

# Big Tent Committee: Climate Resilience Overview

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# So what can we do about climate change?



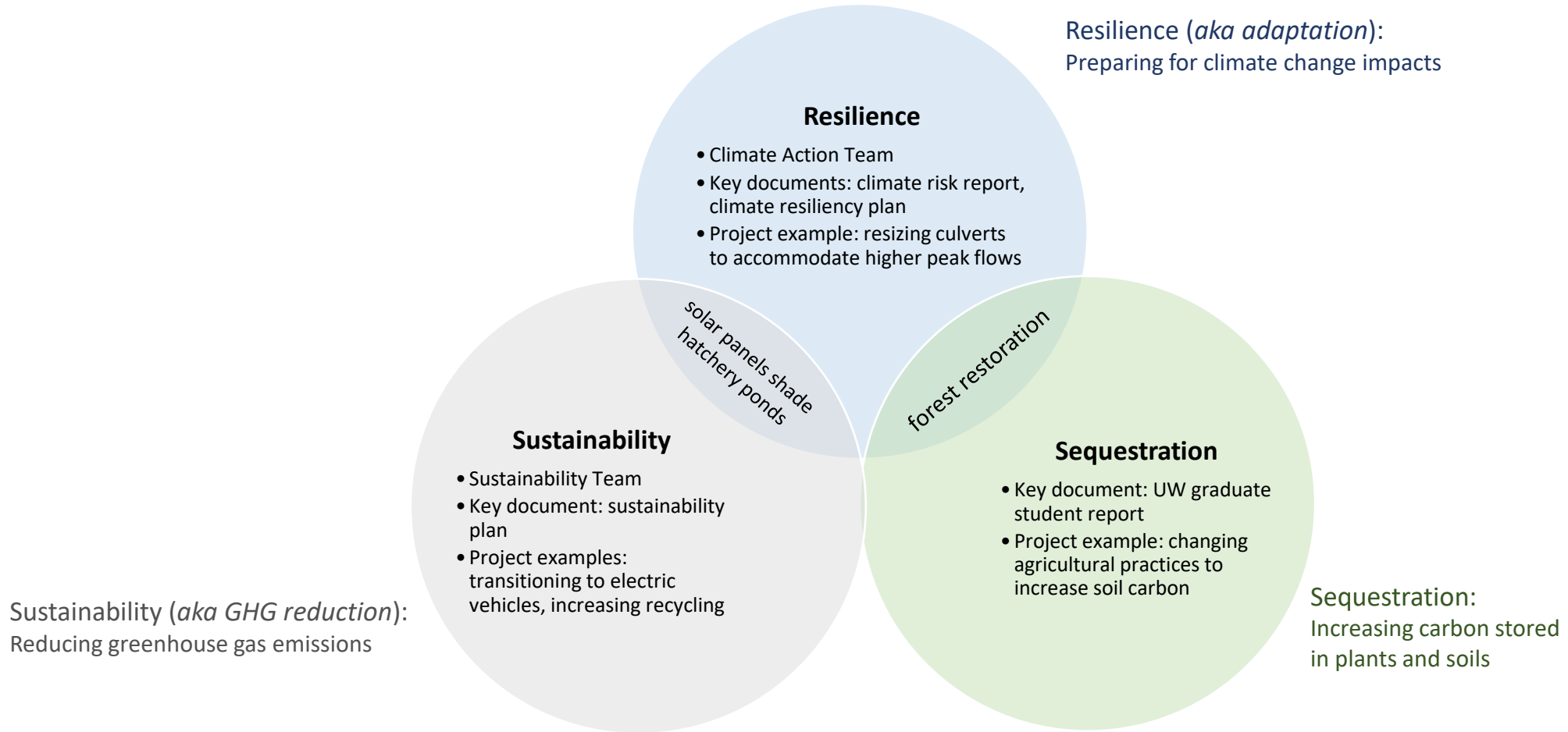
## Mitigation

Reduce emissions of greenhouse gases

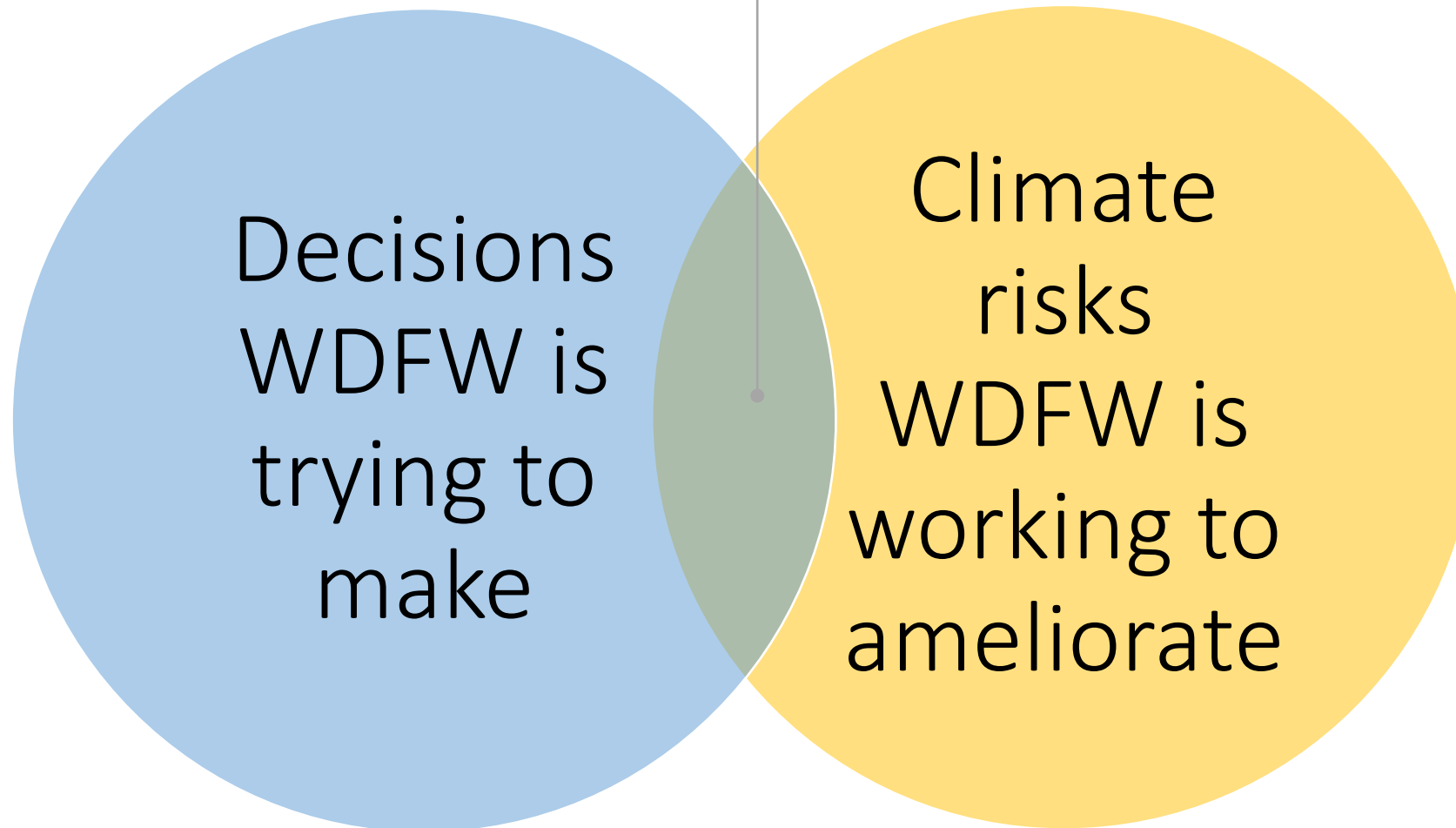
## Adaptation

Identify and prepare for the impacts of climate change

# We are taking a holistic approach to tackling climate change at WDFW



WDFW should focus climate resilience efforts at the nexus of **decision making** & **climate risks**



# Building Blocks of Climate Resilience

**Authority:** WDFW guidance, policies, legal capacity exist; agency staff are empowered to act & have the ability to do so.

**Capacity:** WDFW staff have the technical capacity (resources are available & skills exist) to effectively assess and implement responses that enhance climate resilience.



**Knowledge:** WDFW programs & staff have access to the best available climate information needed to make informed decisions about climate change.

**Motivation:** WDFW staff and leadership are interested & driven to act to build resilience.



“Climate change poses challenges to fulfilling its mission to “*preserve, protect, and perpetuate fish, wildlife, and ecosystems while providing sustainable fish and wildlife recreational & commercial opportunities.*”

- Identifies cross-programmatic vulnerabilities to climate change
- Identifies opportunities for WDFW to build resilience to climate change

**PREPARING WASHINGTON DEPARTMENT OF FISH AND WILDLIFE FOR A CHANGING CLIMATE:**

Assessing Risks and Opportunities for Action



A collaboration of the Washington Department of Fish and Wildlife and the University of Washington Climate Impacts Group



# Four climate-related vulnerabilities common across Fish Program, Wildlife Program, Habitat Program, and CAMP Program

Risks to Species Conservation & Recovery



Risks to Harvest & Recreation Opportunities



AREA CLOSED:  
WILDFIRE RISK

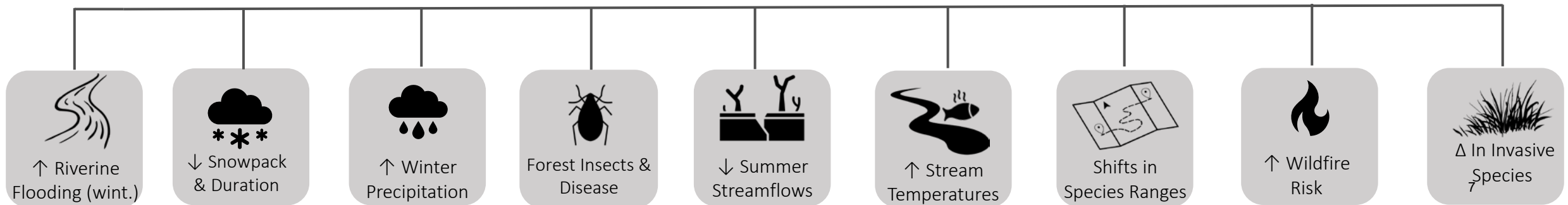
Risks to Providing Effective Technical Assistance, Permitting, Research & Planning



Risks to WDFW Lands & Infrastructure



## Non-exhaustive list of climate drivers



# Opportunities for action to address these climate-related vulnerabilities

Policy,  
Regulations,  
Guidance &  
Mgmt Plans

Research,  
Monitoring,  
Tools, and Data  
Mgmt

Capacity  
Building, Staff  
Training &  
Coordination

Outreach &  
Communications

Partnerships &  
Collaboration

Num.	Short Description	Strategy	Action	Type of Action	Program (Harriet's Guess)	Strategic Plan or Foundational Map Connection
1	Adaptive fisheries management		forecasted conditions, so that harvest planning is responsive to changing climate risks and environmental conditions.	Data Collection & Monitoring	Fish	Deliver science that informs Washington's most pressing fish and wildlife questions. Near-term 1d.
2	Adaptive water quality management		Revise the Hydraulic Code Rules to require the consideration of future streamflow conditions for Hydraulic Project Approvals (HPAs) for projects that use, divert, obstruct, or change the natural flow or bed of any of the salt or fresh waters of the state. [Consider the requirement to use the climate adapted culverts tool for HPAs]	Policy	Habitat - Regulation	Foundational Map. A.9.3.9. Study and plan for climate impacts on waterways and resulting effects on aquatic lifecycles.
3	Adaptive water quality management		Work with the Department of Ecology to make Clean Water Act discharge permits more flexible and responsive to changing conditions.	Policy & Partnerships	Habitat	
4	Adaptive dam and reservoir management	Support and advise the setting of environmental flows to maintain adequate streamflow levels.	Research how environmental flows can be improved to maintain key ecological processes including channel forming process flows and streamflow during critical low flow periods.	Evaluation & Assessment	Habitat - Science	Foundational Map. A.4.(3.4). Ensure that there remains enough water in waterways to allow for healthy fish lifecycles.

72 opportunities for action  
Next step: Prioritize for 23-25 biennium