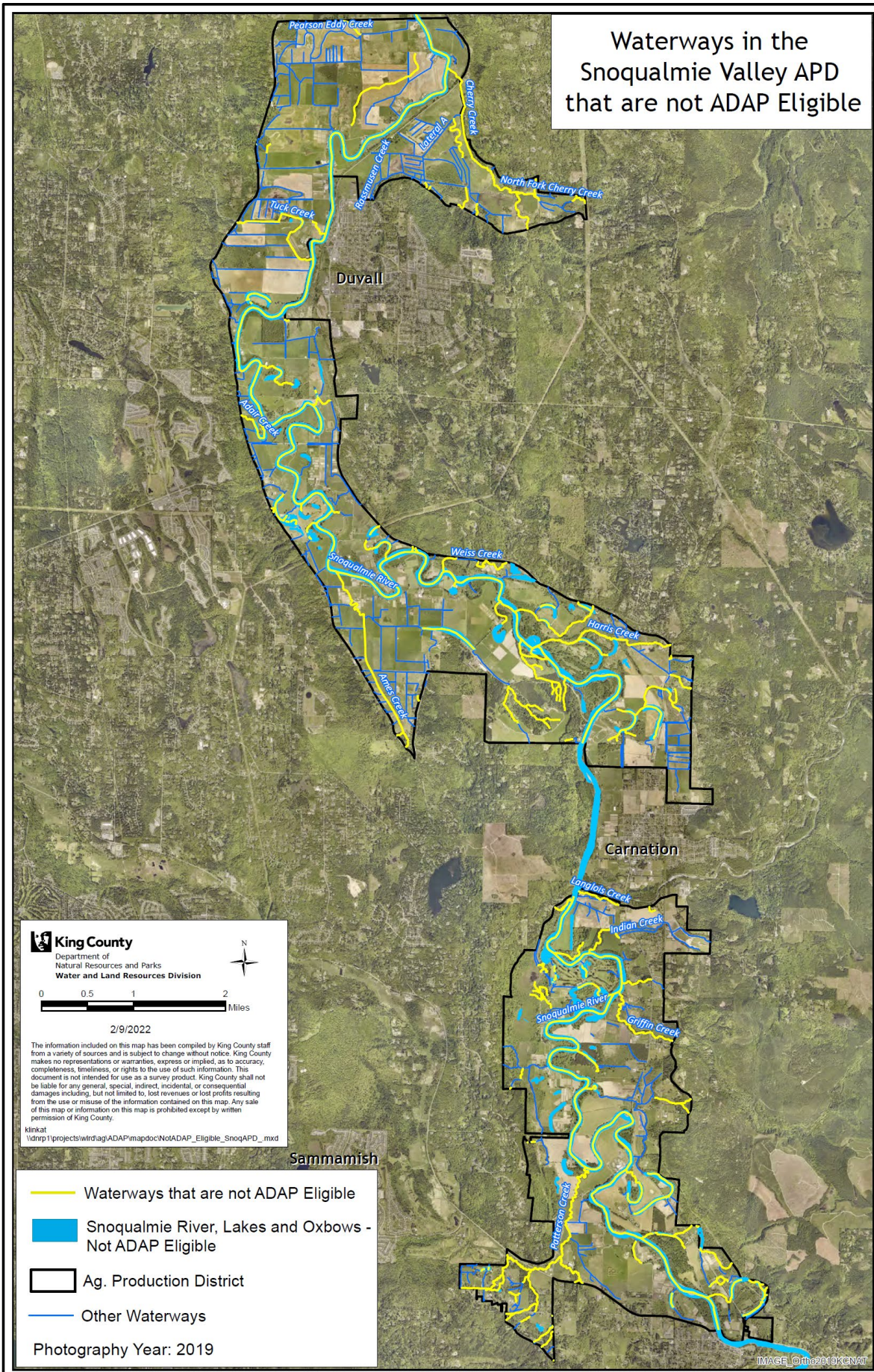
Priority

<p>Waterways (non-ADAP) are streams usually larger than ADAP eligible waterways and/or natural waterways (e.g., those with headwaters and that are primarily unmodified by human activity or more natural conditions). ADAP ineligible waterways may have Chinook salmon present, which means they are protected by the Endangered Species Act (ESA). There is no clear way to permit agricultural drainage maintenance in these systems under existing King County Code. Two pilots are underway, King County Stormwater Services on Griffin Creek and the Snoqualmie Valley Watershed Improvement District (SVWID) is conducting pilot projects on Cherry Creek to understand the regulatory barriers better, clarify permitting requirements and identify opportunities for code changes.</p> <p>Because waterway classification is subject to change as more information is gained, prioritize Stormwater Services to monitor flows on waterways and see if they meet ADAP standards and then re-classify them. Some of these waterways that need further study for re-classification include Tuck Creek, Ames Creek, Waterwheel Creek, and others.</p> <p>Waterway maintenance activities include in-stream sediment management, vegetation management (noxious weed management), culvert replacement, and beaver dam management.</p>	<p>Lead:</p> <ul style="list-style-type: none"> King County Stormwater Services IDP Snoqualmie Valley Watershed Improvement District (SVWID) <p>Partners:</p> <ul style="list-style-type: none"> King Conservation District 	<p>MEDIUM /HIGH</p>
<p>Strategies</p>		
<ul style="list-style-type: none"> Monitor flows and further study waterways that may meet ADAP standards. If waterways meet ADAP standards, re-classify as ADAP eligible (update Waterway Classifications Map 8, ADAP eligible waterways Map, and non-ADAP eligible waterways Map 6 & 7). Complete pilot studies to identify regulatory barriers, clarify permitting requirements and identify opportunities for code revisions. Secure multi-benefit partnerships and long-term funding from King County Stormwater Management (SWM), the King County Flood Control District, special district assessments, and multi-benefit project grants such as Floodplains by Design and the Family Forest Fish Passage Program (FFF2P), etc. to increase capacity for non-ADAP waterway maintenance in tandem with fish habitat and flood improvement projects. Assess waterways for drainage maintenance/flood impacts to APD and conduct maintenance where required. 		

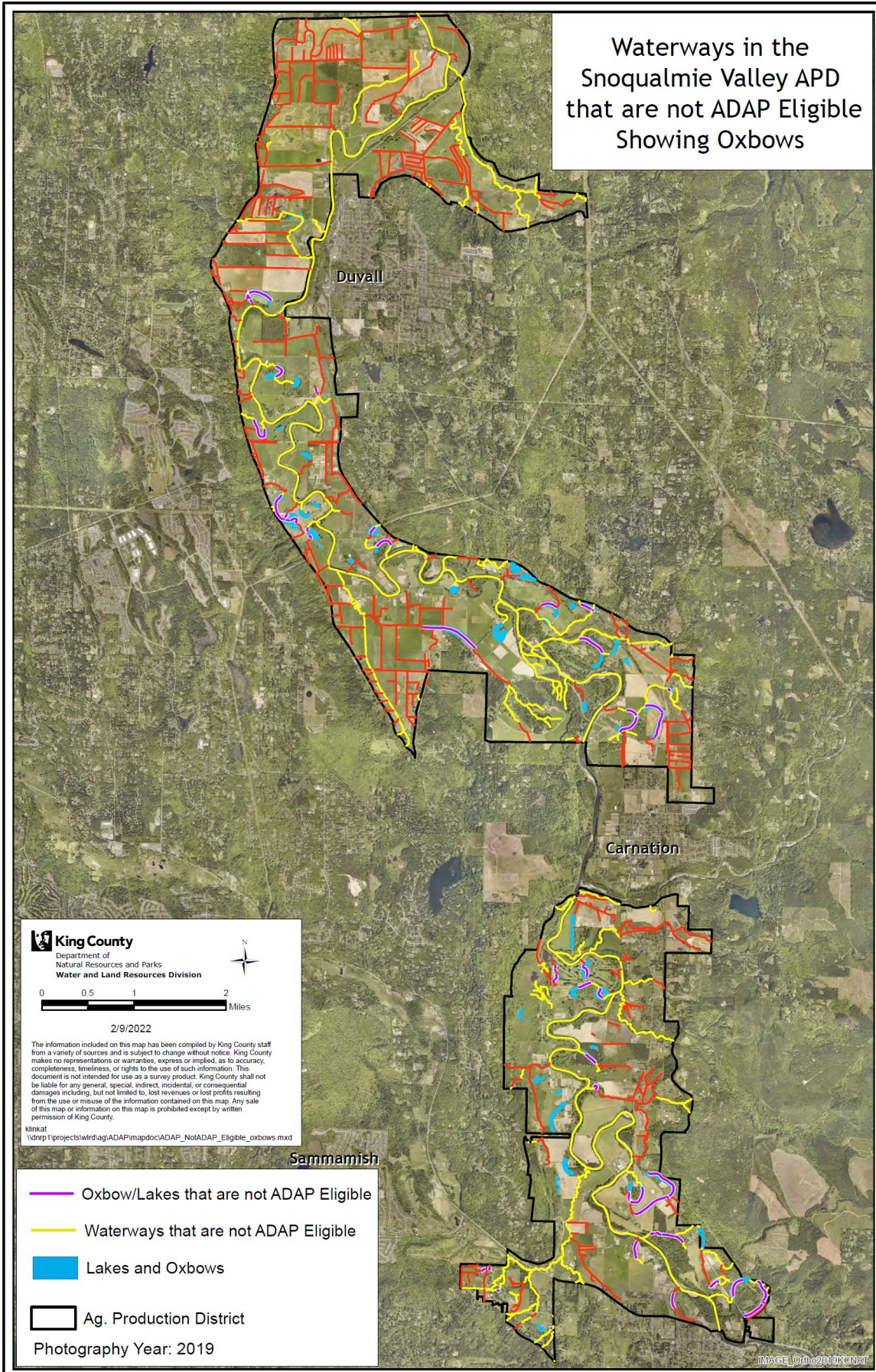
Figure 7. Non-ADAP waterways being assessed for inclusion in King County’s Integrated Drainage Program (IDP).

Snoqualmie Valley APD		Waterway Classification ⁴		Chinook Present
Water Body (non-ADAP)	Channel	Fish Presence		
Per FFF Farm 2, being researched for permits through multi-benefit pilot projects and added to KC Integrated Drainage Program (IDP)	Griffin Creek	Modified	High	YES
	Tuck Creek	Modified	High	NO
	Cherry Creek	Modified/Natural	High	YES
	Ames Creek	Modified/Natural	Moderate	NO
Need to be assessed for barriers to agricultural drainage and permitting developed to allow ag drainage maintenance	Harris Creek	Natural	High	NO
	Patterson Creek	Natural	High	YES
	Langlois/Indian Creek	Modified/Natural	High	YES

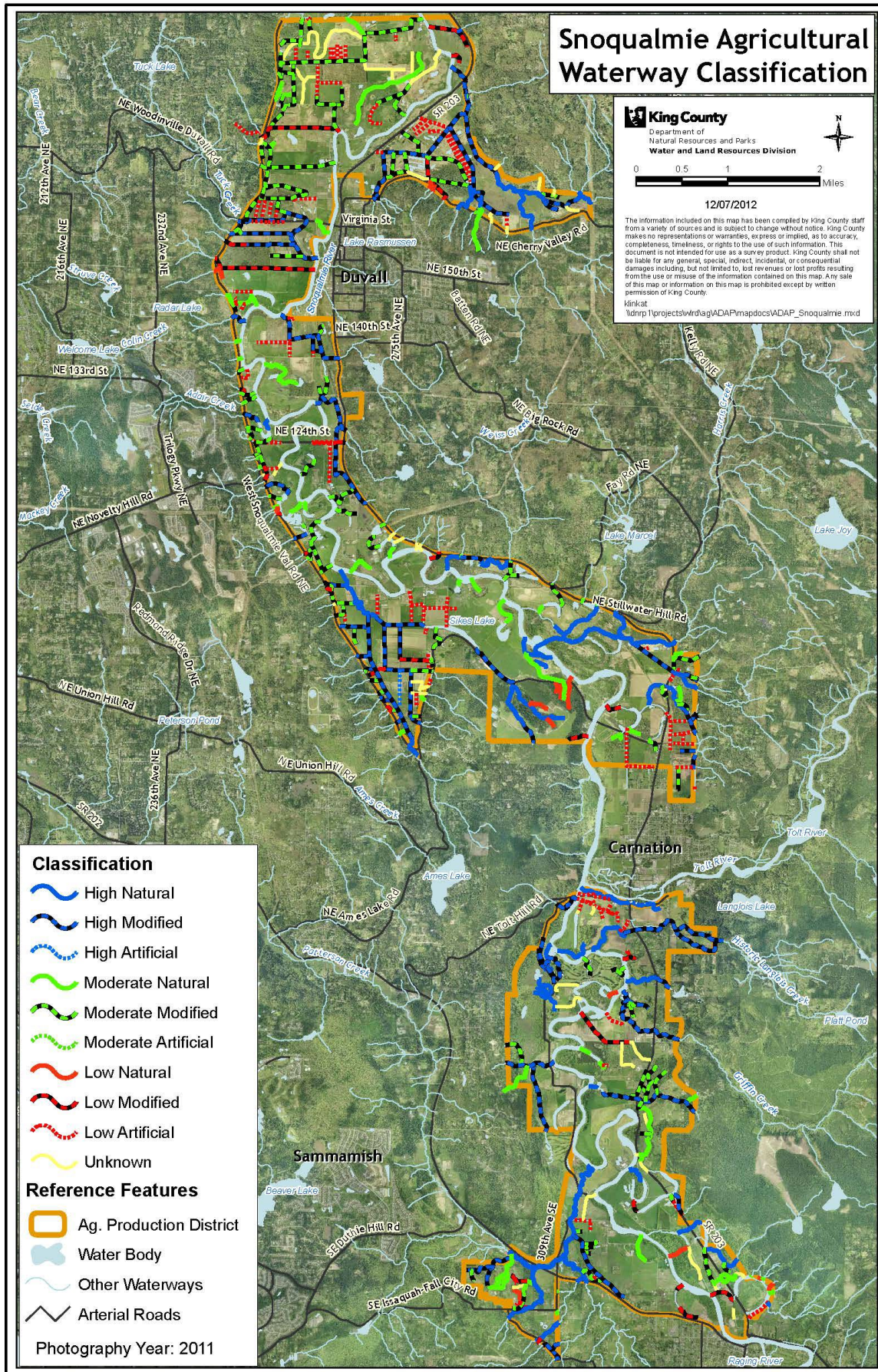
Map 6. Waterways in the Snoqualmie Valley APD that are not ADAP eligible



Map 7. Waterways in the Snoqualmie Valley APD that are not ADAP Eligible Showing Oxbows (in linear feet count, other lakes not in linear feet count)



Map 8. Snoqualmie Waterway Classification in relation to ADAP eligible and non-ADAP eligible Waterways



¹ Agricultural Drainage Assistance Program (ADAP) is a King County program that assists farmer/landowners with drainage technical support for ADAP eligible waterway maintenance. See issue paper 1.1.1 for more details.

²King County Department of Natural Resources and Parks, “Hydraulic Permit Approval Memorandum of Understanding” December 2011. [\[LINK\]](#) Accessed 10/28/21.

³ Erin Ericson, Executive Director, Snoqualmie Valley Watershed Improvement District, personal communication, January 10, 2022.

⁴ King County Department of Natural Resources and Parks, “Snoqualmie Waterway Classification” December 7, 2012. [\[LINK\]](#) Accessed 10/28/21.