



# Farm Fish Flood: SVAPD Agriculture Land Resource Strategic Plan 2022

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**Q1** Task Force Meeting Bi-weekly

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**Q2** Completing Issue Papers and Maps

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**Q3** Outreach with farmers in early fall

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**Q4** On schedule for adoption in  
December

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# Task Force Participants

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| Members   | Affiliation                             |
|---|---|
| <b>1. Janet Keller, Jordan Jobe</b>                 | Ag Commission                           |
| <b>2. Andrew Stout<br/>Erin Erickson, alternate</b> | Watershed Improvement District          |
| <b>3. Janet Keller<br/>Lisa Kysar, alternate</b>    | Snoqualmie Valley Preservation Alliance |
| <b>4. Libby Reed<br/>Dave Glenn, alternate</b>      | Sno Valley Tilth, SCD Resiliency Plan   |
| <b>5. Bobbi Lindemulder</b>                         | FFF IOC, Snohomish CD                   |
| <b>6. Jordan Jobe</b>                               | WSU CSANR                               |



- Vision statement
- 2 Goals
- 10 Sub-goals
- Key values/themes
- Objectives and Measures
- 22 Issue dashboards
- References

**Improve  
Farmland  
Productivity**

**Increase  
Farmland  
Protections**

# STRATEGIC GOALS LINK TO PRIORITY STRATEGIES TO ACCOMPLISH THAT GOAL

## Goal 1

### Improve Farmland Productivity

## Sub-goals

1. All farmable acreage in the SVAPD will be improved through **drainage** so that the land can be productively farmed for the full length of the growing season.

**2. Transportation** infrastructure including revetments, roads and bridges will be fully functioning to support the movement of agricultural products while managing traffic to increase safety for all and prioritize routine operation of farms every day.

3. Every commercial farm has sufficient access to water for **irrigation** and uses best management practices and technology to minimize water usage. Farms will keep existing water rights, continue water transfers through SVWID, and increase access to water transfers.

4. Every commercial farm has sufficient **access** (close proximity and enough space) to **high ground** for equipment, storage, and livestock, and every farm **home** below the base flood elevation is **elevated** to ensure **flood safety** and continued productivity on the farm.

5. Commercial farms will maintain and increase agricultural productivity through adaptively managing changing plant pathogens, crop varieties, animal diseases, precipitation changes affecting water flows and irrigation needs through **climate change** research and education relevant to Western Washington and the Snoqualmie Valley APD.



# STRATEGIC GOALS EMBODY THE KEY COMPONENTS OF THE PLAN

## Goal 2

Increase Farmland Protections

## Sub-goals

6. Flood Safety

7. Development and Population Growth

8. Wildlife

9. Farmland Preservation

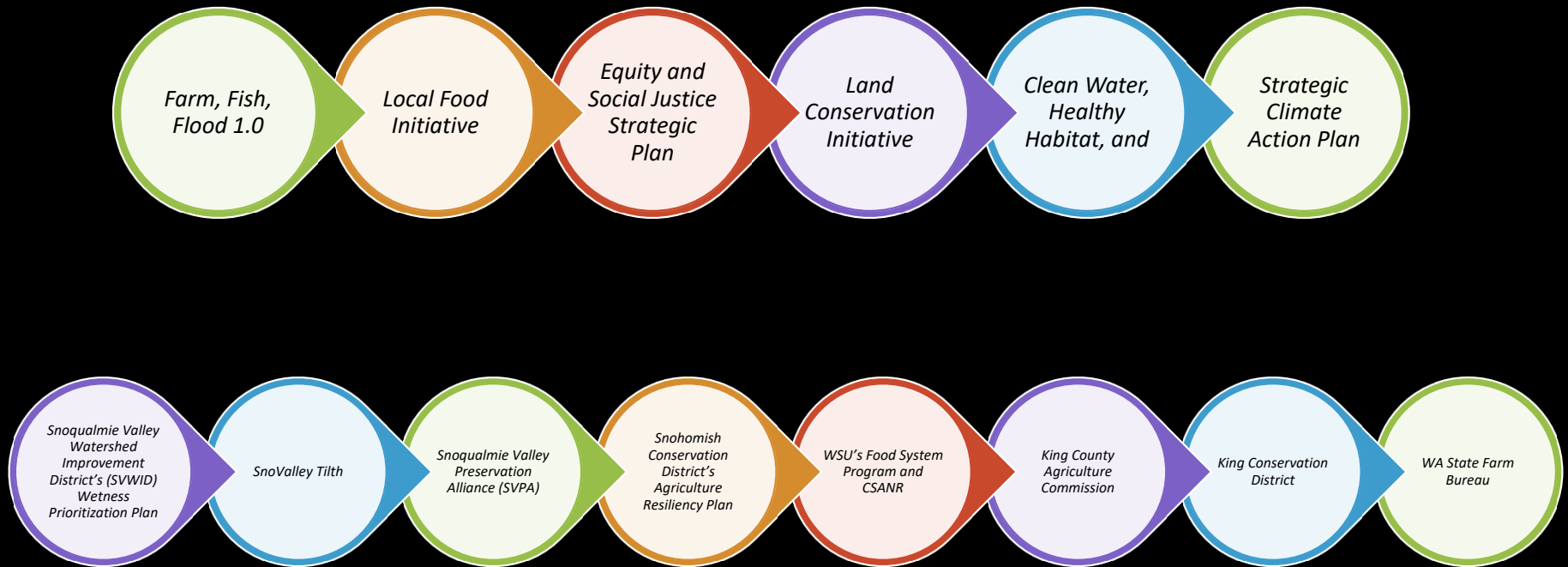
10. Proposed acreage needs for long-term, viable sector



# Key values/themes incorporated into the plan

1. Responsible Stewardship/Sustainable Farming
2. Flood and climate change preparedness
3. Equity and social justice
4. Multi-benefit projects
5. Innovative thinking
6. Regulatory certainty
7. Resource investments
8. Alignment with related plans and programs

# Alignment with related strategic plans and programs



Goal

# Improve Farmland Productivity

Sub-goal

1. All farmable acreage in the SVAPD is routinely improved through **drainage** so that the land can be productively farmed for the full length of the growing season.

Objectives

*a. Increase pace of drainage infrastructure improvements and ensure schedule for routine monitoring and maintenance of drainage improvements by increasing and providing long-term funding for drainage service providers to at least \$1.5M/year*

*b. Strengthen partnerships for multi-benefit project implementation, funding opportunities, and regulatory improvements*

*c. Reduce cost for landowners to ensure more improvements occur and there is equity in access to drainage programs*

*d. Explore mitigation bank for strategic plantings that most benefit habitat*

Measures

Acreage put back into production after drainage maintenance: ADAP eligible waterways, Multi-benefit waterways, Culverts, Flood Control Gates and Pumps, Tiles

Track partners, projects, funding, regulatory progress

Increase in outreach and cost-share

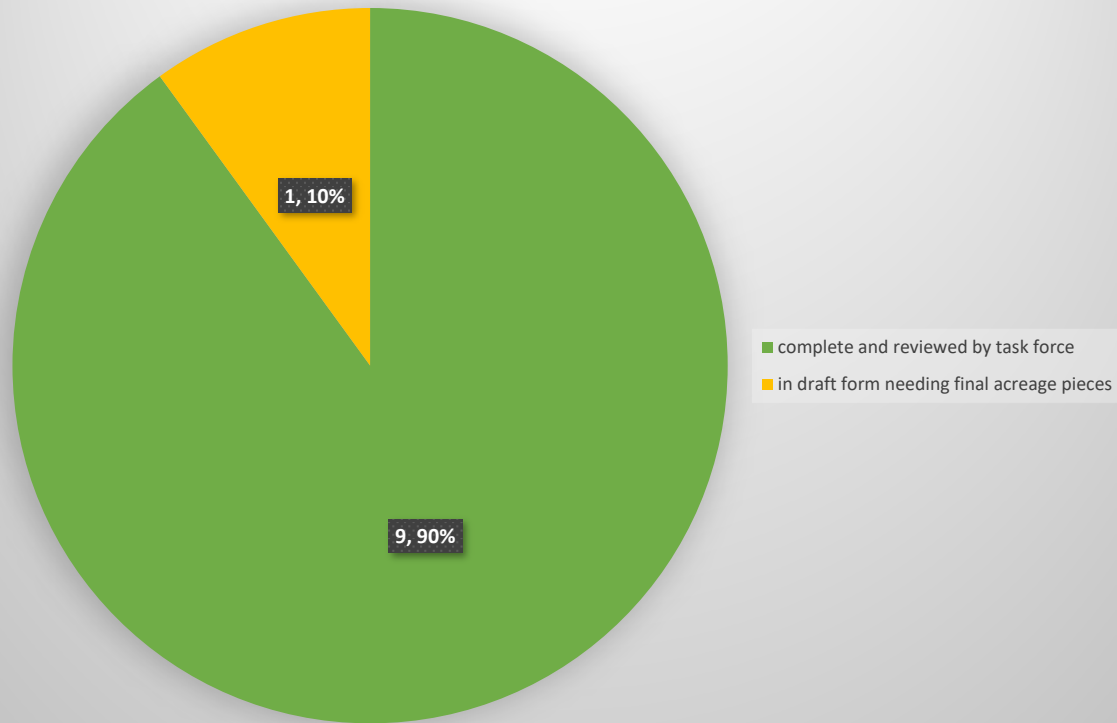
Progress via ADAP dashboard timeline

Values and Strategic Plan Overlay





### Sub-goals Progress to Date



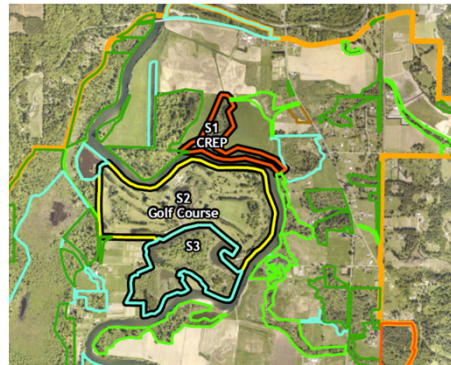
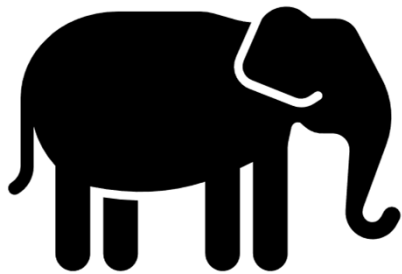
Been working on this since May; Map overlay in progress

# Mapping for Acreage Needs

Examined all SVAPD 2017 Ag Land Use Mapping

Re-categorized some areas for long-term vs. present use

Now fine-tuning scale to match finer FFF Buffer Task Force Maps



66%  
Complete

## 1. Improved Farmland Productivity

### 1.1 Drainage

1. Waterway Maintenance – ADAP eligible
2. Agricultural Drainage Tiles
3. Flap/Flood Control Gates and Pumps
4. Culverts
5. Natural Waterways
6. Beavers

### 1.2 High Ground and Home Elevations for Flood Safety

7. Farm Pads and High Ground Refuge
8. Homes and home elevations

### 1.3 Irrigation

9. Water Rights and Irrigation

### 1.4 Transportation

10. Revetments
11. Transportation Corridors and Bridges

### 1.5 Climate Change

12. Invasive Species
13. Climate change predictions

## 2. Increased Farmland Protections

### 2.1 Flood Safety, saving homes in the APD (home elevations)

14. Known patterns of flooding

### 2.2 Population Growth and Development Impacts

15. Population Growth and Development

### 2.3 Wildlife

16. Elk
17. Waterfowl  
see issue 1.1.6 Beavers

### 2.4 Farmland Preservation

18. Farmland Preservation Program

### 2.5 Proposed xx farmable acres for a long-term, viable agriculture sector

19. FALLOW Areas of high-quality agricultural soils
20. Riparian buffers, restoration, and mitigation projects
21. Areas of low or no agriculture potential (and thus could be kept out of ag production permanently with little impact to current or future farm operations)
22. Proposed acreage needs for sector

# Table of Contents

22 Issue Papers by Sub-Goal and Topic

# Coming up...



## **Improve Farmland Productivity**

**Water Rights and Irrigation**

Revetments

Transportation



## **Increase Farmland Protections**

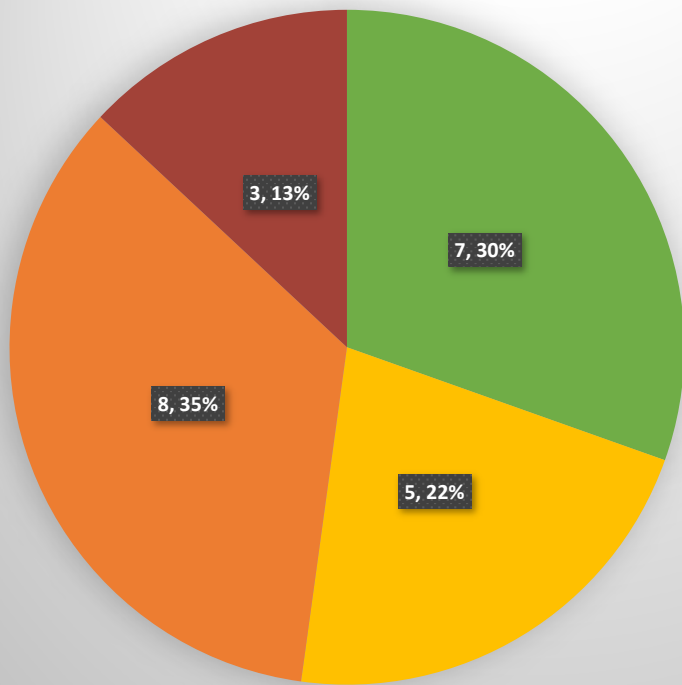
**Elk**

**Waterfowl**

**Farmland Preservation**

Acreage (4)

## Issue Papers Progress to Date



- complete and reviewed by task force
- under task force review
- in draft form needing SME input/reviews
- not yet drafted

### 1.1.1: Drainage Maintenance for ADAP Eligible Waterways

**ADAP Eligible Waterway Maintenance**  
Snoqualmie Valley APD

There are 83 miles of ADAP eligible waterways in the SVAPD. Each year, approximately 20,000 feet (~2 miles) of agricultural waterways are maintained in the Snoqualmie Valley, which equates to about 2% of all eligible waterways and a return interval of about 45 years. It would take approximately 37 years for complete waterway maintenance on the existing 73 miles in the SVAPD at the current rate of 2 miles each year.

Costs for agricultural waterway dredging can vary based on complexity of the project. As of 2018, projects cost about \$50 per linear foot from the planning through the monitoring stages, meaning that initial dredging of the remaining 73 miles of the 83 miles of eligible waterways would cost roughly \$36,750,000. On average, 72% of these costs are covered by King County, 18% by King Conservation District or the DNRDC, and 10% by landowners.

**Background**

Agricultural waterways direct water out of agricultural fields into larger waterways and streams. Over time, these waterways can fill with sediment and become blocked by overgrown weeds, slowing or stopping the movement of water and leading to poorly drained fields.

King County's Agricultural Drainage Assistance Program (ADAP) works under an interlocal agreement with Washington Department of Fish and Wildlife (WDFW) that incorporates best management practices (BMPs) to protect fish and water quality. Through ADAP, landowners only need a single permit to conduct maintenance. Currently, ADAP is the only permitted program for agricultural waterway maintenance in the Snoqualmie Valley. ADAP is limited to working on drainage improvements in artificial drainage channels and relatively small modified waterways. King County's Integrated Drainage Program will expand work into larger waterways and incorporate sediment management and technical assistance on flood/rise gate, and jump maintenance.

**Strategies**

**Desired Condition by 2046**


All eligible waterways are assessed and undergo initial maintenance, are evaluated for maintenance return interval based on waterway classification and need, and recurring maintenance is done. Cost-benefit analysis of an offsite mitigation strategy completed.

**Timeline**

- 2022: KC Integrated Drainage Program is funded and begins improvements on additional drainage systems
- 2023: Funding gap met, additional ADAP crews added, timeline of dredging projects developed (starting with landowner requests and priority sub-basin and moving to lower priority basins in SVAPD)
- 2026: Cost-benefit analysis of offsite mitigation strategies completed
- 2030: Initial maintenance of remaining 73 miles completed
- 2045: Recurring maintenance interval is determined by evaluation criteria and scheduled for ongoing maintenance.

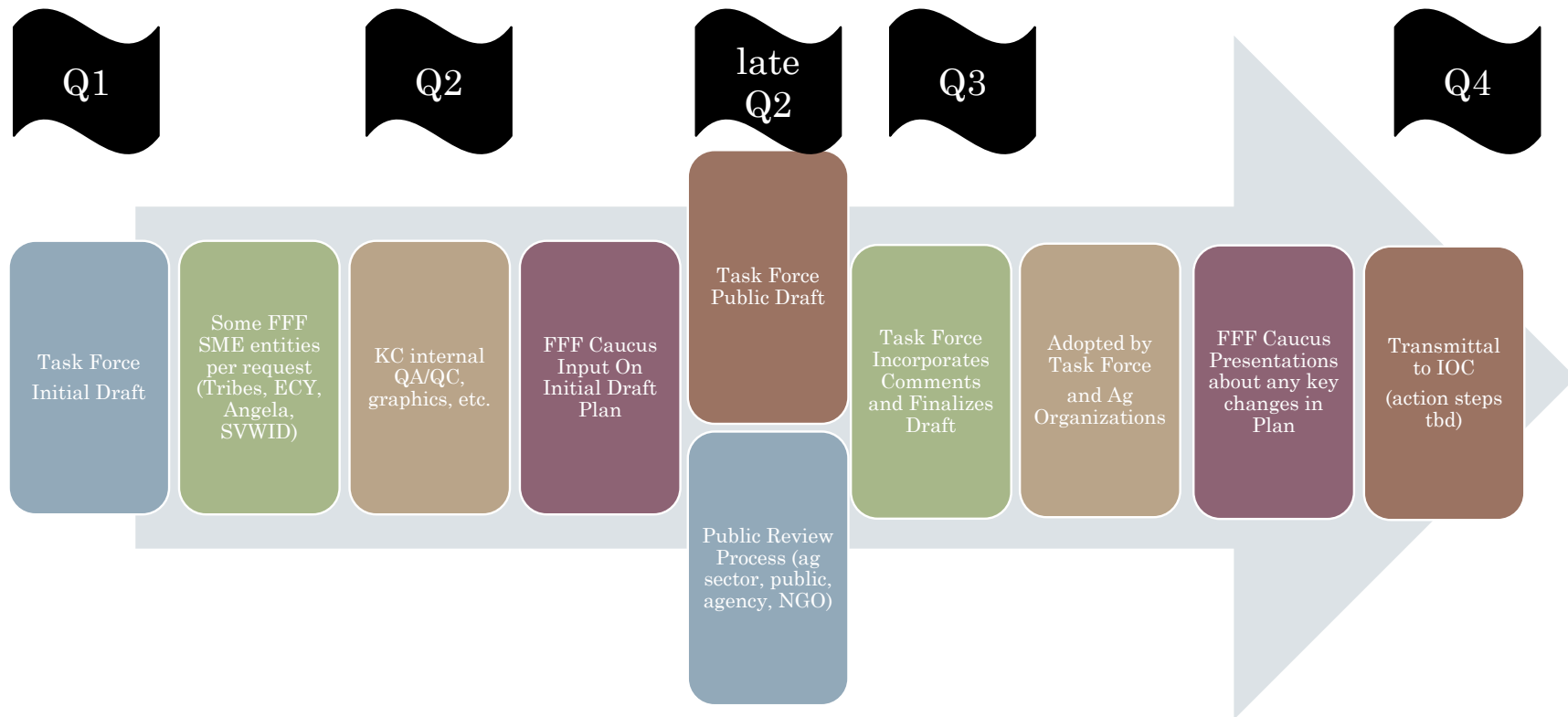
| Service Providers  | Priority |
|--|----------|
| <b>Lead:</b> <ul style="list-style-type: none"> <li>• King County Integrated Drainage Program</li> </ul> <b>Partners:</b> <ul style="list-style-type: none"> <li>• SW Watershed Management District</li> <li>• King Conservation District</li> </ul> | HIGH     |

# Issue Paper format

| 1.1.1: Drainage Maintenance for ADAP Eligible Waterways   |   |  |
|---|---|--|
| Current Condition   |   | Desired Condition by 2046  |
| <p><b>ADAP Eligible Waterway Maintenance</b><br/>Snoqualmie Valley APD</p>  <p>There are 83 miles of ADAP eligible waterways in the SVAPD. Each year, approximately 32,000 feet ("2 miles) of agricultural waterways are maintained in the Snoqualmie Valley, which equates to about 2% of all eligible waterways and a return interval of about 45 years. It would take approximately 37 years to complete waterway maintenance on the existing 73 miles in the SVAPD at the current rate of 2 miles each year.</p> <p>Costs for agricultural waterway dredging can vary based on complexity of the project. As of 2018, projects cost about \$50 per linear foot from the planning through the monitoring stages, meaning that initial dredging of the remaining 73 miles of the 83 miles of eligible waterways would cost roughly \$19,272,000. On average, 72% of these costs are covered by King County, 18% by King Conservation District or the SVAPD, and 10% by landowners.</p> |   | <p>All eligible waterways are assessed and undergo initial maintenance, are evaluated for maintenance return interval based on waterway classification and need, and recurring maintenance is done. Cost-benefit analysis of an offsite mitigation strategy completed.</p> |
| <p><b>Timeline</b></p> <ul style="list-style-type: none"> <li>2021: KC Integrated Drainage Program is funded and begins improvements on additional drainage systems</li> <li>2023: Funding gap met, additional ADAP crews added, timeline of dredging projects developed (starting with landowner requests and priority sub-basin and moving to lower priority basins in SVAPD)</li> <li>2026: Cost-benefit analysis of offsite mitigation strategies completed</li> <li>2031: Initial maintenance of remaining 73 miles completed</li> <li>2045: Recurring maintenance interval is determined by evaluation criteria and scheduled for ongoing maintenance</li> </ul>  |   |  |
| Background  | Service Providers   | Priority   |
| <p>Agricultural waterways direct water out of agricultural fields into larger waterways and streams. Over time, these waterways can fill with sediment and become blocked by overgrown weeds, slowing or stopping the movement of water and leading to poorly drained fields.</p> <p>King County's Agricultural Drainage Assistance Program (ADAP) works under an interlocal agreement with Washington Department of Fish and Wildlife (WDFW) that incorporates best management practices (BMPs) to protect fish and water quality. Through ADAP, landowners only need a single permit to conduct maintenance. Currently, ADAP is the only permitted program for agricultural waterway maintenance in the Snoqualmie Valley. ADAP is limited to working on drainage improvements in artificial drainage channels and relatively small modified waterways. King County's Integrated Drainage Program will expand work into larger waterways and incorporate culvert replacement, and technical assistance on flood/flow gate, and pump maintenance.</p>                    | <p><b>Lead:</b></p> <ul style="list-style-type: none"> <li>King County Integrated Drainage Program</li> </ul> <p><b>Partners:</b></p> <ul style="list-style-type: none"> <li>SV Watershed Improvement District</li> <li>King Conservation District</li> </ul> | <p><b>HIGH</b></p>   |
| <p><b>Strategies</b></p>  |   |  |

- Current Condition
- Background
- Desired Condition by 2046
- Strategies
- Timeline
- Service Providers (Lead, partners)
- Priority Level (high, medium, low)
- Maps
- Tables
- References

# Plan Review Process





Challenges and Successes Along the Way



Lessons learned?



What's been difficult?



Excitement about certain issue papers?



How does the task force work together?



What else?



Questions from Commissioners?

# Task Force Members and Participants