

Jefferson County

COMMUNITY WILDFIRE PROTECTION PLAN



Advisory Group Meeting #1



Submit written comments to jeffbocc@co.jefferson.wa.us



PUBLIC COMMENT PERIOD

AGENDA

- Introductions
- Overview of CWPPs
- Goals and Objectives
- Schedule
- Roles
- Survey Results
- CWPP Outline
- Base Maps
- Data Needs
- Community Risk and Hazard Assessment
- Wildland-Urban Interface Delineations
- Public Outreach
- Hub Site
- Closing Remarks Regarding Next Steps and Actions

MEET THE SWCA TEAM



Emily Geery
Project Manager



Vicky Amato
Principal Fire
Planner/Subject Matter
Expert



Michaela Bartosh
Assistant Project
Manager

- **Agency/organization**
- **Role**
- **CWPP experience**
- **What interests you the most about wildfire planning?**



OVERVIEW OF CWPPS

- Plan to reduce threats to life and property from wildfire
- Came from Healthy Forest Restoration Act 2003
 - Collaborative
 - Identify and prioritize hazardous fuel treatments and methods to protect at-risk communities
 - Identify measures to reduce structural ignitability
- Does not mandate actions
- Makes recommendations
 - Fuel reduction – *Resilient Landscapes*
 - Structural Ignitability – *Fire Adapted Communities*
 - Public education and outreach – *Fire Adapted Communities*
 - Fire response capabilities – *Safe and Effective Wildfire Response*
- Sets priorities for action
- Required for many grant funding sources

GOALS AND OBJECTIVES

- Improve wildfire resilience and adaptation
- Develop actions to mitigate risks
- Broad public and stakeholder input and support
- Access to grant funding
- Track improvements
 - Community resiliency
 - Planned and completed projects
 - Community outreach success

ADVISORY GROUP MEETINGS

Meeting 1

- Introduction
- CWPP goals and objectives
- Priority concerns
- Data gathering
- Public outreach preparation

Meeting 2

- Risk assessment
- Recommendations
- Document outline
- Implement public outreach

Meeting 3

- Draft document review comments
- Public outreach results
- Signatories

SCHEDULE

TASK	APPROXIMATE TIMELINE
Phase 1: Discovery	
Task 1: Kick-off Meeting and Identify Advisory Group Membership	May 2023
Task 1a: Conduct Stakeholder Interviews (Virtual)	August/September 2023
Task 2: Data Gathering and Management	August 2023
Task 3: Establish Community Base Maps	July 2023
Phase 2: Meet and Retreat	
Task 4: Host Advisory Group Meetings	
Advisory Group Meeting #1: Virtual (2 hours)	June 2023
Advisory Group Meeting #2: In-person Workshop (Retreat)	August/September 2023
Advisory Group Meeting #3: Virtual (2 hours)	December 2023
Task 5: Host Public Engagement Meetings	
Public Meeting #1: Mixed Virtual/In-person	August/September 2023
Public Meeting #2: Mixed Virtual/In-person	August/September 2023
Public Meeting #3: Mixed Virtual/In-person	August/September 2023
Public Meeting #4: Mixed Virtual/In-person	August/September 2023

SCHEDULE

TASK	APPROXIMATE TIMELINE
Phase 3: Document and Review	
Task 6: Develop a Community Risk Assessment	July/ August 2023
Task 6a: On-the-ground Structural Hazard Assessments	August/September 2023
Task 7: Develop Mitigation Strategies and Actions	December 2023
Phase 4: Approve and Launch	
Task 8: Draft CWPP	December 2023
Task 9: Virtual Final Draft Delivery	February 2024
Phase 5: Hub Site and Evacuation Modeling	
Task 10: Development of Esri Hub Site	February 2024
Task 11: Evacuation Modeling and Planning	December 2023

ADVISORY GROUP ROLES

- Represent your jurisdiction
- Provide local expertise, knowledge, and direction
- Assist with data compilation
- Engage other stakeholders
- Develop implementable project recommendations
- Implement projects (after the CWPP is approved)
- Track project accomplishment



SURVEY RESULTS

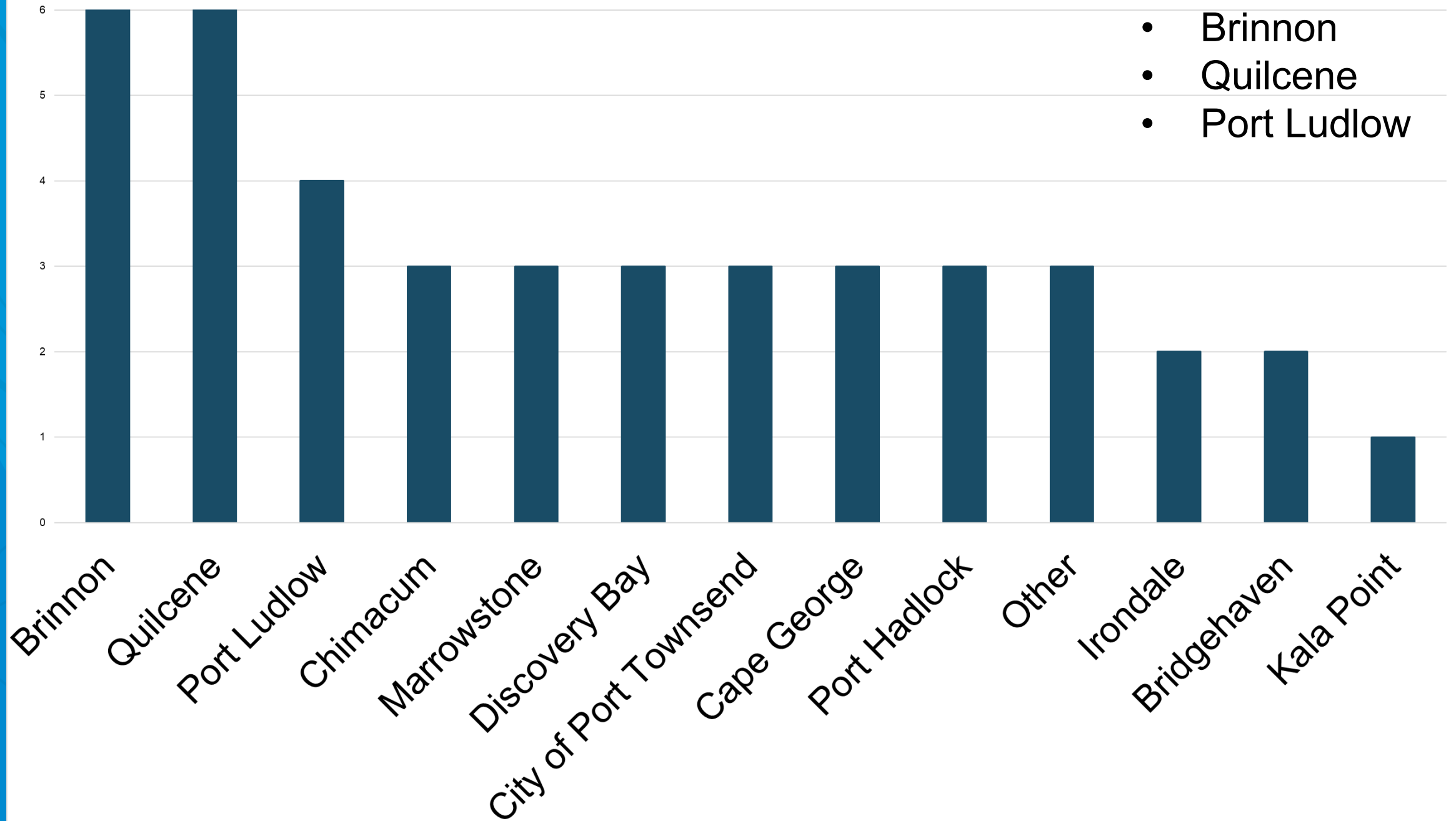


Wildfire concerns and priorities

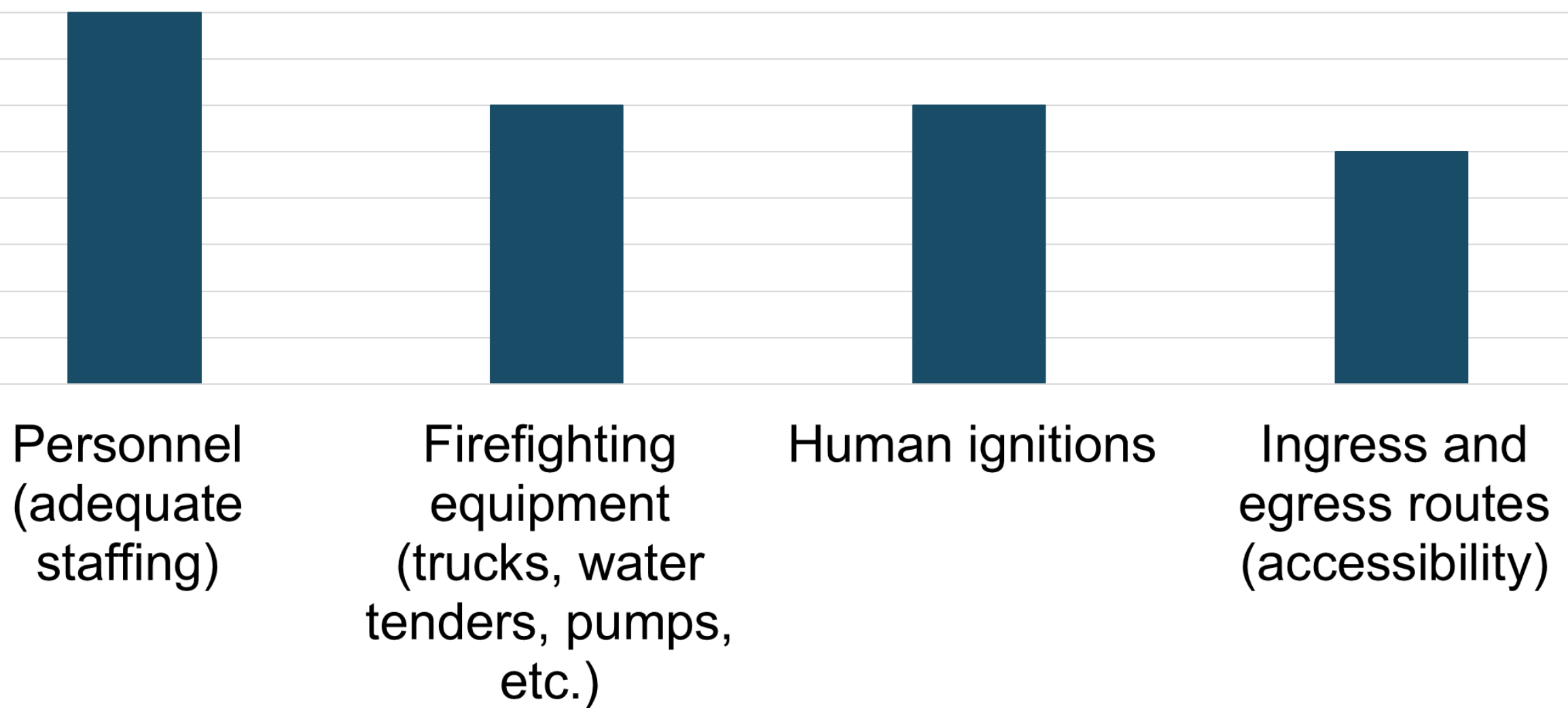


13 responses

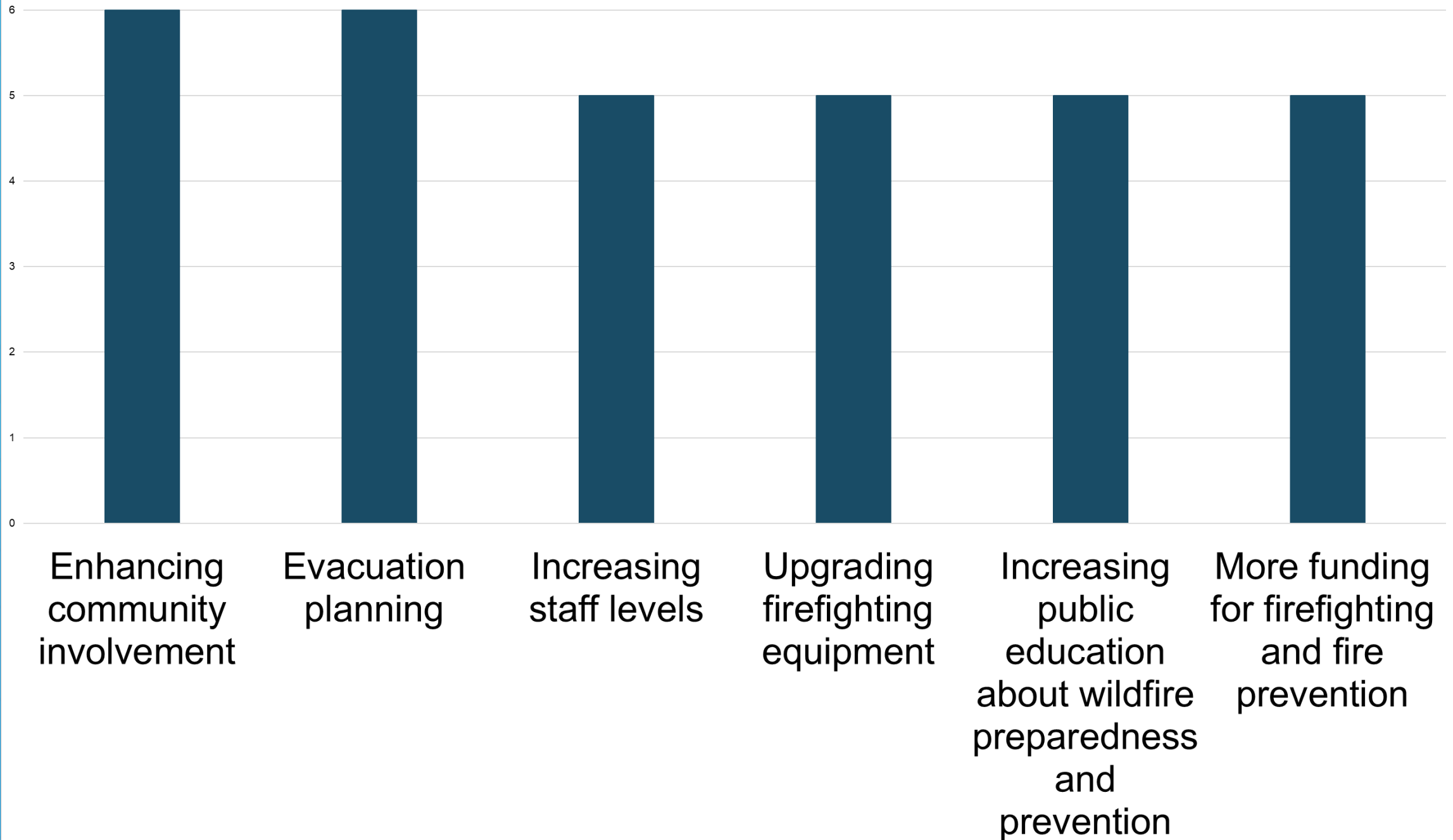
Communities with Greatest Wildfire Risk



Extreme Concerns Regarding Wildfire Safety and Preparedness



High Priorities for Mitigation/Prevention Strategies



LET'S HEAR FROM YOU

- What are your big concerns?
- What is on your wish list for projects?
- What is working currently?
- What is not working?
- How do you hope to use this plan?





OUTLINE: MAIN DOCUMENT

- Aligned with the National Cohesive Wildfire Management Strategy
 - Resilient Landscapes
 - Fire Adapted Communities
 - Safe and Effective Wildfire Response
- Main document outline
 - Chapter 1 – Introduction
 - Chapter 2 – Fire Environment
 - Chapter 3 – WUI Risk Hazard Assessment
 - Chapter 4 – Mitigation Strategies
 - Chapter 5 – Monitoring and Evaluation



OUTLINE: APPENDICES

- Appendix document outline
 - Appendix A – CWPP Plan Alignment
 - Appendix B – Supporting Maps
 - Appendix C – Community Risk-Hazard Assessments for WUI Communities
 - Appendix D – Forms
 - Appendix E – Funding Sources
 - Appendix F – Homeowner Resources
 - Appendix G – Community Outreach and Educational Programs
 - Appendix H – Fuel Treatment Types and Methods
 - Appendix I – Post-Fire Response and Restoration

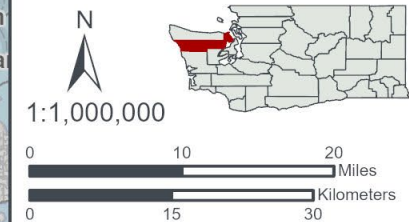
WEBMAP OF BASE MAPS

JEFFERSON COUNTY COMMUNITY
WILDFIRE PROTECTION PLAN
General Location

- City/Town
- Minor Roadway
- Major Roadway
- Highway
- Stream/River
- Waterbody
- Planning Area
- County Boundary

Jefferson County, Washington
NAD 1983 UTM Zone 10N
123.6575°W 47.943°N

Base Map: Esri ArcGIS Online, accessed June 2023



Updated: 6/12/2023
Project No. 78744
File: generalLocation



JEFFERSON COUNTY COMMUNITY
WILDFIRE PROTECTION PLAN

Ownership

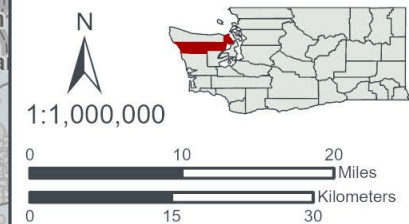
- City/Town
- Minor Roadway
- Major Roadway
- Highway
- ▭ Planning Area
- ▭ County Boundary

Land Ownership

- ▭ Bureau of Indian Affairs
- ▭ Bureau of Land Management
- ▭ U.S. Forst Service
- ▭ U.S. Fish and Wildlife Service
- ▭ National Park Service
- ▭ Private
- ▭ State
- ▭ Undetermined

Jefferson County, Washington
NAD 1983 UTM Zone 10N
123.6575°W 47.943°N

Base Map: Esri ArcGIS Online, accessed June 2023



Updated: 6/12/2023
Project No. 78744
File: ownership

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JEFFERSON COUNTY COMMUNITY
WILDFIRE PROTECTION PLAN

Vegetation

- City/Town
- Minor Roadway
- Major Roadway
- Highway
- ▭ Planning Area
- ▭ County Boundary

Existing Vegetation Cover

- Open Water
- Snow/Ice
- Developed
- Barren
- Crop Cover
- Sparse Vegetation
- Shrub Cover
- Tree Cover
- Herb/Grass Cover

Jefferson County, Washington
NAD 1983 UTM Zone 10N
123.6575°W 47.943°N

Credits: LANDFIRE

Base Map: Esri ArcGIS Online, accessed June 2023



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Updated: 6/12/2023
Project No. 78744
File: vegetation

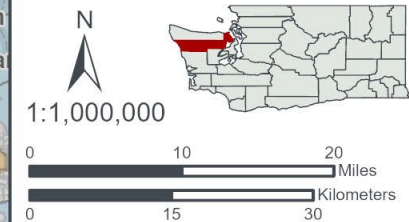
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Cultural Values at Risk

- City/Town
- †† Cemetery
- 🏠 NRHP Building
- 🏡 NRHP District
- 📍 NRHP Site
- 🏢 NRHP Structure
- Highway
- Major Roadway
- Minor Roadway
- Stream/River
- 💧 Waterbody
- 🔴 Planning Area
- 🗺️ County Boundary
- 🏠 NRHP Building Area
- 🏡 NRHP District Area
- 📍 NRHP Site Area
- 🌲 Tribal Lands

Jefferson County, Washington
NAD 1983 UTM Zone 10N
123.6575°W 47.943°N

Base Map: Esri ArcGIS Online, accessed June 2023



Updated: 6/12/2023
Project No. 78744
File: hvrasCultural

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ENVIRONMENTAL CONSULTANTS

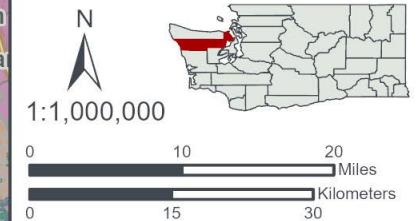
JEFFERSON COUNTY COMMUNITY WILDFIRE PROTECTION PLAN

Natural Values at Risk

- City/Town
- Highway
- Major Roadway
- Minor Roadway
- Stream/River
- Waterbody
- Planning Area
- County Boundary

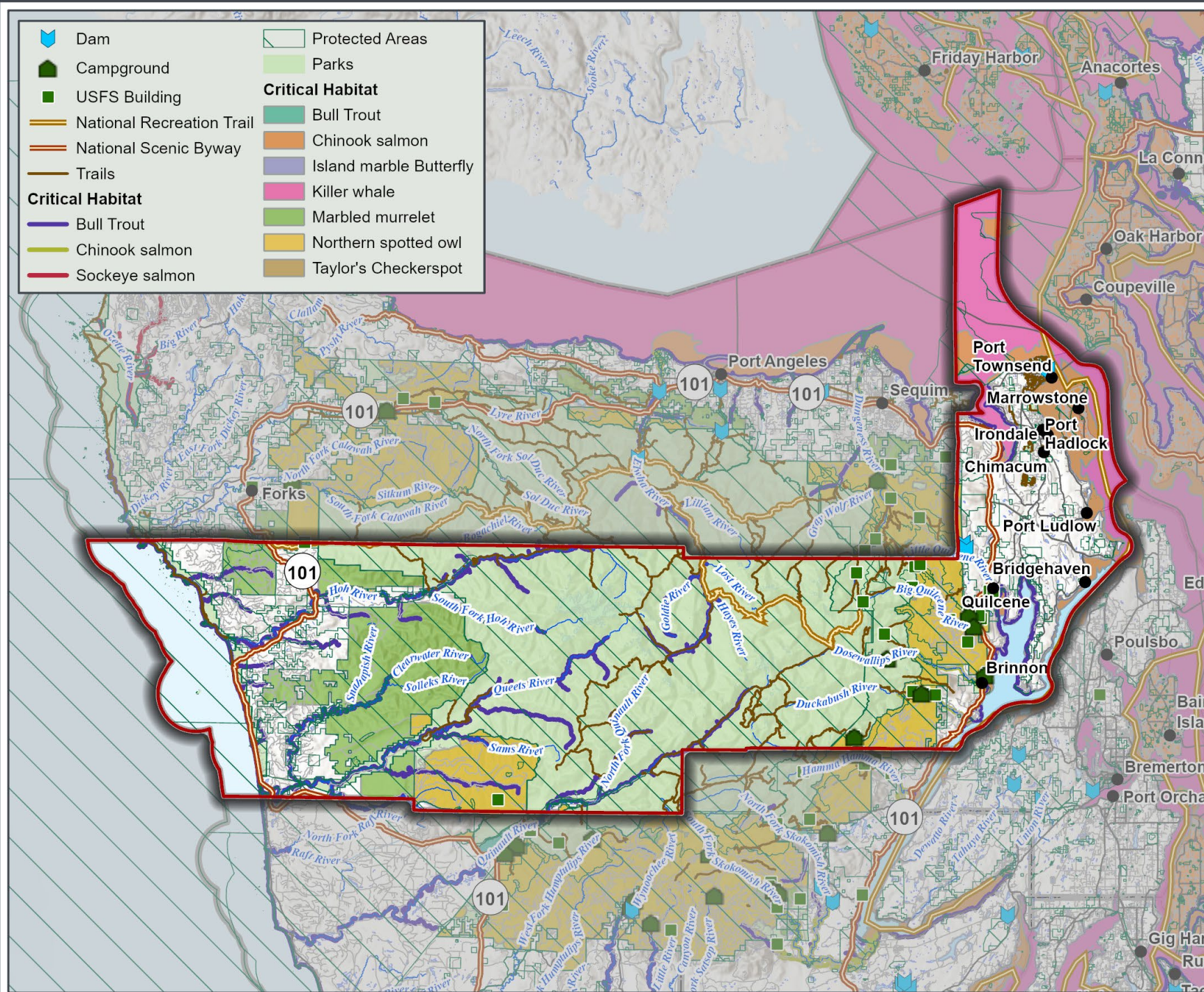
Jefferson County, Washington
NAD 1983 UTM Zone 10N
123.6575°W 47.943°N

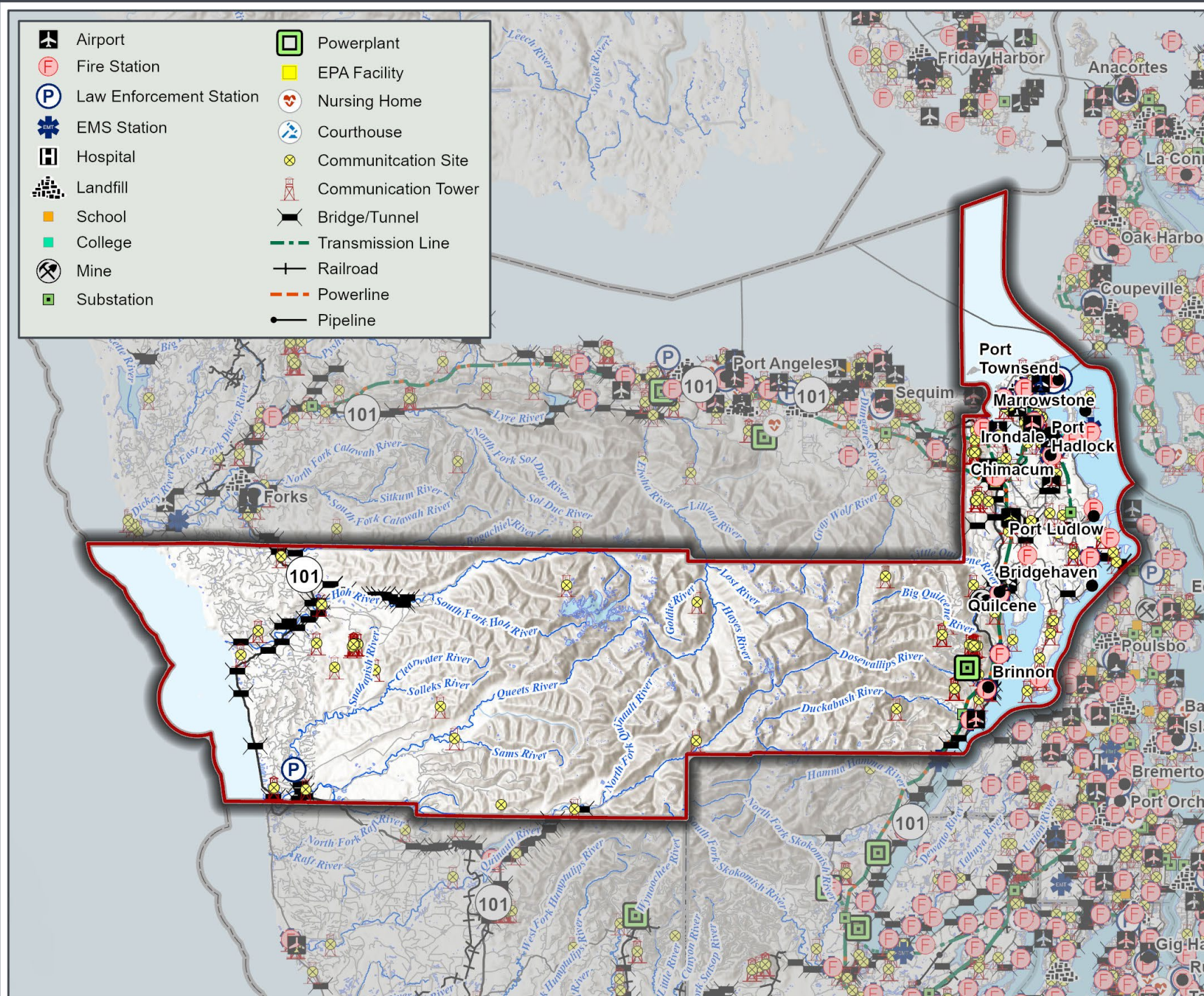
Base Map: Esri ArcGIS Online, accessed June 2023



Updated: 6/12/2023
Project No. 78744
File: hvrasNatural

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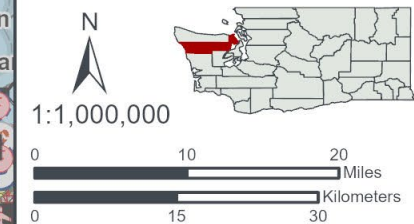
**JEFFERSON COUNTY COMMUNITY
WILDFIRE PROTECTION PLAN**

Socioeconomic Values at Risk

- City/Town
- Highway
- Major Roadway
- Minor Roadway
- Stream/River
- Waterbody
- Planning Area
- County Boundary

Jefferson County, Washington
NAD 1983 UTM Zone 10N
123.6575°W 47.943°N

Base Map: Esri ArcGIS Online, accessed June 2023



Updated: 6/12/2023
Project No. 78744
File: hvrasSocioeco



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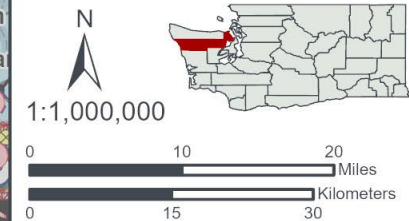
- | | |
|-------------------------|---------------------|
| Airport | Substation |
| Fire Station | Powerplant |
| Law Enforcement Station | Communication Site |
| EMS Station | Communication Tower |
| Hospital | Bridge/Tunnel |
| Landfill | Transmission Line |
| School | Railroad |
| College | Powerline |
| Mine | Pipeline |

JEFFERSON COUNTY COMMUNITY WILDFIRE PROTECTION PLAN Critical Infrastructure

- City/Town
- Highway
- Major Roadway
- Minor Roadway
- Stream/River
- Waterbody
- Planning Area
- County Boundary

Jefferson County, Washington
NAD 1983 UTM Zone 10N
123.6575°W 47.943°N

Base Map: Esri ArcGIS Online, accessed June 2023



Updated: 6/12/2023
Project No. 78744
File: criticalInfra

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JEFFERSON COUNTY COMMUNITY
WILDFIRE PROTECTION PLAN

Burn Probability - Integrated Hazard

- City/Town
- Minor Roadway
- Major Roadway
- Highway
- ▭ Planning Area
- ▭ County Boundary

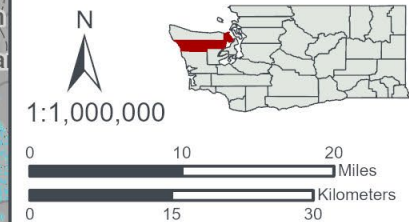
Burn Probability - Integrated Hazard

- Non-burnable
- Burnable but not burned
- Lowest Hazard
- Lower Hazard
- Middle Hazard
- Higher Hazard
- Highest Hazard

Jefferson County, Washington
NAD 1983 UTM Zone 10N
123.6575°W 47.943°N

Credits: IFTDSS, accessed June 2023

Base Map: Esri ArcGIS Online, accessed June 2023



Updated: 6/12/2023
Project No. 78744
File: burnProbability

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JEFFERSON COUNTY COMMUNITY
WILDFIRE PROTECTION PLAN

Crown Fire Activity

- City/Town
- Minor Roadway
- Major Roadway
- Highway
- ▭ Planning Area
- ▭ County Boundary

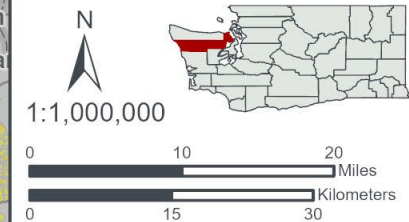
Crown Fire Activity

- Active Crown Fire
- Passive Crown Fire
- Surface Fire
- No Fire

Jefferson County, Washington
NAD 1983 UTM Zone 10N
123.6575°W 47.943°N

Credits: IFTDSS, accessed June 2023

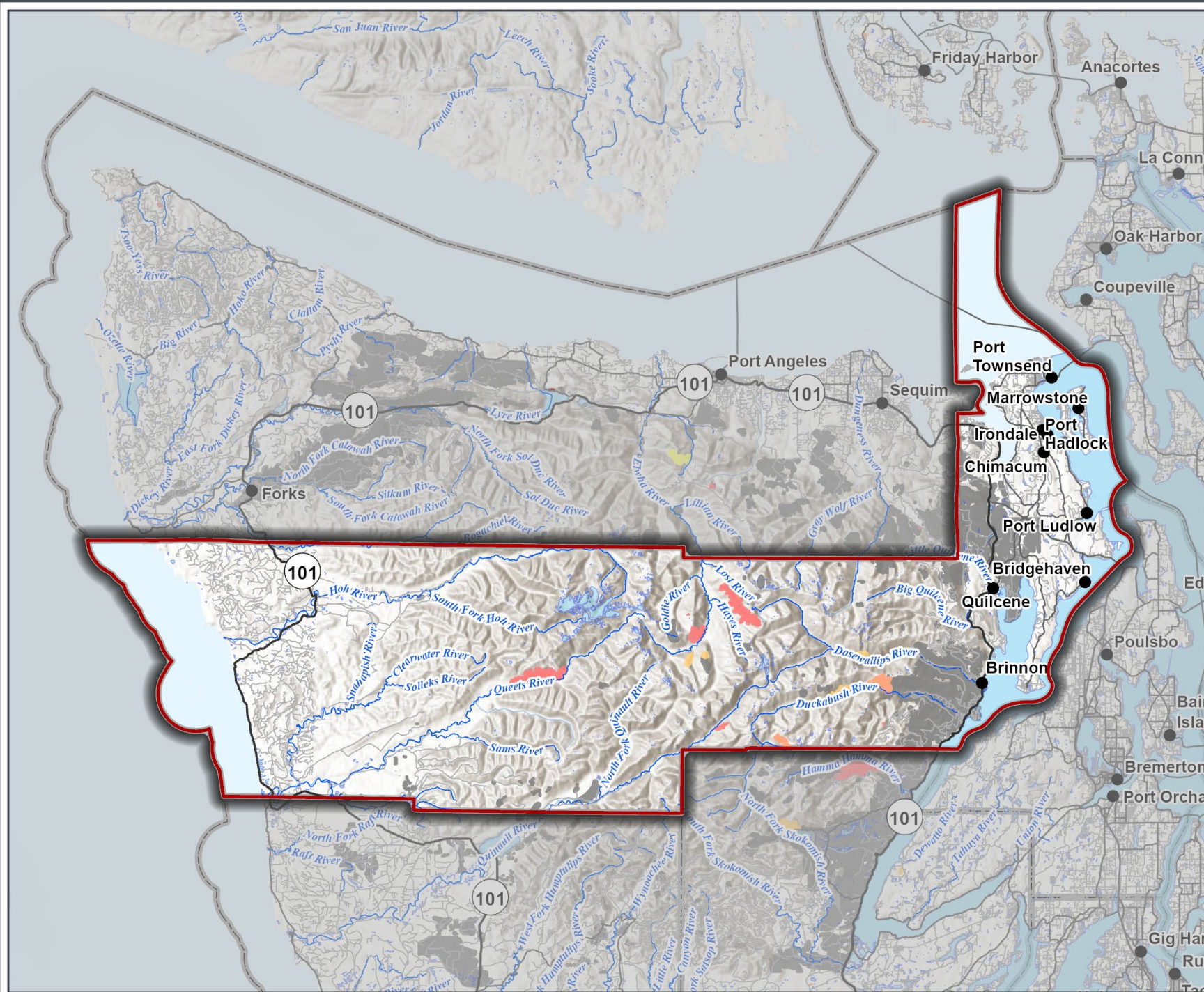
Base Map: Esri ArcGIS Online, accessed June 2023



Updated: 6/12/2023
Project No. 78744
File: crownFireActivity

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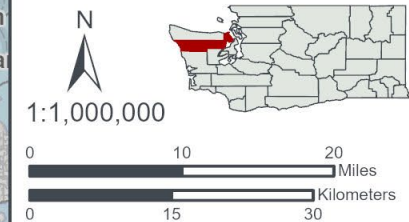
JEFFERSON COUNTY COMMUNITY
WILDFIRE PROTECTION PLAN

Fire Incidents

- City/Town
 - Highway
 - Major Roadway
 - Minor Roadway
 - Stream/River
 - Waterbody
 - Planning Area
 - County Boundary
- Fire Cause (1970 - 2023)
- Natural
 - Human
 - ▼ Unknown/Undetermined

Jefferson County, Washington
NAD 1983 UTM Zone 10N
123.6575°W 47.943°N

Base Map: Esri ArcGIS Online, accessed June 2023



Updated: 6/12/2023
Project No. 78744
File: fireIncidents

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JEFFERSON COUNTY COMMUNITY
WILDFIRE PROTECTION PLAN

Fireline Intensity

- City/Town
- Minor Roadway
- Major Roadway
- Highway
- ▭ Planning Area
- ▭ County Boundary

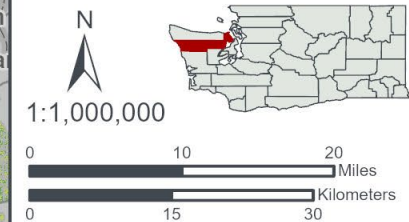
Fireline Intensity (BTU/feet/second)

- ▭ Non-burnable
- ▭ >0 - 5
- ▭ >5 - 100

Jefferson County, Washington
NAD 1983 UTM Zone 10N
123.6575°W 47.943°N

Credits: IFTDSS, accessed June 2023

Base Map: Esri ArcGIS Online, accessed June 2023



Updated: 6/12/2023
Project No. 78744
File: firelineIntensity

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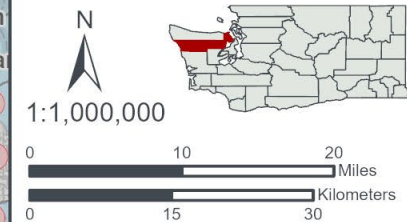
JEFFERSON COUNTY COMMUNITY
WILDFIRE PROTECTION PLAN

Fire Response

- City/Town
 - Ⓡ Fire Station
 - Highway
 - Major Roadway
 - Minor Roadway
 - Stream/River
 - Waterbody
 - Planning Area
 - County Boundary
- Fire District**
- Brinnon Fire Department
 - Clallam County Fire District No. 1
 - Clallam County Fire District No. 3
 - Discovery Bay Volunteer Fire & Rescue
 - East Jefferson Fire & Rescue
 - Jefferson County Fire Protection District No. 7
 - Quilcene Fire Rescue

Jefferson County, Washington
NAD 1983 UTM Zone 10N
123.6575°W 47.943°N

Base Map: Esri ArcGIS Online, accessed June 2023



Updated: 6/12/2023
Project No. 78744
File: fireResponse

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JEFFERSON COUNTY COMMUNITY
WILDFIRE PROTECTION PLAN

Flame Length

- City/Town
- Minor Roadway
- Major Roadway
- Highway
- ▭ Planning Area
- ▭ County Boundary

Flame Length (feet)

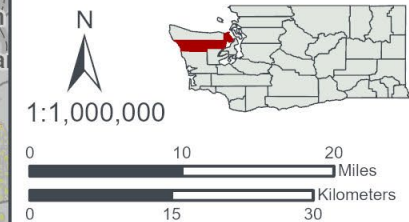
<VALUE>

- Non-burnable
- >1 - 4
- >4 - 8
- >8 - 11
- >11 - 25
- >25

Jefferson County, Washington
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123.6575°W 47.943°N

Credits: IFTDSS, accessed June 2023

Base Map: Esri ArcGIS Online, accessed June 2023



Updated: 6/12/2023
Project No. 78744
File: flameLength

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JEFFERSON COUNTY COMMUNITY
WILDFIRE PROTECTION PLAN

Rate of Spread

- City/Town
- Minor Roadway
- Major Roadway
- Highway
- ▭ Planning Area
- ▭ County Boundary

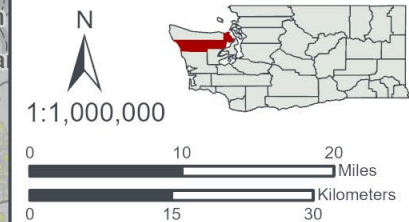
Rate of Spread (chains/hour)

- Non-burnable
- >2 - 5
- >5 - 20
- >20 - 50
- >50 - 150
- >150

Jefferson County, Washington
NAD 1983 UTM Zone 10N
123.6575°W 47.943°N

Credits: IFTDSS, accessed June 2023

Base Map: Esri ArcGIS Online, accessed June 2023



Updated: 6/12/2023
Project No. 78744
File: rateOfSpread

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DATA NEEDS

Spatial Data (shapefiles)

- Water suppression sources
- Existing evacuation zones/routes
- Fuel treatment data
- Fire history data

Documents

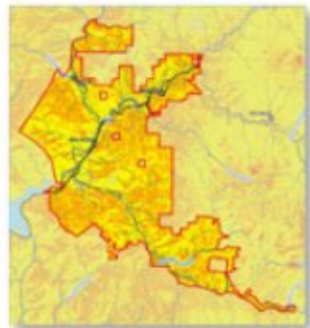
- Fuels plans
- Fire management plans
- Emergency operations plans
- Hazard mitigation planning

COMMUNITY RISK AND HAZARD ASSESSMENT

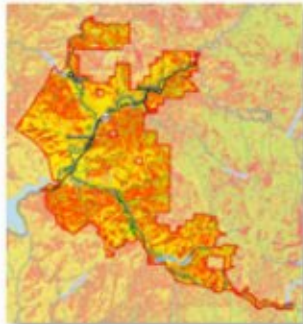
Desktop Assessments

- Wildfire hazards analysis – fire behavior modeling
 - Inputs: fuels, weather, topography
 - Outputs: flame length, rate of spread, crown fire potential, burn probability
- Fuels analysis
- Fire history
- Fire response
 - Suppression Difficulty Index
 - Potential Control Lines

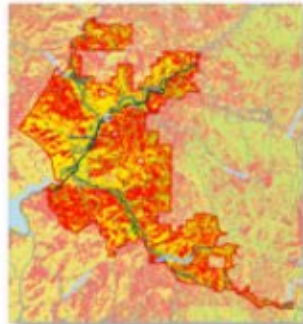
COMPOSITE RISK-HAZARD EXAMPLE



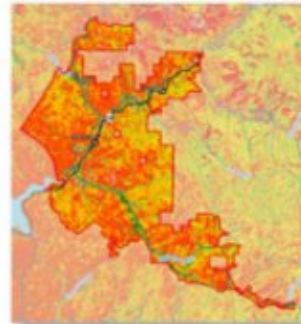
Crown Fire Activity



Fireline Intensity



Flame Length



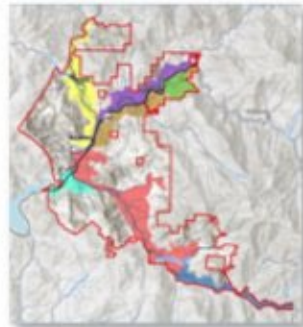
Rate of Spread



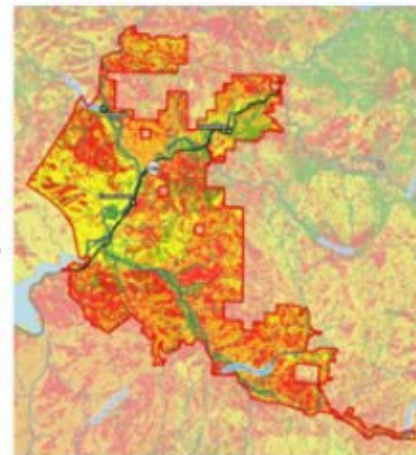
Fire History



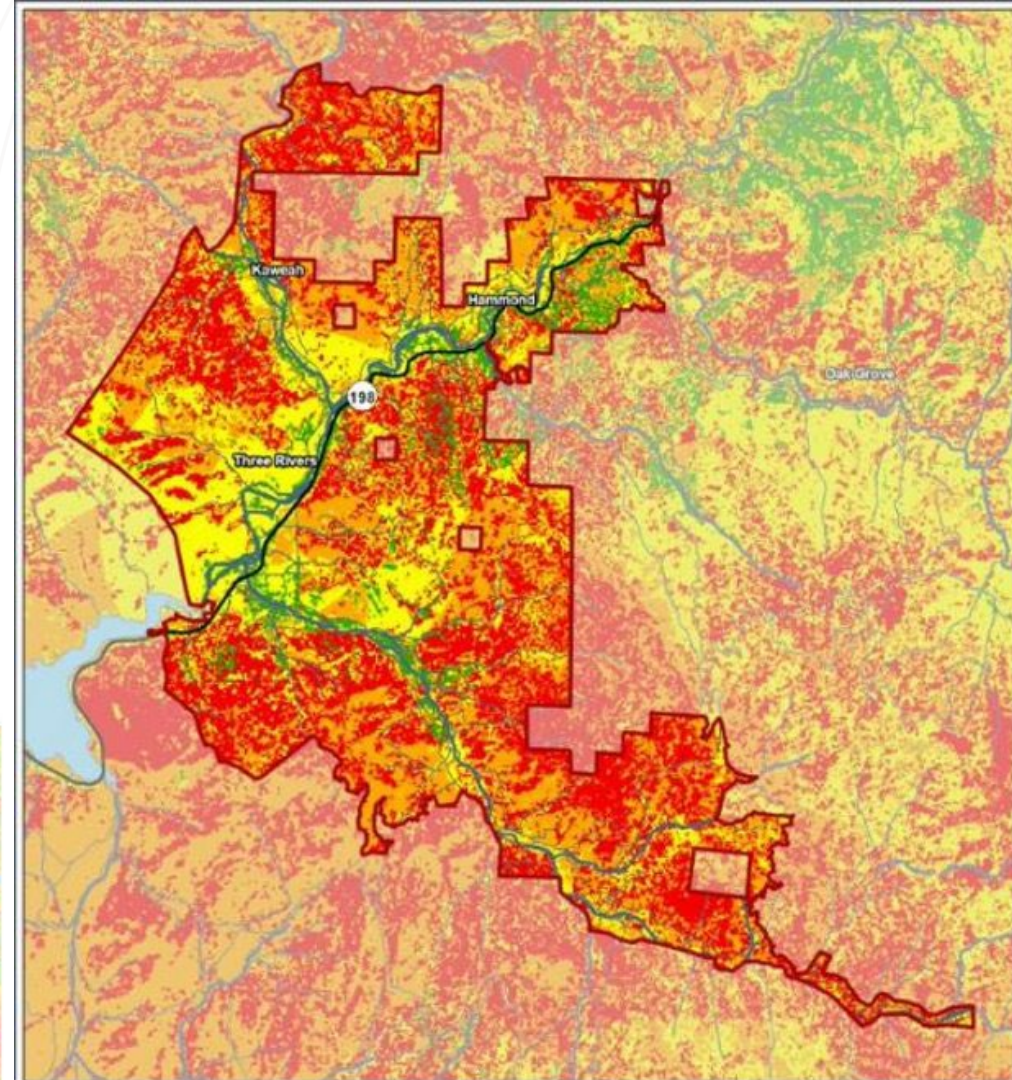
High Values at Risk



Wildland Urban Interface



Composite Risk-Hazard Assessment



THREE RIVERS CWPP
Composite
Risk-Hazard
Assessment



Three Rivers
Tulare County, CA
NAD 1983 UTM Zone 11N
118.8642°W 36.4268°N
Base Map: ESRI ArcGIS Online,
accessed March 2022
Updated: 3/25/2022
Project No: 63436
File: riskAssessment



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COMMUNITY RISK AND HAZARD ASSESSMENT

On-the-ground Assessments

- Late summer–fall 2023
- Fuels ground-truthing/calibration
- National Fire Protection Association 1144 assessments – windshield survey
 - Ingress/egress, construction materials, defensible space, water access, etc.
 - Community risk ratings: low, moderate, high, and extreme risk

NATIONAL FIRE PROTECTION ASSOCIATION 1144 STRUCTURAL IGNITABILITY

1144 NATIONAL FIRE PROTECTION ASSOCIATION ASSESSMENT FORM

SWCA – 1144 NFPA Assessment		
Community		Notes:
Surveyor		
Survey Date/Time		
Means of Access		
Ingress and Egress		
2 or more roads in and out score 0		
1 road in and out 7		
Road Width		
> 24 ft 0		
> 20 ft < 24 ft 2		
< 20 ft 4		
Road Conditions		
Surfaced road, grade < 5% 0		
Surfaced road, grade > 5% 2		
Non-surfaced road, grade < 5% 2		
Non-surfaced road, grade > 5% 5		
Other than all season 7		
Fire Access		
< 300 ft with turnaround 0		
> 300 ft with turnaround 2		
< 300 ft with no turnaround 4		
> 300 ft with no turnaround 5		
Street Signs		
Present – reflective 0		
Present – non-reflective 2		
Not present 5		
Notes:		
Vegetation (Fuel Models)		
Predominant Vegetation		
Primary Predominant Vegetation		
Non-Burnable (NB) Score 2		
Grass (GR) Score 5		

Roofing Assembly	
Roofing	
Class A - metal roof, clay/concrete tiles, slate, asphalt shingles 0	
Class B - pressure treated composite shakes and shingles 3	
Class C - untreated wood shingle, plywood, particle board 15	
Unrated - Extremely poor roofing conditions 25	
Notes:	
Building Construction	
Siding Materials (predominant)	
Non-combustible (brick/concrete) 5	
Fire Resistive (stucco/adobe) 10	
Combustible (wood or vinyl) 12	
Deck and fencing (predominant)	
No deck or fence/non-combustible 0	
Combustible deck and fence 5	
Building Set-Back	
> 30 ft to slope 1	
< 30 ft to slope 5	
Notes:	
Available Fire Protection	
Water Sources	
Water Source? yes/no	
Water Source Type hydrant, water tank, other	
Other Water Source	
Water Source Score Hydrant = 1 Water Tank = 3	
Organized Response	
Station < 5 mi from community 1	
Station > 5 mi from community 3	
Notes:	
Placement of Gas and Electric Utilities	
Both underground 0	
One above, one below 3	
Both above ground 5	
Values at Risk Observations	

PROJECT RECOMMENDATION MATRIX EXAMPLE

PROJECT DESCRIPTION	LOCATION	LAND OWNERSHIP	METHOD AND GOAL	TIMELINE	RESOURCES/FUNDING	PRIORITY
- Develop pre-fire plans for post-fire response. - Aligns with State Forest Action Plan Sub-strategy 2.1.3 and Hazard Mitigation Plan Strategy 4.3.	Countywide, focusing on areas that scored a risk rating of 70 and higher first. Includes: Community A, C, F, J, R, and P.	County, municipal, governments; utility providers; and water providers.	- Review the Post-Fire Response and Rehabilitation section (Chapter 4) for post-fire planning and actions. - Develop and/or familiarize yourself with Burned Area Emergency Rehabilitation protocols. - Establish guidelines for county, municipalities, utility providers, and water providers that details the steps required in the event of a fire to better prepare for post-fire response. - Establish relationships with agencies responsible for post-fire response before the fire. - Initiate annual mock exercise utilizing SimTable. - Build into County Emergency Operations Plan and Annual Operations Plan during next revision.	Spring 2021	- FEMA - County Hazard Mitigation - Emergency Managers	High

PUBLIC OUTREACH

Online/virtual: Community survey (hosted on hub site)

Social media

Flyer + press release

Public meetings

Public review of draft CWPP

HUB SITE



Interactive risk
analysis mapping



Public outreach



Community risk
ratings



Project
recommendations
and mitigation
measures

CLOSING REMARKS REGARDING NEXT STEPS AND ACTIONS



Data needs



Risk assessment



Actions

THANK YOU!

Questions and Comments

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Michaela Bartosh
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