



Photo of Mount Saint Helen's from Swift Reservoir. (Image: M. Jones, Matt Jones Photography - <http://www.flickr.com/photos/mattithyahu/247077808/>).

Swift Reservoir, Skamania County, WA Community Wildfire Protection Plan

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Swift Reservoir
Skamania County, WA

CWPP



Swift Reservoir, Skamania County, WA
Community Wildfire Protection Plan

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2007-2008

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INTRODUCTION AND MISSION

Introduction

Wildfire is a “fact of life” for rural communities in the state of Washington. It is a key part of the forest ecosystems that comprise the twenty-two million acres of private, state, and federal forests that cover nearly fifty percent of the state. Because it also threatens human life and property, wildfire has long been suppressed. But in ecosystems adapted to frequent fires, suppressing fire does not make the threat go away. To the contrary, decades of successfully suppressing fire has led to a widespread decline in forest health. Many drier forests are out of balance (overcrowded, weakened by disease, dominated by the wrong species) and heavily loaded with woody fuel. Adding human population growth to these factors creates a recipe for catastrophic wildfires. Fortunately, throughout the West, state and federal agencies, local communities, private contractors, non-profit groups, and individual citizens are now teaming up to reduce that risk (Washington DNR 2007).

The Swift Community Wildfire Protection Plan (CWPP) was prepared through a Title III grant from Secure Rural Schools and Self Determination Act of 2000 in Skamania County. The plan will serve as a chapter to the Klickitat and Skamania County, WA CWPP and as a stand alone document. The primary purpose of this plan was to provide a framework to emergency responders, property owners and interested parties within the planning area that will increase the communities’ capacity to be better prepared for a wildfire. The plan identifies ‘communities at risk’ (CAR) and other values that would be vulnerable during a wildfire (Hulbert 2004).

Mission

The Swift CWPP mission is to protect life, property and natural resources from wildfire. To better support the CWPP’s mission, the Swift CWPP Steering Committee has developed projects that reinforce the protection mission. The following three goals were developed to guide the Steering Committee’s projects:

1. Improve survivability of people, homes, and the environment during wildfires.
2. Promote wildfire awareness and education for citizens located in ‘risk areas’.
3. Engage in community-developed fuels treatment projects that reduce wildfire vulnerability to CAR.

HEALTHY FOREST RESTORATION ACT AND CWPP’s

The Healthy Forest Restoration Act (HFRA), signed into law by President Bush in 2003, calls for the development of Community Wildfire Protection Plans. This section describes these requirements.

Healthy Forests Restoration Act / Healthy Forests Initiative

In 2002, President Bush announced the Healthy Forests Initiative (HFI) designed to identify and remove barriers to the implementation of projects that were developed to

restore the health of the nation's forests (Douglas County 2005). Congress enacted the HFRA Healthy Forests Restoration Act in November 2003. It provides new tools and additional authorities to treat more acres more quickly to expedite restoration goals. It strengthens public participation and provides incentives for local communities to develop community wildfire protection plans. It limits the complexity of environmental analyses for hazard reduction projects, provides a more effective appeal process and instructs the courts that are being asked to halt projects, to balance the short-term affects of implementing the projects against the harm from undue delay and long-term benefits of a restored forest (Douglas County 2005).

Title I of the Act addresses vegetation treatments on certain types of National Forest System and Bureau of Land Management (BLM) lands that are at risk of wildland fire or insect and disease epidemics. More specifically, it:

- Encourages streamlined environmental analysis of HFRA projects;
- Provides for administrative review of proposed HFRA projects on National Forest System lands before decisions are issued;
- Contains requirements governing the maintenance and restoration of old-growth forest stands when the USDA Forest Service (FS) and BLM conduct HFRA projects in such stands;
- Requires HFRA projects in the FS and BLM to maximize retention of larger trees in areas other than old-growth stands, consistent with the objective of restoring fire-resilient stands and protecting at-risk communities and Federal lands;
- Encourages collaboration between Federal agencies and local communities when community wildland fire protection plans are prepared;
- Requires using at least 50% of the dollars allocated to HFRA projects to protect CAR of wildland fire if identified in CWPPs;
- Requires performance to be monitored when agencies conduct hazardous-fuel reduction projects and encourages multiparty monitoring that includes communities and other interested parties; and
- Encourages courts that consider a request for an injunction on an HFRA-authorized project to balance environmental effects of undertaking the project against the effects of failing to do so.

Community Wildfire Protection Plan

Title I of the HFRA encourages the development of CWPPs under which communities will designate their Wildland Urban Interface (WUI), and where HFRA projects may take place. Half of all fuel reduction projects under the HFRA will occur in the community protection zone as defined by HFRA. HFRA also encourages biomass energy production through grants and assistance to local communities to create market incentives for removal of otherwise valueless forest material. The HFRA is linked to the Rural Schools and Community Self-Determination Act of 2000, PL 106-393, through funding provisions found in two separate Titles of PL 106-393. Title III provides counties with funds for expenditure on projects that fall within certain categories, one of which is county planning efforts to increase the protection of people and property from wildfire (Douglas County 2005). The CWPP planning process under HFRA is clearly an authorized use of Title III funds under PL 106-393 (Douglas County 2005), and Skamania County utilized Title III funds to create the Swift CWPP.

CWPP REQUIREMENTS

The HFRA requires 3 components in a CWPP

- 1) Collaboration:** A CWPP must be collaboratively developed by local and state government representatives, in consultation with federal agencies and other interested parties.
- 2) Prioritized Fuel Reduction:** A CWPP must identify and prioritize areas for hazardous fuel reduction treatments and recommend the types and methods of treatment that will protect one or more at-risk communities and essential infrastructure.
- 3) Treatment of Structural Ignitability:** A CWPP must recommend measures that homeowners and communities can take to reduce the ignitability of structures throughout the area addressed by the plan.

PLANNING PROCESS

The planning process for the Swift CWPP follows recommendations from “Preparing a Community Wildfire Protection Plan: a Handbook for Wildland-Urban Interface Communities” and information gathered from successful CWPP’s (National Association of State Foresters 2004).

Step One: Convene Decision Makers, Federal Agencies and Interested Parties

The Swift CWPP Steering Committee includes a core group (local government, local fire authority and state agencies), federal agencies and interested parties/community members. The core group is responsible for the development of a CWPP as described in the HFRA and must mutually agree on the plan’s final contents. The Swift Steering Committee met three times to establish, review and critique the planning components (Appendix A- Meeting Agendas, Minutes and Steering Committee Sign-in Sheets). The Swift Steering Committee consists of:

Core group (Decision makers)

- **Frank Yela** – Skamania County Fire District 6 (FD6) Volunteer Fire Department Chief
- **Gary Stuart** – Cowlitz-Skamania County Fire District 7 (FD7) Volunteer Fire Department Chief
- **John Carlson** – Skamania County Department of Emergency Management Coordinator
- **Marlon Morat** – Skamania County Fire Marshall and Building Inspector
- **Russ Hovey** – Washington State Department of Natural Resources (WADNR) Pacific Cascade Region Fire Program Specialist

Federal Agencies

- **Lucus Santio** – FS, Gifford Pinchot National Forest (GPNF) – AMFO Mt. St. Helen’s NVM

Interested Parties/Community Members

- **Kathleen Carlson** – CERT Representative
- **Carolyn Yela** – Assistant Chief FD6 and Community Member
- **Ron Knight** – Volunteer Fire Fighter FD6 and Community Member
- **Mariah Reese** – Community Member FD7
- **Dick Dietrich** – Volunteer Fire Fighter FD6
- **Beth Lee** – Community Member FD7
- **Mary Sauer** – Swift Communities Action Team (SCAT) Vice President

CWPP Team Facilitators

- **Ole Helgerson** - WSU Extension Director and Area Forester
- **Sara Zielin** - Skamania County Wildfire Prevention Coordinator

The following interest groups were invited to participate with the Swift CWPP but were unable to attend planning meetings:

- **United States Fish and Wildlife Service**
- **PacifiCorp**
- **Pope Resources – Olympic Resource Management**
- **ANE Forestry**

Step Two: Establish Planning Area

The Swift CWPP planning area was identified by the Klickitat and Skamania County, WA Community Wildfire Protection Plan (Figure 1). The dual-county plan established ‘communities’ based on geographic, political and economic features. A large section of FS land was included in the planning area because these lands significantly influence the economy of the Swift CWPP area. This original community boundary was adjusted by the Steering Committee to exclude the area that is outside of the Skamania County boundary (Figure 2). The Swift CWPP planning area covers over 443 square miles and nearly 280,000 acres.

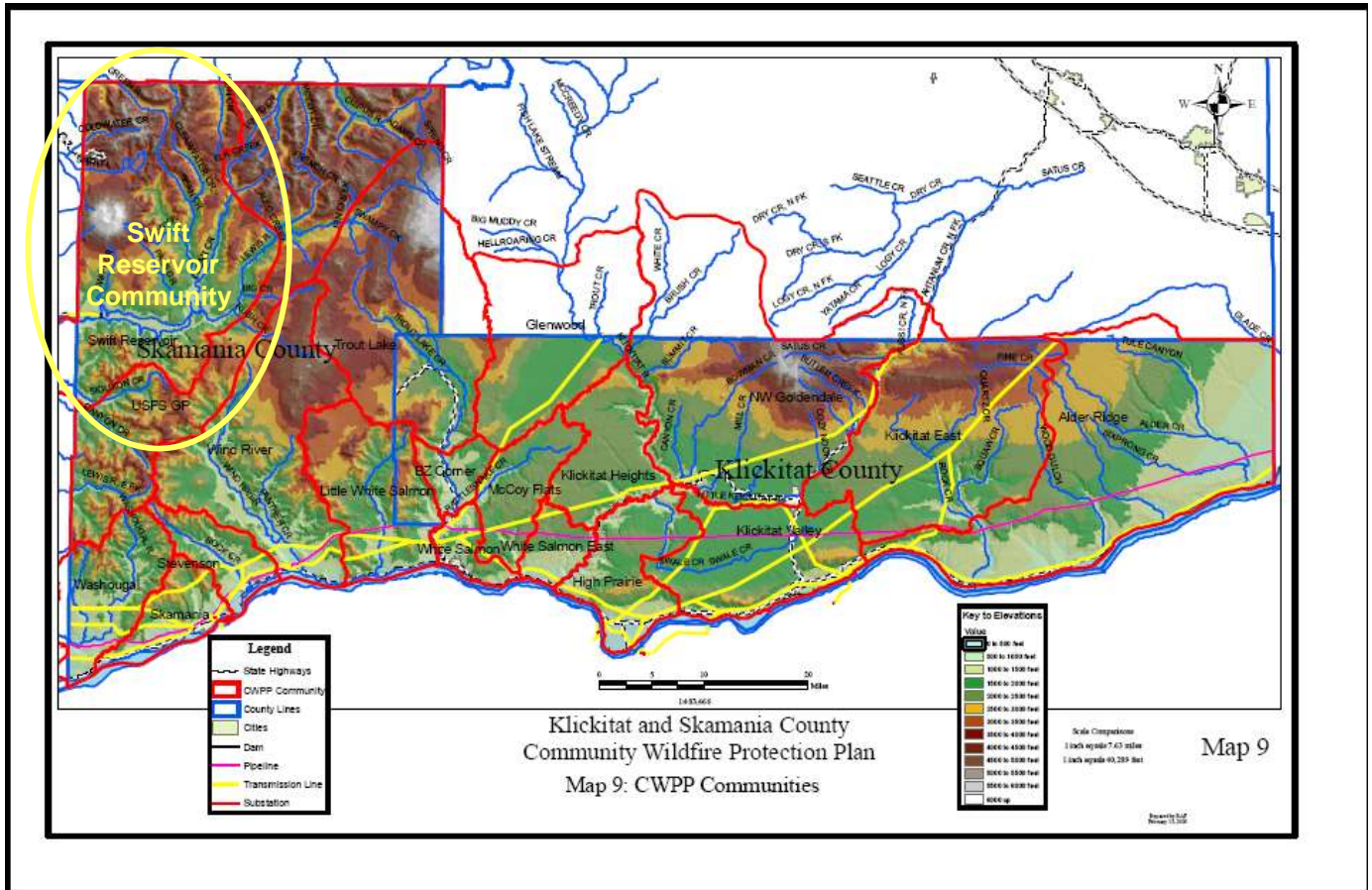


Figure 1. Klickitat and Skamania County Community Wildfire Protection Plan “Communities” map. Cartographer: Bill Alexander (adapted by Sara Zielin).

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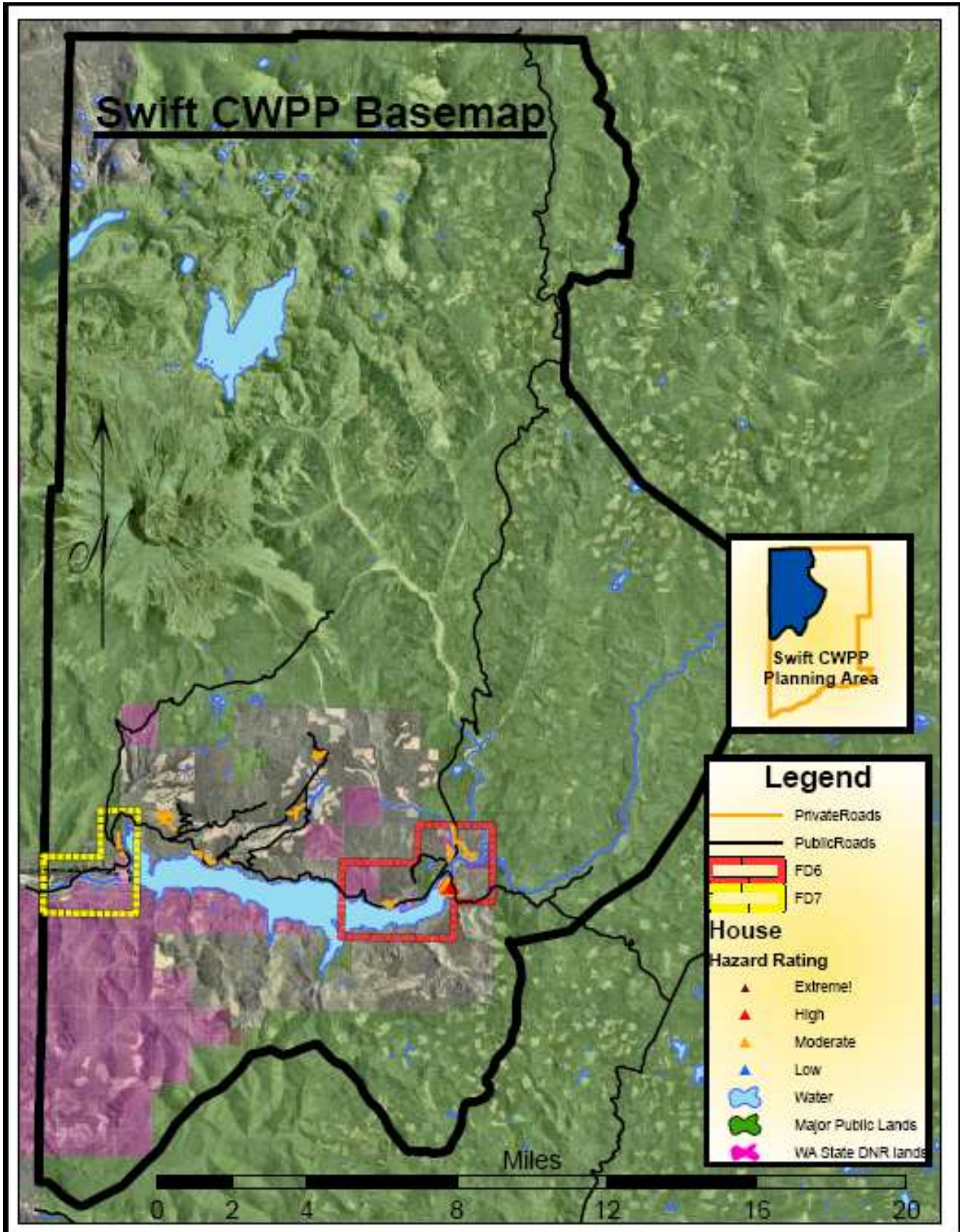


Figure 2. Appendix H1- Swift CWPP Base Map (Cartographer: Sara Zielin).

Step Three: Community Outreach

Community members from the Swift community served on the Steering Committee to represent the public throughout the process. A questionnaire was created and dispersed within the community in September 2007 (Appendix B – Community Questionnaire). The survey results were reviewed by the committee, and applied to different aspects of the plan. This plan was also open for public comment from December 12, 2007 until January 10, 2008.

Step Four: Community Risk Assessment

The community risk assessment took place in two phases. The Swift Steering Committee carried out phase one by reviewing basic risk factors such as: risk of ignition, hazards, values protected and wildfire protection capabilities. The committee defined lists of elements under each risk factor to more specifically describe risks within the planning area.

In phase two, the committee further defined risk factors and identified site specific problems by completing two workshops: 1) gap workshop and 2) map workshop.

The gap workshop identified constraints, 'bottle necks', missing links and/or gaps in the fire fighting system within the Swift planning area. Solutions to the gaps were established as fuel mitigation, planning, education and equipment, staffing and exercise projects.

The map workshop assessed several different aspects of the Swift planning area such as fire history, population density, fuel loads and future developments and identified 'high risk areas' and/or CAR that exist and then established fuel mitigation projects, classed by risk to better protect life, property and natural resources.

Step Five: Establish Community Priorities and Recommendations

Based on risks identified in Step Four, the committee discussed and defined each project establishing a list of priority projects.

This section describes solutions to problems identified in the gap and map workshops and documents projects supporting the goals and objectives of the Swift CWPP (...”to protect life, property and natural resources”). Projects are divided into 4 categories: 1) Fuel Mitigation 2) Planning Projects 3) Education Projects and 4) Equipment, Training and Exercise Projects. Some projects tie to two or more categories. Other project categories may be developed in the future.

Step Six: Develop an Action Plan and Assessment Strategy

The Swift CWPP Steering Committee collectively agreed to meet annually at a minimum and as needed otherwise to review the plan and make needed revisions. The core group will oversee and approve any plan amendments as well as grant applications referencing the Swift CWPP. The Title III Firewise Project offers initial CWPP project follow-up and grant application assistance while legislated funding is still available. Because this is not a permanent funding source, a fulltime position to develop CWPP projects and prepare grants will be pursued.

Step Seven: Community Wildfire Protection Plan Approval

The core group, considering feedback from the steering committee and public comment, will determine the final plan. The Swift CWPP will seek the Skamania County Board of Commissioner's approval.

COMMUNITY PROFILE

Climate

The Swift CWPP planning area is located in northwest Skamania County, WA in the Cascade Mountains. In general, Skamania County enjoys a mild but variable climate, with the climate becoming drier and more continental as one travels from west to east.

Forests and Vegetation

Skamania County is predominantly forest covered. Forests range from mesic western hemlock, western red cedar and Douglas-fir in the west, typical of the area encompassed by the Swift CWPP area to more xeric Douglas fir-grand fir and Oregon oak-ponderosa pine in the east (Figure 3).

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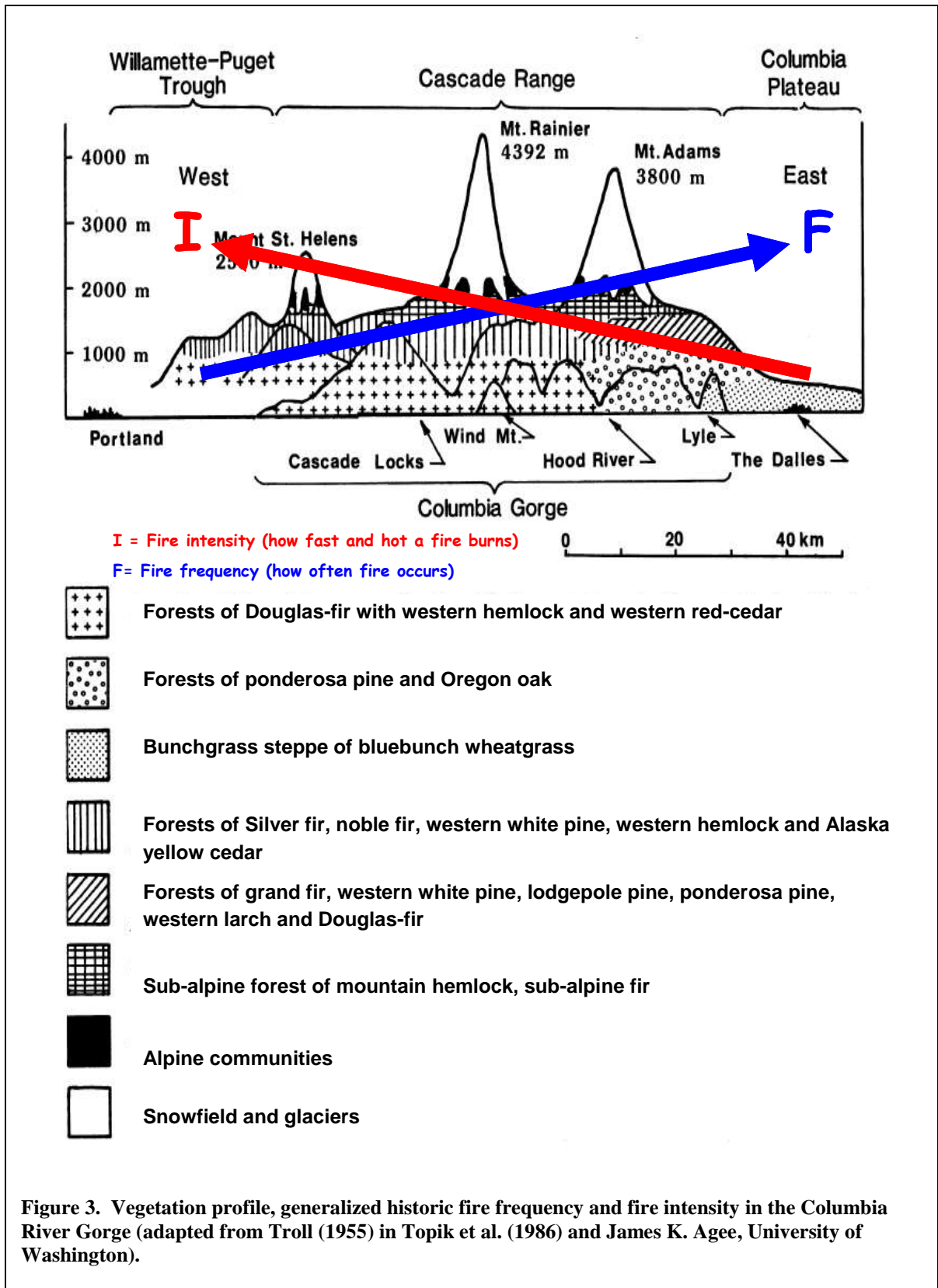


Figure 3. Vegetation profile, generalized historic fire frequency and fire intensity in the Columbia River Gorge (adapted from Troll (1955) in Topik et al. (1986) and James K. Agee, University of Washington).

Location

The Swift CWPP planning area is located in the northwest corner of Skamania County (see Figure 2). Major communities reside in the southern half of the Swift CWPP planning area and are located on the north side of Swift Reservoir from the Cowlitz County border to the northeast side of the reservoir (see Figure 8). Mount Saint Helen's National Volcanic Monument is located in the northwestern section within the Swift CWPP planning area. The 1982 established monument covers 110,000 acres following the May 18, 1980 eruption (Witherspoon 2007). State lands are located in the southwest section of the planning area and cover over 121,000 acres.

Population

According to the Skamania County Planning Department, 339 cabins and structures exist within the Swift planning area (as of May 2006), although all the owners of these cabins and structures are not year round residents. The Swift area has high growth potential and according to the Swift Subarea Plan the number of new recreational cabins possible are by 2027 is 564, totaling 903 cabins (Swift Subarea Plan 2007). The population is correspondingly expected to climb. Land Use Designation amendments being proposed by the Subarea Plan will provide a framework for this impending growth.

Transportation

All roads located within the Swift CWPP planning area are either owned and maintained by the USDA FS or are private roads. Two primary paved routes access the area. The primary access from the south through Skamania County is via the Wind River Road to the Curly Creek Road and then to the USFS 90 Road. Wind River Road runs in a north-south direction from State Route 14, through Carson, until it intersects the Curly Creek Road that connects to the USFS 90 Road which is the main road located within the CWPP planning area (Witherspoon 2007). Ingress and egress from Interstate 5 in the west is through Cowlitz County to State Route 503 to the FS 90 Road.

Critical Infrastructure

Critical infrastructure in the Swift CWPP includes:

- Fire, ambulance and police stations and equipment
- Power lines (minimal)
- Wells, water pumping and supply areas
- Dams
- Bridges
- Commercial areas of economic value to the communities
- Gas and fuel storage areas
- Main highways

Fire History

The Swift CWPP planning area lies with a mixed fire regime including smaller more frequent fires and larger less frequent fires (Figure 3). Several larger fires have occurred here (Figure 4). Historically known large wildfires have usually resulted from strong east winds following periods of summer drought (Topik 1986). The Yacolt Fire stands out as being the greatest fire to move through the area. The fire started near Stabler, WA on Sept. 10, 1902. Driven by strong east winds, it killed 38 adult people and destroyed over 12 billion board feet of lumber on 238,900 acres. It stopped near the town of Yacolt in Clark County when the wind died. In 2003, the Herman Creek fire in Cascade Locks,

OR burned 375 acres in about 4 hours driven by an east wind. Fire fighting there was hampered by lack of knowledge of the terrain by the first responders that came from out of the area. A structure was lost because it was regarded as too hazardous to protect.

Data Collection

In 2003, a National Fire Plan funded project in Skamania, Hood River, Wasco and Klickitat Counties targeted: 1) Locating and risk-ranking WUI structures using NFPA-299 protocol (Appendix C - NFPA-299 Hazard Rating Form) into a Geographic Information System (GIS) database; 2) working with rural volunteer fire districts to identify and remedy equipment and training, and 3) educating rural dwellers in wildfire survivability and damage prevention.

Using Title III funding, three of the four counties (Skamania, Hood River and Wasco) completed the NFPA-299 survey in a GIS database. The NFPA-299 survey data describes conditions affecting structure flammability. It provides information to emergency planners and responders allowing safer response during wildfire (Columbia Gorge 2003).

In Skamania County the project also collected data on fire hydrants, water sources, and other features. Publicly available WADNR GIS data describes wildfire risk areas in Skamania County (RAMS), public road networks and hydrology.

WILDFIRE RISK ASSESSMENT

Risk assessments were performed by the Swift CWPP Steering Committee in two phases. Phase I identified risk of ignition, hazards, values protected, and emergency equipment and staffing inventory. Phase II included a “gap” workshop that defined response capabilities in need of strengthening and a map workshop that designated areas of high risk.

Phase I

Risk of Ignition

Swift wildfire ignition risks include and are not limited to: structure fires, debris burning, fireworks, recreational fires (camping and/or forest product camps), discarded cigarettes, lightning, power lines, generators, candles, propane tanks, arson, off-highway vehicles, logging, and welding.

Structure Fires

Structure fires will continue to occur within the planning area. With many new homes being built within or adjacent to forest lands, the probability of a structure fire igniting from a catastrophic wildfire, or vice-versa, is high especially during fire season.

Debris Burning

Debris burning is legal in Skamania County with a valid permit October 1 through June 30 unless otherwise noted by the Fire Marshall (Figure 5). The debris pile dimensions must be no larger than 10 feet by 10 feet (horizontally) by 5 feet (vertically) and may not to exceed a total of 100 square feet for multiple piles (Skamania County Ordinance 2006). WADNR burning regulations also apply to silvicultural practices within Skamania County. Burn pile dimensions (regulated by WADNR) are 4feet by 4feet (rule

burn) from July 1st thru July 15th and 10feet by 10feet October 16th thru June 30th. Illegal burning does occur and is an important risk factor for wildfire ignition.



Figure 5. To minimize chances of wildfire, burn debris when chances of wildfire ignition are low (Image adapted from: Edgeplot

<http://www.flickr.com/photos/edgeplot/356582184>)

Fireworks

According to the Revised Code of Washington 70.77.395 it is legal in the state of Washington to use fireworks between the dates of June 29 and July 5 (Revised Code 2007). Fireworks are banned otherwise. However, illegal use of fireworks still occurs for most of the year and can ignite a wildfire. Over the July 4 weekend, 2005, numerous firework-ignited wildfires burned hundreds of acres in the Columbia River Gorge (Hulbert 2004).

Recreational Fires

Recreational fires from hikers, campers and forest product camps are a source of wildfire ignition. There are many hiking and backpacking destinations within the GPNF, WADNR and private lands in and around the CWPP area that thousands of people visit every year. Recreational campfires are permitted when suitable conditions exist, but are banned during peak fire season. People have been cited for having fires during a ban.

Discarded Cigarettes

Lit cigarettes tossed from a moving vehicle, have long been source of wildfire ignition. Because of the miles of roads within the planning area, pinpointing exact high risk locations is difficult. In general, the potential is greatest where suitable fuels adjoin roads, particularly around high-use areas.

Lightning

Lightning has historically caused many wildfires in the planning area. With the right weather conditions and fuel characteristics, a major regional lightning storm could spawn many wildfires potentially overwhelming response capabilities. Although, lightning cannot be controlled, we do have the ability to manage hazardous fuels around structures and properties reducing the chances of their ignition from wildfire.

Power lines

Currently, there are no electrical services available to the Swift CWPP planning area communities and individual residences use generators for electricity (Witherspoon 2007). PacifiCorp transmission lines exist within the planning area and are located on the west-side of Swift Reservoir. No utility companies, including Skamania County Public Utility District (PUD) #1, service Swift Reservoir communities. Although power lines are not in excess, branches or trees falling on power lines can ignite a wildfire (Figure 6).



Figure 6. Power lines similar to these broken by a tree caused the 2003 Herman Creek Fire (Image: S. Zielin, Skamania County).

Generators, candles and propane tanks

Fuel generators are the primary source of electricity to homeowners within the Swift planning area. Although these machines are a great source of power, fire hazards exist with operation and fuel storage. Candles and propane tanks also serve as risks of ignition as electric power is not the main source of energy and these methods are used.

Arson

Arson caused seven fires within the planning area between 1973 and 1998 according to WADNR fire statistics GIS data (DNR GIS 2007). The acreage burned is minimal, totaling approximately one acre. Causes of arson include grudges, pyromania and other. A person who would start a fire for vengeance would likely be a person who would not consider time of year, humidity, wind and other aspects that would allow a

fire to become uncontrollable (Davis 2005). Although arson has not been the leading cause of fire starts within the CWPP area it has the potential to cause a catastrophic wildfire.

Off Highway Vehicles, Logging and Welding

These ignition sources were discussed by the Steering Committee and were regarded as low risk. Even so, each source has caused small acreage fires and with the right conditions could be the source of a major wildfire.

Hazards

Fire season in the Swift area runs from approximately mid-May to October. After ignition, major conditions affecting wildfire spread are: weather, topography and fuels.

Weather

Wind is an element of wildfire hazard because it pushes the flame front, increases the rate of fire spread, and decreases moisture in both the air and fuel (Davis 2005). The most prominent weather hazards that influence fire in the Swift area are extreme east and west winds and low humidity. Strong east winds caused the extensive Yacolt Burn and the smaller Herman Creek Fire

Wind driven wildfires can throw burning embers downwind up to a mile igniting spot fires ahead of the main flame front. This presents a major hazard for many of the Swift area structures and properties. Research indicates that flying embers ignite about one-half of homes lost during wildfire.

Relative humidity and precipitation largely determine fuel moisture. Extended periods of summer drought can increase wildfire, as lack of fall and winter precipitation and snow in and around a community lead to drier fuels and increased risk of ignition (Davis 2005).

Topography

Slope accelerates upward heat transfer in fires. The estimated rate of fire spread is twice as fast up a 30 percent or greater slope as compared to a level surface. Along the Swift Reservoir Watershed, densely vegetated slopes from 20 to 70 percent branch in all directions (Figure 7). Although fire primarily burns uphill, structures at the base of slopes are also at risk because fire can move downhill. Thus, structures built on slopes are at risk from both directions (Davis 2005). For residents living in sloping topography, consulting with the Swift CWPP core group or FD6 and FD7 Fire Chiefs is recommended.

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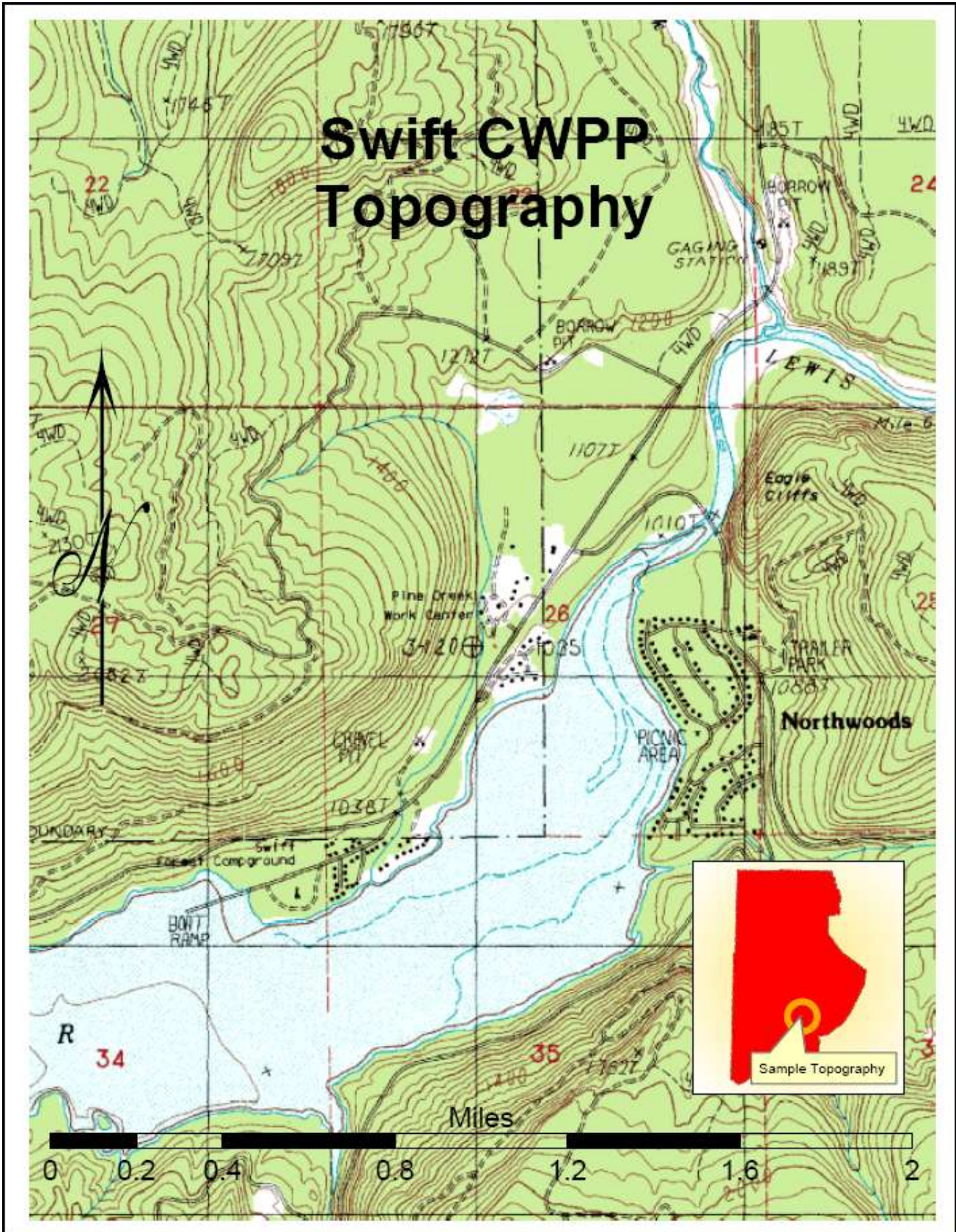


Figure 7. Appendix H3 - Example canyon topography at a popular recreation area within the Swift CWPP planning area (Cartographer: Sara Zielin).

Fuels

There are many structures and properties within the CWPP planning area that are adjacent to high fuel loads. Without adjacent fuels mitigation, home ignition can occur from heat radiated and convected from nearby fire. The following fuel models were taken from the NFPA-299 form and were used in assessing Swift wildfire hazard.

Light-Flashy Fuel (grass, forbs, and shrubs)

This fuel type can be found throughout the planning area, especially along roads and within or near the valley floor.

Moderate Fuel (light brush and small trees)

A significant area of the community is regarded as consisting of moderate fuel intermixed with other fuel types. Moderate fuels can create fire ladders, allowing a ground fire to spread vertically into the forest canopy.

Heavy Fuel (dense brush, timber, and hardwoods)

The majority of areas outside the valley floor fall into this category. Ground fire can ignite heavy fuels and increase risk of crown fires when ladder fuels are present.

Slash (timber harvest residue)

Slash and also debris piles and stacked combustible building materials can ignite easily and threaten closely adjoining structures. When ignited they are extremely difficult to extinguish. Locating combustible piles away from structures and other fuels and burning during safe conditions can reduce risk from this hazard.

Because they present a source of concentrated heat, stored fuels can quickly turn into a very serious structural threat when ignited. Locating fuel storage units at prescribed distances from structures reduces risk.

Values Protected

This section lists specific values (not in order of importance) within the Swift CWPP planning area identified by the Steering Committee that should be protected from wildfire.

- Infrastructure (fire station, roads, power lines, dams, bridges, reservoir, etc.)
- Commercial Timber
- Recreation Values (Cedar flats, Mt Saint Helen's, Swift Reservoir, Fisheries (rivers and streams)
- Watersheds
- Historical Sites
- Endangered Species
- Archaeological Sites

Emergency Equipment and Staffing Inventory

This section includes inventories for all the fire fighting agencies within the Swift CWPP planning area as of September 2007 (Appendix D - Wildfire Protection Capabilities).

Skamania County Volunteer Fire District 6

The communities residing at the east end of the Swift Reservoir are serviced by FD6. Personnel and equipment inventory includes:

- 12 Volunteer Firefighters, 4 EMT, 2 Medical First Responders, 0 Red Card Certified

- 1 – Six Bay Station (with full kitchen, training facility and self powered by power generation and local well system)
- 1 – Type 6 Wildland Engine (drafting pump onboard)
- 1 – Type 7 Wildland Engine (drafting pump onboard)
- 1 – Class A Pumper (drafting capability)
- 1 – Tender 3000 gallon
- 1 – Tender 2000 gallon
- 1 – Squad (multi-function: wildland type 6, medical aid, rescue, drafting capability)

Cowlitz-Skamania County Volunteer Fire District 7

The communities residing at the west end of Swift Reservoir are serviced by FD7.

Personnel and equipment inventory includes:

- 39 Volunteer Firefighters, 0 Red Card Certified
- 1 Part-time employee
- 1 – Six Bay Main Station
- 3 – Two Bay Satellite Stations
- 4 – Type 1 Engines
- 2 – Tenders 3200 gallons
- 1 – Type 6 Engine
- 1 – Rescue Vehicle

FD6 and FD7 have compiled an inventory list that documents the current status and future needs of equipment, staffing and training (Appendix E - Current Inventory and Future Needs). Wildland fire protection outside of the Fire District boundary is provided by the GPNF and WADNR under mutual aid agreements. The following federal and state fire fighting resources are not stationed within the planning area and estimated response times are from 60 to 90 minutes, but may be longer.

Mt Adams Ranger District GPNF

The Mt. Adams Ranger District of the GPNF provides fire protection primarily on federal lands in the Swift CWPP area with the following inventory depending on level and location of wildfire:

Trout Lake, WA Duty Station

- 2 – Type 6 wildfire engines w/foam 300 gallons
- 1 – Type 6 prevention module 320 gallons
- 1 – Type 7 prevention module 80 gallons
- 11-14 on duty employees staffed per day from 7/4 – 10/15
- Estimated 35 employees line qualified firefighters available as needed from approximately 7/4 – 10/15

Mount Saint Helen's National Volcanic Monument

The Mount Saint Helen's National Volcanic Monument of the GPNF provides fire protection primarily on federal lands in the Swift CWPP area with the following inventory depending on level and location of wildfire:

Amboy, WA Duty Station

- 1 – Type 6 suppression engine w/foam 300 gallons
- 1 – Type 6 prevention engine 200 gallons
- 1 – Type 7 prevention engine 100 gallons
- 1 Chevy 4X4 command rig

- Seven day coverage from 7/1 – 10/15 (number of employees not available)

Washington State Department of Natural Resources

WADNR provides fire protection primarily on private and state lands and has the following inventory depending on level and location of wildfire:

- 6 – Firefighters
- 2 – Type 6 wildfire engines

Phase II

Gap Workshop

The purpose of the gap workshop was to identify any constraints, 'bottle necks', missing links and/or gaps within the Swift planning area fire fighting system. Following are the “gaps” identified by the Swift Steering Committee:

1. Lack of red card volunteers (130, 190 standards), bring training to FD6 and FD7
2. Lack of radio communication with DNR and Forest Service
3. Lack of evacuation routes; coordinate with Skamania County Sheriff’s office
4. Limited water storage tanks and they’re lacking known coordinate positions
5. No defined mutual aid distances
6. Lack of GIS and mapping accuracy, e.g. Northwoods fire hydrants
7. Limited Firewise education
8. Lack of multi-agency drills and coordination
9. Undefined MOU’s with Forest Service
10. Lack of volunteers (FD6) and volunteer availability during week (FD7)
11. Equipment (older, serviceable, but would be nice to update)
12. Lack of fire service. Marble Mountain, Four Peaks and other “no man’s land” not in either Fire District, (ties to lack of volunteers, residents want fire protection but do not seem willing to support volunteer fire districts)

Map Workshop

The purposes of the map workshop are to 1) assess several different aspects of the Swift planning area such as fire history, population density, fuel loads and future developments and identify ‘high risk areas’ and/or CAR that exist, and then 2) establish fuel mitigation projects, classed by risk to better protect life, property and natural resources. Figure 8 depicts potential water tank sites and ‘high risk areas’ that the Swift CWPP Steering Committee outlined. The three major elements that drove the designation of the high risk areas were human use, historical fires and fuel loads.

PROJECTS

The following projects were identified to reduce the risk of wildfire and protect life, property and natural resources within the Swift CWPP planning area. These projects are subject to modification depending on changes in local priorities.

Projects were classed into four categories: 1) Fuel Mitigation Projects, 2) Planning Projects, 3) Education Projects, and 4) Equipment, Training and Exercise Projects. Some specific project types, such as landowner fuels mitigation have components in two or more categories. Priority rankings reflect importance among all projects; not just within a category.

Fuel Mitigation Projects

The primary goal of fuel mitigation projects is to reduce wildfire risk by physically reducing fuel densities in selected areas to specified levels. Specific target areas and fuel densities will be assessed using computer models, NFPA-299 data, professional judgment and other appropriate and available methods.

Project 1: Firewise homeowner protection – High Priority

Induce homeowners to create and maintain their own “firewise” landscape by advertising, holding classes and demonstrations and using other suitable media. The “Living with Fire” brochure (Appendix F – “Living With Fire, A Guide for the Homeowner”) indicates fuel reduction treatments, types and methods that homeowners should implement. Fuel treatments will also comply with Skamania County requirements.

Implementing “firewise” methods such as creating defensible space, thinning dense vegetation, providing access, having established escape routes for homes and neighborhoods to an adequate safety zones can greatly reduce a community’s risk from wildfire (Davis 2005).

Project 2: Fuel breaks around ‘communities at risk’ – High Priority

The Steering Committee chose as risk criteria; existing population density, future development, fire history (wildland and structure) and fuel loads. The Committee then used professional judgment to establish boundaries encompassing high risk areas based on these criteria. These areas were designated “Communities at risk” (CAR) and/or “high risk areas” within the Swift planning area. The Committee suggested that strategic fuel breaks be created by thinning, limbing or clearing mechanically or by hand to better protect the following CAR (Figure 8):

- Rain Creek
- Beagle
- Marble Creek
- Elk
- Marble Mountain
- Drift Creek Cove
- Swift Cove
- Swift View
- Swift Camp
- Swift Estates
- Three Rivers
- Northwoods
- Four Peaks

Swift CWPP High Risk Areas

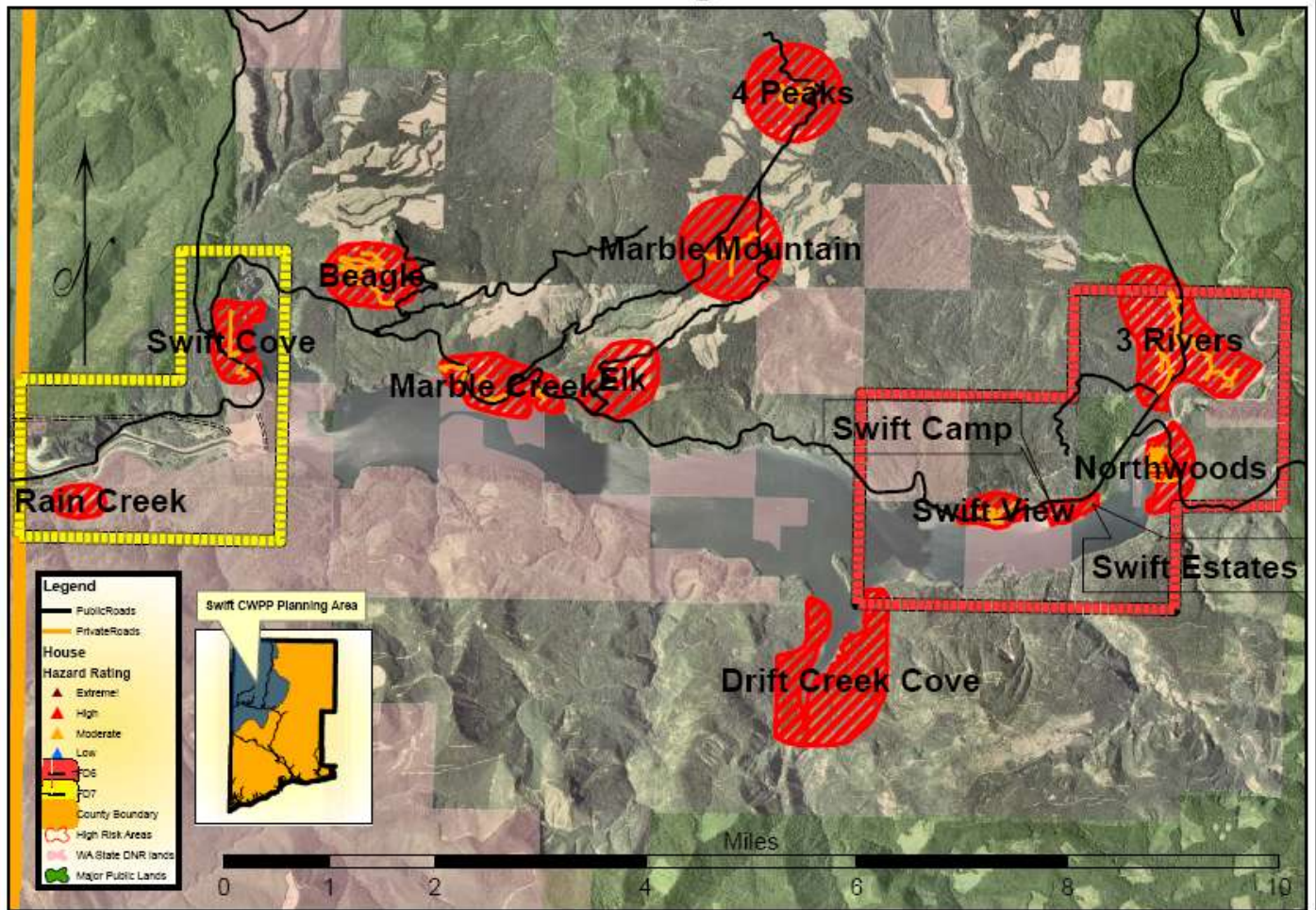


Figure 8. Appendix H4 – High Risk Areas within the Swift CWPP planning area (Cartographer: Sara Zielin).

Project 3: High use recreation areas – Low Priority

Create defensible fuel zones and fire breaks around recreation areas and along roads accessing high-use recreation areas to protect sites and users from wildfire. Recreation sites to be protected are:

- Drift Creek Cove
- Swift Cove (lakeside)
- Northwoods (common areas)
- Swift Estates (boat docks)
- Swift Creek Campgrounds
- Eagle Cliffs Store (camping area)
- Rain Creek
- Three Rivers Recreation Area

Project 4: Establish a fuels disposal program – Moderate Priority

Establish an annual wood chipping day where residents can easily dispose of small trees and brush removed as part of establishing defensible space around their homes. This

would reduce wildfire risk from on-site burning and the amount of unwanted smoke. Potential cooperators include Skamania County, WADNR, and USDA Forest Service among others.

Planning Projects

The primary goals of planning projects are to further refine education and fuels mitigation projects and reduce or eliminate constraints in response and interagency cooperation.

Project 1: Fire service annexation of “no man’s” land - Moderate Priority

The land north of Swift Reservoir along the USFS 90 Road is rapidly developing and is not serviced under either adjacent Fire District (Skamania County FD6 and Cowlitz-Skamania FD7). Following are communities lacking Fire District service protection within the Swift CWPP planning area (Figure 8):

- Beagle
- Elk
- Marble Creek
- Marble Mountain
- Four Peaks
- Drift Creek Cove

Project 2: Gate accessibility – High Priority

Many of the new developments in the Swift Reservoir area are gated and EMS responders cannot access homes without a key or combination. The County Fire Marshall suggests Knox-Box systems be installed on every gate within the county.

Project 3: Burn ban coordination with Skamania County Fire Districts and Gifford Pinchot National Forest – Moderate Priority

Skamania County and the Gifford Pinchot National Forest both control burn bans on their respective jurisdictions within Skamania County. However, when the County’s burn ban and the Gifford Pinchot’s don’t correspond, residents complain that fires are allowed on Forest Service recreation sites but not on private property. This makes regulation of illegal fires difficult and takes away from the two volunteer Fire Districts’ resources. This project would coordinate burn bans with USFS and Skamania County Fire Districts so they’re consistent throughout the Swift CWPP planning area.

Project 4: Various GPS data collection and map building – Moderate Priority

The Steering Committee regards updating and maintaining necessary GIS data throughout the Swift CWPP planning area as essential for EMS responders to maintain an effective firefighting system, to improve response times, and to continue to depend on digital data. Main topics of concern are:

- Continue NFPA299 Survey – This project is devoted to surveying new homes and updating and maintaining the NFPA299 Survey data that has been surveyed in the past throughout the planning area.
- Locate and map water sources – Water source sites are essential to fighting fire and locating new and mapping existing water source sites will give fire fighting entities the necessary information to perform their jobs.
- Locate and map gates – Many new developments are being constructed within the planning area and most have locked gated entries. All of the gate locations are

- not known and can prevent EMS responders from accessing homes especially without the corresponding keys and/or codes in hand.
- Obtain coordinates for helicopter landing zones (LZ) and staging areas – This project includes recording GPS locations for known landing zones and staging areas as well as locating new potential sites throughout the Swift CWPP planning area. Some new potential zones and areas are as follows:
 - Landing zones
 - FD6 boat ramp
 - FD7 Rain Creek (ex Bluebird Helicopter)
 - Staging areas
 - FD6 Pine Creek

Project 7: Emergency Response Handbook – Moderate Priority

This guide for the Swift CWPP area is intended for outside responders. This document would allow the user to identify terrain features such as public and private roads, bridges and weight limitations, gates, road accessibility, power lines, gas lines, decommissioned roads, and resources such as fire hydrants, water sources, staging areas, evacuation routes and areas and other items deemed to be of use. A standardized GIS map will be prepared for sake of continuity with WADNR, FS maps and other Skamania County CWPP plans. Achieving this requires an on-going county GIS presence and establishing M.O.U.'s as needed between FS, WADNR, FD6 and FD7, local timber industries and adjoining counties for sharing of GIS data and like resources.

Project 8: Establish Evacuation Plan – High Priority

Currently, the Swift area does not have an evacuation plan that includes a public notification system and identifies escape routes, escape areas, staging areas, helicopter landing zones (LZ) that will be utilized in the case of an emergency such as a wildfire. The Steering Committee will review potential sites for designated emergency areas and make land-use agreements with landowners and emergency agencies.

Project 9: Achieve Communication Interoperability – High Priority

Currently, Skamania Volunteer FD6 and Cowlitz-Skamania FD7 communicate on VHF radios which are not compatible with other Skamania County Volunteer Fire Districts and Sheriffs Office. The CWPP Steering Committee recommends that Skamania County EMS, USDA FS and WADNR work together in achieving radio system interoperability by methods such as by providing FD6, FD7, EMS, and Sherriff's Department access to particular frequencies, necessary radios and/or gateway devices.

Education Projects

The primary goal of education projects is to raise public wildfire awareness to the point where residents will take the initiative for creating and maintaining defensible space around their own homes and structures.

Project 1: “Firewise” education programs at Swift and Vancouver – High Priority

Engage the Swift communities in “Firewise” education programs at both Swift and Vancouver areas. The Steering Committee discussed the importance in educating the community members about living in a “firewise” community. Many new subdivisions are developing in Swift Reservoir area and new residents often have low awareness of wildfire risk. Also, most people are not year round residents and holding programs in the Vancouver area would increase people’s availability to attend programs during the off

season months. Outreach methods may include holding an annual pancake feed in coordination with Fire Districts 6 and 7, WADNR, Forest Service and established groups such as Swift Communities Action Team (SCAT), Cougar Area Trail Seekers (CATS) and community members within Swift CWPP planning area.

Project 2: Maintain a website – Low Priority

Create a website for Fire Districts 6 and 7 that will be a central location for the public to get information on current fire risk, pile burning, fire hall notes, maintain a blog and links to “firewise” websites.

Equipment, Staffing and Exercise Projects

The primary goal of Equipment, Staffing and Exercise projects is to increase the wildfire response capabilities of the CWPP planning area fire agencies by defining and addressing equipment, staff and training needs.

Project 1: Volunteer Fire District Recruitment – High Priority

Volunteer Fire Districts depend on local citizen commitment. Currently Fire District 6 has eight volunteers (mostly available on weekends) and Fire District 7 has forty volunteers (mostly available at night or on weekends). Thus, both Districts may be short of staff during emergency situations. Holding a targeted recruiting event to motivate community members to participate in the Fire Districts will give the Fire Chiefs and Assistant Chiefs an opportunity to engage local citizens in serving their community.

Project 2: Red card training with FS and WADNR – High Priority

Skamania County Volunteer Fire Districts including FD6 and FD7 (Cowlitz-Skamania) will coordinate with WADNR and FS on scheduling ‘red card’ training to increase volunteer fire fighters abilities to attend training.

Project 3: Grant writer for Fire District 6 and 7 – Moderate Priority

Volunteer Fire Districts depend on grants to help fund equipment and training needs. Volunteers lack the adequate time needed to search and apply for useful grants. The Steering Committee regards it necessary to hire a grant writer to take advantage of these opportunities Fire District 6 and 7 can’t manage on their own. This position would serve both Fire District 6 and 7 and possibly other Skamania County Fire Districts.

Project 4: Organize and perform a multi-agency training/mock drills –Moderate Priority

Organize a mock drill with FD6 and FD7 and other Skamania County Volunteer Fire Districts, FS, and WADNR, that tests the fire fighting systems and capabilities and identifies problems within the system.

Project 5: Class A Fire Engine – Low Priority

Skamania County Volunteer Fire District 6 needs a Class A Fire Engine to better protect the growing Swift communities.

The Swift Action Plan

Education projects will teach “firewise” measures that homeowners can take to reduce structure ignitability. The goal is to get community members to make it their personal responsibility to take steps to protect themselves during wildfire. Phase 1 of the action plan includes seeking a Wildfire Prevention Intern who will develop “firewise” education

classes, write grants pertaining to CWPPs and recruit a “firewise” volunteer cadre. The position would serve FD6, FD7 and other Fire Districts. The Swift CWPP core group will continue to work with Wildfire Prevention Coordinator in prioritizing work for CWPP intern. Lastly, utilize the Skamania County Wildfire Prevention Coordinator for CWPP support while funding still exists.

Structure Ignitability

The Swift CWPP Steering Committee recommends that the homeowners within the planning area use the “Living with Fire: A guide for the homeowner” brochure as an initial guide to reducing structure ignitability (Appendix F).

MONITORING AND EVALUATING

To help document changes, before and after photos should be taken of fuel mitigation project areas. Pictures demonstrate the effectiveness of the project and subsequent changes from year-to-year plan growth. Recording GPS coordinates of the photo locations are strongly suggested (Hulbert 2004). Software such as Landscape Modeling System (LMS) can help predict when re-treatment of forest fuels will be necessary.

A CWPP is a living document and annual re-evaluation will be performed by the Swift Steering Committee. The Steering Committee will also convene to discuss CWPP updates and to share any new project, grant developments and amendments as needed.

The Swift CWPP has recognized FEMA Pre-Disaster Mitigation (PDM) Plan Requirements. The table in Appendix G, indicates how the Swift CWPP meets FEMA PDM compliancy and what components are missing for future acceptance.

APPENDICES

- A – Agendas, Meeting Minutes, Steering Committee Sign-in Sheets
- B – Community Questionnaire
- C – NFPA-299 Hazard Rating Form
- D – Wildfire Protection Capabilities
- E – Current Inventory and Future Needs
- F – “Living With Fire, A Guide for the Homeowner”
- G – FEMA Pre-Disaster Mitigation Compliance
- H1 – CWPP Map – Swift Basemap
- H2 – CWPP Map – Historical Wildland and Structure Fires
- H3 – CWPP Map – Swift Topography
- H4 – CWPP Map – High Risk Areas

REFERENCES

- Columbia Gorge Wildfire Prevention Coordinator Website. 2003. Retrieved May 30, 2007, from <http://www.skamaniacounty.org/Wildfire/Web%20Page%20May%202007.htm>
- Davis, C., J. Esteves and M. Dearden. 2005. Trout Lake Community Wildfire Protection Plan. Retrieved May 29, 2007, from <http://www.dnr.wa.gov/hdocs/rp/mitigation/klickitat/troutlake.pdf>
- DNR GIS Data. Retrieved June 28, 2007, from <http://www3.wadnr.gov/dnrapp6/dataweb/dmmatrix.html#Wildfire%20and%20Prevention>.
- Douglas County Planning Department. 2005. Retrieved June 6, 2007 from http://www.co.douglas.or.us/planning/wildfire_plans/default.asp.
- Hulbert, J. H. 2004. Community Wildfire Protection Plan: For the Cities of Bingen and White Salmon. Retrieved May 29, 2007, from <http://www.dnr.wa.gov/hdocs/rp/mitigation/klickitat/whitesalmonbingen.pdf>
- Hulbert, J. H. 2005. Community Wildfire Protection Plan: For the City of Cascade Locks. Retrieved May 30, 2007, from <http://www.oregon.gov/ODF/FIRE/docs/PREV/CascadeLocksFirePlanJanuary04.pdf>
- National Association of State Foresters. 2004. Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Communities. Retrieved May 29, 2007, from <http://www.safnet.org/policyandpress/cwpphandbook.pdf>
- Revised Code of Washington. 2007. Retrieved May 29, 2007, from <http://apps.leg.wa.gov/RCW/default.aspx?cite=70.77.395>
- Skamania County Ordinances. Retrieved June 7, 2007, from <http://www.skamaniacounty.org/bpc/html/index.htm>
- Stevenson Chamber of Commerce. Retrieved May 29, 2007, from http://www.skamania.org/county_stats.html
- Topik, C, Halverson, N. M.; Brockway, D. G. 1986. Plant Association and Management Guide for the Western Hemlock Zone. USDA Forest Service. Pacific Northwest Region, R6-ECOL-230A <http://www.treearch.fs.fed.us/pubs/2374>
- Washington Department of Natural Resources. Retrieved June 28, 2007, from <http://www.dnr.wa.gov/hdocs/rp/01wildlandfiresum/nfplan02.pdf>
- Williams Northwest. Retrieved August 21, 2007, from <http://www.williams.com/williamsinwashington/index.asp>
- Witherspoon, K.A., M. J. Mazeski. Retrieved September 20, 2007, from <http://www.skamaniacounty.org/Planning/Swift%20Area/Swift%20Sub-Area.htm>

Appendix A – Meeting Agendas, Minutes and Attendance Sign-in Sheets

Meeting 1 - Agenda, Minutes and Attendance Sign-in Sheet

September 21, 2007 Swift Community Wildfire Protection Plan Meeting 1 Fire District 6 Fire Station, Milepost 16.2 FS90, WA AGENDA		
GOALS: 1)Outline CWPP Process 2)Review Planning Area 3)Establish Goals and Objectives 4)Risk Assessment		
Time	Speaker(s)	Topic
7:00-7:10	Zielin, All	Introductions, agenda review
7:10-7:20	Zielin	Community Wildfire Protection Plan Synopsis <ul style="list-style-type: none"> • Roles • Background • Process • Requirements • Completed Data Collection • Current Status • Main Limitations and Douglas County CWPP as a model • Swift CWPP Outline
7:20-7:30	All	<ul style="list-style-type: none"> • Questions
7:30-7:40	Zielin, Helgerson	Review Swift Planning Area <ul style="list-style-type: none"> • Klickitat and Skamania County CWPP • Swift Base Map
8:40-8:00	Helgerson, Zielin, All	Establish the Swift CWPP Objectives and Goals <ul style="list-style-type: none"> • Protection of Life, Property and Resources
8:00-8:45	Helgerson, Zielin, All	Swift Risk Assessment Workshop Process <ul style="list-style-type: none"> • Ignition Risk • Hazard – weather, topography, fuel loads and types • Values Protected – infrastructure and other • Protection Capabilities – What we have, what we need and what gaps exist in the system
8:45-9:00	All	Review meeting, set next meeting date, adjourn

Swift CWPP Minutes

Meeting 1 – September 21, 2007

Meeting started at 7:00pm

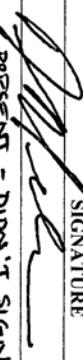

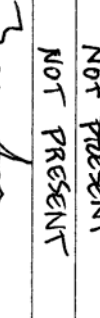
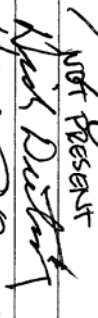
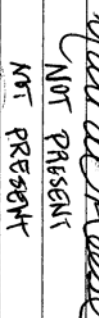
















- Introductions and agenda review
- Meeting packets were handed out and included:
 - “Resource List”- weblinks related to CWPP’s
 - Tentative CWPP document outline
 - Maps
 - Klickitat and Skamania County CWPP “communities”
 - Swift CWPP planning area
 - Wildfire Response Capabilities for FD6 and FD7
 - Community Questionnaire
 - Tentative agenda for meeting 2
- Sara presented the general information pertaining to CWPP’s
- Swift planning area was presented and discussed
 - Reese and Yela thought the planning area was too large and should be consolidated to where communities are located
 - J. Carlson explained how the Forest Service land to the north can affect the communities to the south and that keeping the planning area ‘as is’ would not have a negative affect
 - Zielin explained how in future meetings we can outline WUI boundaries for the communities
 - J. Carlson explained the big picture of how the Swift CWPP will serve as a chapter to the Klickitat and Skamania County CWPP and keeping the planning area as outlined in the broad brushed will be beneficial for continuity
 - Group discussed referencing Cowlitz-Skamania FD7 as a resource to the Swift CWPP and all agreed on keeping the planning area as originally presented
- Objective and goals were presented and discussed
 - Yela agreed they should be as presented but in the order of Life, Natural Resources and Property – all agreed
- Phase I of the risk assessment was performed as a group, the group was asked to brainstorm about the following four topics in respect to the Swift Planning Area:
 - Risk of Ignition
 - Man caused
 - Generators
 - Candles
 - Propane tanks
 - Slash/debris burning
 - Fireworks
 - Camp fires – recreational primitive camps a higher risk
 - Smoking/cigarettes
 - Forestry practices – logging, harvesting
 - Power lines – on the west end of Swift Reservoir
 - Structure fires

- Arson
 - Firearms
 - Natural
 - Lightning
- Hazards (natural)
 - Weather – high east and west winds, and unique wind patterns caused by canyon topography and the reservoir
 - Fuels – light flashy fuels (mostly on private land), heavy fuels where thinning has occurred and not properly maintained, poor forestry practices on private lands
 - Topography – Steep canyon topography, foot hills of Mt St Helens, creates limited escape routes
- Values Protected
 - Infrastructure
 - Fire Station
 - Roads
 - Dams
 - Bridges
 - Swift Reservoir
 - Radio towers – not discussed
 - Residential
 - Non-residential
 - Recreation areas – Cedar flats, Mt St Helens, Swift Reservoir, fisheries – streams and rivers
- Wildfire Protection Capabilities
 - Skamania County Volunteer Fire Districts 6 and 7 completed a list of current inventory and staffing. They also listed future training, staffing and equipment needs
- Community Questionnaire – Sara asked community members of the Steering Committee to complete, disperse to other community members and bring results to the next meeting
- The Swift CWPP Steering Committee requested that representatives from PacifiCorp, ORM, ANE and USFW be asked to participate with the Swift CWPP

Next meeting was tentatively set for October 5, 2007 - 6:00pm SCFD#6 Station
 Meeting was adjourned by 8:30pm

Swift Community Wildfire Protection Plan Steering Committee
Sign-in sheet – Meeting 1

Date: 20070921 Time: 7:00 - _____ Location: Skamania County Volunteer Fire District 6 Station

NAME	REPRESENTATION	SIGNATURE
FRANK YELA	FIRE CHIEF, FD6, 3 RIVERS COMMUNITY MEMBER	 PRESENT - DIDN'T SIGN
CAROLYN YELA	ASSISTANT CHIEF, FD6, 3 RIVERS COMMUNITY MEMBER	 NOT PRESENT
RON KNIGHT	FIRE COMMISSIONER, FD6, NORTHWOODS RESIDENT	 NOT PRESENT
GARY STUART	FIRE CHIEF, PD7	 NOT PRESENT
RON WILLIAMS	COMMUNITY MEMBER FD6	 NOT PRESENT
KATIE LYNCH	NORTHWOODS CABIN OWNER	 NOT PRESENT
MARY SAUERS	COMMUNITY MEMBER FD6	 NOT PRESENT
BILL BAUMAN	SWIFT ESTATES RESIDENT	 NOT PRESENT
DICK DIETRICH	SWIFTVIEW RESIDENT	 NOT PRESENT
MARIAH REESE	COMMUNITY MEMBER FD7	 NOT PRESENT
BETH LEE/ART	COMMUNITY MEMBER FD7, USFS 90	 NOT PRESENT
JANE HILL/BILL FIELDS	PACIFICORP	 NOT PRESENT
KATHLEEN CARLSON	EOC	 NOT PRESENT
GREG PAGE	USDA FOREST SERVICE GIFFORD PINCHOT NF	 NOT PRESENT
LUCAS SANTIO	USDA FOREST SERVICE MT ST HELENS	 NOT PRESENT
JASON DEBARBER	USDA FOREST SERVICE MT ST HELENS	 NOT PRESENT
JOHN CARLSON	SKAMANIA CO. DEM	 NOT PRESENT
MARLON MORAT	SKAMANIA CO. FIRE MARSHALL	 NOT PRESENT
RUSS HOVEY	WADNR	 NOT PRESENT
OLE HELGERSON	FACILITATOR	 NOT PRESENT
SARA ZIELIN	FACILITATOR	 NOT PRESENT

Meeting 2 - Meeting Agenda, Minutes and Attendance Sign-in Sheet

Swift Community Wildfire Protection Plan Meeting 2 Fire District 6 Station, Milepost 16.2 FS90, WA AGENDA		
GOALS: 1) Identify Gaps 2) Identify Problem Areas 3) Review Community Concerns 4) Identify Projects 5) Prioritize Projects		
Time	Speaker(s)	Topic
6:00-6:10	Zielin, All	Introductions, agenda review, meeting minutes from 9/21/07
6:10-6:20	Zielin	Gap Identification Workshop <ul style="list-style-type: none"> • What limitations and/or constraints to our ability to fight wildfire exist within the Swift CWPP planning area?
6:20-7:00	Zielin, All	Map Workshop <ul style="list-style-type: none"> • Population Density • Future Development • Fire History • Fuel Loads
7:00-7:05	Zielin, Page	Grants <ul style="list-style-type: none"> • Many types and requirements
7:05-7:15	Community	Community Questionnaire <ul style="list-style-type: none"> • Concerns from community
7:15-7:45	Zielin	Project Workshop <ul style="list-style-type: none"> • Fuel Mitigation Projects • Planning Projects • Education Projects • Equipment/Staffing/Exercise
7:45 - 7:55	Helgerson, All	Prioritizing Projects <ul style="list-style-type: none"> • High Priority • Moderate Priority • Low Priority
7:55-8:00	All	Review meeting, set next meeting date, adjourn

SWIFT CWPP Minutes

Meeting 2 - October 5, 2007

Meeting started at 6pm - FD 6 Fire Station

Attending: John Carlson, Kathleen Carlson, Dick Dietrich, Ole Helgerson (facilitator and recorder), Marlon Morat, Mary Sauer, Gary Stuart, Carol Yela, Frank Yela

Note: **italics** denote OH interpretations, uncertainties or edits of comments recorded during meeting, please review for accuracy

- Introductions
- Ole handed out meeting packet:
 - Agenda reviewed
 - Community Questionnaire discussed: property owner meetings as possible outlets
- Ole to email questionnaire to Frank for duplication

Gap workshop

1. Lack of red card volunteers (130, 190 standards), bring training to FD6 and FD7
2. **Radio** Communication; ok with Skamania County (*also Cowlitz?*) but need review of how to better link with DNR and Forest Service
3. Evacuation routes; coordinate with Skamania County Sheriff's office
4. Water storage tanks, have some, need mapped (*add to handbook*)
5. Mutual aid distances
6. GIS and mapping accuracy, e.g. Northwoods fire hydrants
7. Education
8. Multi-agency drills and coordination
 - a. Contracts or MOUs with Forest Service and DNR
 - b. (*reference radios, red card training, volcano issues*)
9. Lack of volunteers (FD6) and volunteer availability during week (FD7)
10. Equipment (older, serviceable, but would be nice to update)
11. Marble Mountain, Four Peaks and other "no man's land" not in either Fire District, (ties to lack of volunteers, residents want fire protection but do not seem willing to support volunteer fire districts)

Map Workshop (*high priority areas for fuels mitigation and resident or recreationist education*), prevailing summer winds are westerly over Swift Reservoir reach and then funneling up side "three river" drainages at east end of reservoir. Twelve "high risk" areas identified, approximate boundaries drawn on laminated orthophoto maps by group. List of "high risk" areas from west to east;

1. Rain Creek(ex Bluebird Helicopter); FD 7, south side of Lewis River below dam
2. Swift Reservoir Cove (SRC); FD 7, west side of cove on north side of reservoir just above dam
3. Beagle;"no fire service," location reservoir north side about one mile east of SRC

4. Wapiti Ridge; “no fire service,” location reservoir north shore, about one mile east and south of Beagle, no road exit, *steep entry road?*
5. Elk; “no fire service,” north of reservoir about one mile east of Wapiti Ridge, no exit
6. Marble Mountain; “no fire service,” location north of Elk, extends about two miles to northeast, steep entry road, no exit
7. “Forest Service” *(need name)* Cove; location, bay on south side of reservoir land, Forest Service, no road access, boaters use beaches on cove for recreation, westerlies could quickly carry fire up steep slope on east side, significant ignition risk to Northwoods from flying embers
8. Swift View; FD6, 12 lots, location north shore of reservoir, potential high population density
9. Swift Camp; FD6, 93 lots, location north shore of reservoir, potential high population density
10. Swift Estates; FD6, 48 lots, location north shore of reservoir, potential high population density
11. Three Rivers, location, east end of reservoir, north side, potential high population density
12. Northwoods; location, east end of reservoir, south side, *high residential density, existing fuels near structures*
13. *Need to get “Four Peaks” area identified on map*

Swift CWPP Project List *(priorities refer to overall ranking all categories combined)*

Fuel Mitigation Projects (copy FD1 CWPP list)

1. Priority High. Create defensible space around homes according to “Firewise” or “living with Fire” standards
2. Priority High. Create fuel breaks around recreation areas and “risk” areas
3. Priority Medium. Woody debris disposal

Planning Projects *(note: italics are potential projects I took from gap lit that did not seem to be covered, please review, oth)*

1. Priority _____. *Water sources, locate potential new sites*
2. Priority _____. *Water sources, map existing sites onto GIS layer*
3. Priority _____. *Evacuation routes; develop in coordination with Skamania County Sheriff’s office*
4. Priority _____. *Correct GIS alignment problems with Northwoods fire hydrants*
5. Priority _____. *new ideas??*
6. Priority Medium. *Fire service* access to “no man’s” land (lands undergoing residential development between FD6 and FD7, e.g. Beagle, Elk, Wapiti Ridge, Marble Mountain, various “Swift” subdivisions, see notes from “map workshop”)
7. Priority Medium. Map out Forest Service, DNR and private ownership on GIS *to better define areas for fuels mitigation and initial response*
8. Priority Medium. Burn ban coordination with Gifford Pinchot National Forest
9. Priority Medium. Continue NFPA299 survey.

10. Priority Medium. Obtain GIS coordinates for helicopter landing zones (LZs) and staging areas
 - a. Landing zone
 - i. FD6 boat ramp *name?*
 - ii. FD7 Rain Creek (ex Bluebird Helicopter)
 - iii. *Others?*
 - b. Staging areas
 - i. FD6 Pine Creek
 - ii. *Others ??*
11. Priority Medium. Emergency response handbook (see FD1 and FD4 CWPPs)
 - a. Include GPS coordinates *and data (sizes & distances from?)* for helicopter landing zones (LZs) and staging areas

Equipment, Staffing and Exercise Projects

1. Priorities Very High and High. Recruit more volunteers
 - a. Very High. FD6, 8 volunteers at most on weekends, none during week days.
 - b. High. FD7, more than 40 volunteers, most not available during week days, but weekend staffing is strong.
2. Priority High. Red card training; coordinate with WDNR *joint FD6 and FD7 training?*
3. Priority Medium. Grant writer *or other staff to facilitate paperwork*

Education Projects

1. Priority High. “Firewise” resident education programs (link to debris burning, defensible space *and???*)
 - a. *Pancake feeds*
 - b. *Vancouver meetings for Northwoods and other resident meetings*
2. Priority Low. Web site
 - a. Information for fire districts *with blog, could adapt existing Skamania County “firewise” web site?*
 - b. Information for public *fire risk, pile burning, fire hall notes, links to firewise*









Date, time and location set for meeting three; Friday, November 2, 1800-2000, FD6 Firehall.

Agenda for meeting 3:

- review items defined in meetings 1 and 2 before drafting cwpp,
- line out review process
- define action steps
- discuss FEMA compliance

Swift Community Wildfire Protection Plan Steering Committee Sign-in sheet – Meeting 2

Date: 2007/09/21 Time: 7:00 - Location: Skamania County Volunteer Fire District 6 Station

NAME	REPRESENTATION	SIGNATURE
FRANK YELA	FIRE CHIEF, FD6, 3 RIVERS COMMUNITY MEMBER	
CAROLYN YELA	ASSISTANT CHIEF, FD6, 3 RIVERS COMMUNITY MEMBER	
RON KNIGHT	FIRE COMMISSIONER, FD6, NORTHWOODS RESIDENT	
GARY STUART	FIRE CHIEF, FD7	
RON WILLIAMS	COMMUNITY MEMBER FD6	
KATIE LYNCH	NORTHWOODS CABIN OWNER	
MARY SAUERS	COMMUNITY MEMBER FD6	
BILL BAUMAN	SWIFT ESTATES RESIDENT	
DICK DIETRICH	SWIFTVIEW RESIDENT	
MARIAN REESE	COMMUNITY MEMBER FD7	
BETH LEE/ART	COMMUNITY MEMBER FD7, USFS 90	
JANE HILL/BILL FIELDS	PACIFICORP	
KATHLEEN CARLSON	EOC	
JASON DEBARBER	USDA FOREST SERVICE MT ST HELENS	
LUCAS SANTIO	USDA FOREST SERVICE MT ST HELENS	
MARLON MORAT	SKAMANIA CO. FIRE MARSHALL	
JOHN CARLSON	SKAMANIA CO. DEM	
RUSS HOVEY	WADNR	
OLE HELGERSON	FACILITATOR	
ERIC HOLMAN	USFW	
TONY PRANGER	ANE FORESTRY	
MIKE MACKELWICH	POPE RESOURCES ORM	

Meeting 3 - Meeting Agenda, Minutes and Attendance Sign-in Sheet

November 2, 2007 Swift Community Wildfire Protection Plan Meeting FD 6 Fire Station, Skamania County, WA AGENDA		
GOALS: 1) Review Projects, 2) Modify/Add/Remove Projects, 3) Re-Prioritize Projects, 4) Create Action Plan, 5) Quickly debrief CWPP planning process		
Time	Speaker(s)	Topic
6:00-6:10	Zielin, All	Introductions, review agenda and meeting minutes from October 5, 2007
6:10-7:00	Zielin, All	Review and change project descriptions as needed <ul style="list-style-type: none"> • Fuel Mitigation • Planning • Education • Equipment/Staffing/Exercise
7:00-7:20	All	Add/Remove projects
7:20-7:30	All	Re-Prioritize projects as needed <ul style="list-style-type: none"> • New projects • Previous projects if necessary
7:30-7:50	All, Zielin, Helgerson	Create an action plan <ul style="list-style-type: none"> • CWPP draft review and signature process • CWPP sustainability • FEMA Pre-Disaster Mitigation Plan Compliancy
7:50-8:00	All	<ul style="list-style-type: none"> • Review meeting and overall CWPP process, • Adjourn meeting <p style="text-align: center; margin-top: 10px;">THANK YOU FOR ALL OF YOUR HELP!!!</p>

Swift CWPP Meeting 3 Minutes
Skamania County Fire District 6 Station
November 2, 2007 6-8pm

- 1) Meeting 2 Review
- 2) Project Review - The Committee reviewed all of the projects established from the previous meeting along with the descriptions revised by Sara and Ole. Projects were further refined per the Swift Steering Committees recommendations. The major changes were as follows:

Fuel Mitigation

- Project 1 – more details were documented on measures community members should take to creating defensible space such as limb-up trees 35 ft, remove ladder fuels within 30 feet of home.
- Project 2 – Communities at risk were revised and Wapiti Ridge needs to be subdivided and Mary Sauer will direct Sara to what changes need to be made. “Forest Service” Cove was changed to Drift Creek Cove. Swift Cove was missing from the project list and will be added.
- Project 3 – Recreation areas were added and are as follows: Drift Creek Cove, Swift View (lakeside), Northwoods common areas, Swift Estates (boat docks), Swift Creek Campground, Eagle Cliffs Store (camping area), Rain Creek and Swift Cove Recreation Area.
- Project 4 – Fuels disposal program evolved into an annual chipping day.

Planning

- Project 1 – Fire service for “no man’s” land and access to gated communities were separated into two projects. Project 1a - Annexation of the land between FD6 and FD7 should occur along FS 90 Road but we will need landowner’s full support to follow through with this project. Project 1b – Knox boxes for all gates within the Swift CWPP planning area, refer to Marlon Morat for County law changes.
- Project 2 – Removed map landownership project as this data already exists
- Project 4, 5, 6 – combined these 3 projects into one discussing the needs of GPS/GIS data including continuing the NFPA299 survey, locating and mapping water sources, landing zones and gates within the Swift CWPP planning area. Sara was referred to contact Tom from North Country EMS about landing zone locations.
- Project 8 – The evacuation plan was designated as high priority and will be added to the Emergency Response Handbook. N.O.A.A. will

be contacted to discuss their emergency notification system and the Swift CWPP.

Education

- Project 1 – Cougar Area Trail Seekers (CATS) and Swift Communities Action Team (SCAT) will be added as a major contact for community members and this education project.

Equipment, Staffing and Exercise

- Project 2 – Add Forest Service to title of project

3) Action Plan Review

- An action plan was discussed and it was decided that the Steering Committee would meet annually at a minimum.
- The Title III Wildfire Prevention Coordinator suggested her lead on planning projects, to initially get things started while the grant position still exists and as time allows.
- Title III 2008 – Announced the NWSA position added to the firewise project and the contributions this position will provide:
 - Perform Firewise education courses
 - CERT/“Firewise” liaison
 - Assist with spearheading Skamania County CWPP projects

4) FEMA Compliancy – The Swift CWPP will attempt to be as FEMA compliant if feasible within the Swift CWPPs main objectives and goals

5) Finalizing CWPP – The Committee discussed the steps to finalize the Swift CWPP:

- Review Draft and suggest any changes
- Allow time for public review and comment
- Present public comment to Steering Committee
- Make changes as recommended by Core Group
- Core group signs final document
- Send to DNR for approval

Swift Community Wildfire Protection Plan Steering Committee Sign-in sheet – Meeting 3

Date: 20070921 Time: 7:00 - Location: Skamania County Volunteer Fire District 6 Station

NAME	REPRESENTATION	SIGNATURE
FRANK YELA	FIRE CHIEF, FD6, 3 RIVERS COMMUNITY MEMBER	
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TONY PRANCER	ANE FORESTRY	
MIKE MACKELWICH	POPE RESOURCES ORM	
Steve Zicklin	FRANCOIS	

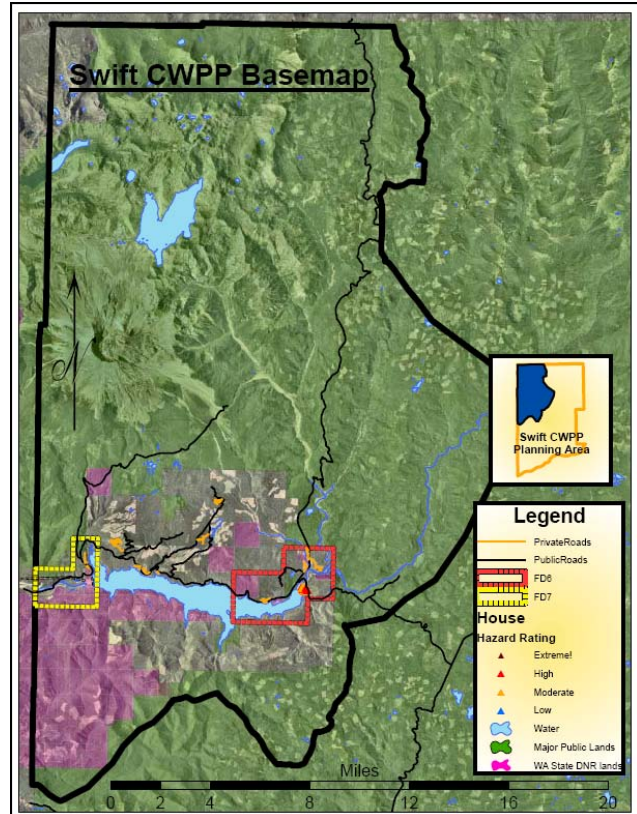
Appendix B – Community Questionnaire

The Swift Community Wildfire Protection Plan (CWPP) Questionnaire

September 2007

The purpose of this survey is to involve the community members in the Swift Community Wildfire Protection Plan. One objective is to determine what natural and manmade features you believe are important to protect in the case of a wildfire. The map to the right depicts the planning area boundary. The Swift CWPP Steering Committee determined goals and objectives for our plan such as protecting life, property and natural resources. What we need from you are ideas about specific areas that you, as a member of the community, want to protect. For example: water sources, wilderness areas, recreation spots, unknown cemeteries, watersheds, hunting grounds, archaeological sites, roads, etc.

Please use the backside of this survey if necessary



- As a community member what areas within the Swift planning area do you want protected in the event of a wildfire?
- What projects do you think could improve the community's fire awareness and responsiveness?
- Do you support the idea of seeking grant funding to upgrade our local, state and federal fire fighting organization's equipment?
- Any other suggestions, concerns, comments, or questions regarding the Swift CWPP.

To stay connected to the Swift CWPP please fill out the following confidential information.

Name(s) _____
Address _____
Phone _____
Email _____

Please return this survey to: Firewise, PO Box 790, Stevenson, WA 98648 OR email Skamaniawfc@saw.net OR call (509) 427-4130

Appendix C – NFPA-299 Hazard Rating Form

Wildfire Hazard Severity Form Checklist NFPA 299

This form may be used for individual houses or larger areas like developments or other types of applications.

Name of area or address receiving assessment

A. Subdivision Design	Points	House or area	Notes
1. Ingress and egress			
Two or more roads in/out	0		
One road in/out	7		
2. Road width			
Greater than 24 feet	0		
Between 20 and 24 feet	2		
Less than 20 feet wide	4		
3. All-season road condition			
Surfaced, grade < 5%	0		
Surfaced, grade > 5%	2		
Non-surfaced, grade < 5%	2		
Non-surfaced, grade > 5%	5		
Other than all-season	7		
4. Fire service access			
< = 300ft, with turnaround	0		
> = 300ft, with turnaround	2		
< = 300ft, no turnaround	4		
> = 300ft, no turnaround	5		
5. Street signs			
Present (4 in. in size and reflective)	0		
Not present	5		
B. Vegetation (Fuel Models)			
1. Predominant vegetation			
Light (grasses, forbs)	5		
Medium (light brush and small trees)	10		
Heavy (dense brush, timber, and hardwoods)	20		
Slash (timber harvest residue)	25		
2. Defensible space			
More than 100 ft of treatment from buildings	1		
More than 71 -100 ft of treatment from buildings	3		
30-70 ft of treatment from buildings	10		
Less than 30 feet	25		
C. Topography			
1. Slope			
Less than 9%	1		
Between 10-20%	4		
Between 21-30%	7		
Between 31-40%	8		
Greater than 41%	10		

Totals for this page

D. Additional Rating Factors	Points	House or area	Notes
1. Topography that adversely affects wildland fire behavior	0 - 5		
2. Area with history of higher fire occurrence	0 - 5		
3. Areas of unusually severe fire weather and winds	0 - 5		
4. Separation of adjacent structures	0 - 5		
E. Roofing Materials			
1. Construction material			
Class A roof (metal, tile)	0		
Class B roof (composite)	3		
Class C roof (wood shingle)	15		
Non-rated	25		
F. Existing Building Construction			
1. Materials (predominant)			
Noncombustible siding/ deck	0		
Noncombustible siding/ wood deck	5		
Combustible siding and deck	10		
2. Setback from slopes > 30%			
More than 30 feet to slope	1		
Less than 30 feet to slope	5		
Not applicable	0		
G. Available Fire Protection			
1. Water source availability (on site)			
500 gpm pressurized hydrants < 1000ft apart	0		
250 gpm pressurized hydrants < 1000ft apart	1		
More than 250 gpm non-pressurized, 2 hours	3		
Less than 250 gpm non-pressurized, 2 hours	5		
No hydrants available	10		
2. Organized response resources			
Station within 5 miles of structure	1		
Station greater than 5 miles	3		
3. Fixed fire protection			
Sprinkler system (NFPA 13, 13R, 13D)	0		
None	5		
H. Utilities (Gas and Electric			
1. Placement			
All underground utilities	0		
One underground, one aboveground	3		
All aboveground	5		
Totals for this page			
I. Totals for Risk Assessments			
Totals for page 1 and 2			
1. Low Hazard:	< 39 points		
2. Moderate Hazard:	40-69 points		
3. High Hazard:	70-112 points		
4. Extreme Hazard:	113 > points		
Census Data			
Track number			
Block group number			
Block number (s)			

Appendix D – Wildfire Response Capabilities

Swift Community Wildfire Protection Plan Inventory List

Inventory Type (Use 'other' section if needed)	Current Status FS Mt St Helens	Current Status WADNR	Current Status FD6	Current Status FD7	Current Status FS Mt Adams
Fire Station(s)	Mount St. Helen's NVM Gifford Pinchot N.F Amboy, Washington		One, Six Bay station with full kitchen and training facility.	1 Main station – 6 bays 3 Satellite stations – 2 bays each	Mt. Adams RD USFS Trout Lake, WA Mt St Helens RD USFS Amboy , WA
Vehicles (Command, rigs, pumpers, tenders, brush rigs, etc.)	1 – Chev 4x4 P.U Command 1- Type 6 Suppression Engine w/Foam 300 Gal 1-Type 6 Prevention Engine 200 Gal 1-Type 7 Prevention Engine 100 Gal	2Type 6 Wildfire Engines	1 - Type 6 Wildland Engine 1 - Type 7 Wildland Engine 1 - Class A Pumper 1 - 3000 gal 1 – 2000 gal Tender. 1 –Squad (Multifunction: Wildland Type 6, Medical Aid, Rescue	4 – Type 1 Engines 2 – 3200 gallons Tenders 1 - Type 6 Engine 1 – Rescue	# 2 Type 6X Engines/ w Foam 300 gal #1 Type 6X Prevention Module 320 gal #1 Type 7X Prevention Module 80 gal
Staffing	7-Day coverage beginning July 1 – Oct 15	3 FF/Engine TOTAL -6	12 - volunteers, 1 FF1 4 - EMT-B 2 - Medical First Responders	39 Volunteers 1 Part Time	We Staff 7 days a week From approx. July 4 th Through Fire Season Oct 15th
Uniforms/Clothing/PPE	Wildland PPE		Wildland PPE Structural PPE	Standard Structure and wildland Turnout	Normal PPE
Training	NWCG Courses to meet FSM 5109.17 Standards		EMS OTEP, Structural FF Basics		
Radios	Numerous Bendix King programmable Handheld and Mobile Radios	2-portable Kings/engine 1mobile in each engine	Tenders have full interoperable VHF mobile radios. Class A and Wildland engines have full interoperable VHF and UHF mobile radios. VHF portables available, some with all FS frequencies.	9 Mobile VHF 23 Portable VHF	All Firefighters carry Bendix King Radios
Pumps and hose lay	District Fire Cache Numerous Mark III, IV, Vi portable pumps 1” – 1 ½” hose and accessories	1500 feet 1” hose Pump with foam Capabilities Mark III pump with 1000 gal portatank	Type 6 Wildland has 250GPM floating pump, 600’ of 1 1/2”, 800’ of 1” hose. 3000 gal tender has drafting capability plus 250GPM portable pump. Type 7 has 250’ of 1 ½” hose and portable 50GPM pump for drafting. Squad has 250’ of 1 ½” and 150’ of 1” rubber real line.	None	Dist Cache
Wildfire response capability and sustainability	Initial Attack through Large Fire Organization capabilities		Initial attack only outside of District		IA for District, Forest , and our Cooperators (WADNR, CGNSA, etc)
Other	Numerous support personnel and other fire personnel, equipment, and supplies at District office, neighboring Districts & GACC locations	6 - 10 person type 2 hand crews- 2hour response. Additional overhead including type 3 team			Extended Attack : As requested by the Dispatch centers, resource availability and fire Type (.1-5) Gifford Pinchot Mobilization Plan, Northwest Mobilization Guide and Directory, Northwest Interagency Coordination Center

Appendix E – Current Inventory and Future Needs

Wildfire Response Capabilities

September 2007

Fire Organization: Skamania County Fire Protection District Six

Responder(s) name: Franklin L. Yela, Chief

Inventory Type (Use 'other' section if needed)	Current Status (Include type and quantity)	Inventory Needed (Include type and quantity)
Fire Station(s)	One, Six Bay station with full kitchen and training facility. Self sustained with self power generation and local well system.	Adequate
Vehicles (Command, rigs, pumpers, tenders, brush rigs, etc.)	<p>1 - Type 6 Wildland Engine (drafting pump onboard) Old but fully operable</p> <p>1 - Type 7 Wildland Engine (drafting pump onboard) Apparatus fully operable but near end of life.</p> <p>1 - Class A Pumper (drafting capability) Fully operable and in good condition</p> <p>1 - 3000 gal Tender (drafting capable + pump onboard) 1978 Fully operable but nearing end of life.</p> <p>1 – 2000 gal Tender. Fully operable but nearing end of life.</p> <p>1 –Squad (Multifunction: Wildland Type 6, Medical Aid, Rescue; Drafting capability) Fully operable, good condition.</p>	<p>Replace Type 7 Engine with Type 7 / Command Vehicle Combo.</p> <p>Replace 2000gal Water Tender with 2500-3000gal diesel unit with draft capabilities.</p> <p>Replace 3000gal Water Tender with Similar.</p>
Staffing	<p>12 - volunteers, 1 FF1</p> <p>4 - EMT-B</p> <p>2 - Medical First Responders</p>	Running recruit academy summer 2008 for 12 prospective volunteers.
Uniforms/Clothing/PPE	<p>Wildland PPE</p> <p>Structural PPE</p>	Need fire shelters and more Wildland PPE
Training	EMS OTEP, Structural FF Basics	Need Wildland FF training
Radios	<p>Tenders have full interoperable VHF mobile radios.</p> <p>Class A and Wildland engines have full interoperable VHF and UHF mobile radios.</p> <p>VHF portables available, some with all FS frequencies.</p>	Currently adequate
Pumps and hose lay	<p>Type 6 Wildland has 250GPM floating pump, 600' of 1 1/2", 800' of 1" hose.</p> <p>3000 gal tender has drafting capability plus 250GPM portable pump.</p> <p>Type 7 has 250' of 1 1/2" hose and portable 50GPM pump for drafting.</p> <p>Squad has 250' of 1 1/2" and 150' of 1" rubber real line.</p>	Need replacement for 250GPM pump on 3000 gal Tender.
Wildfire response capability and sustainability	Initial attack only outside of District	Need more qualified volunteers.
Other		

Wildfire Response Capabilities

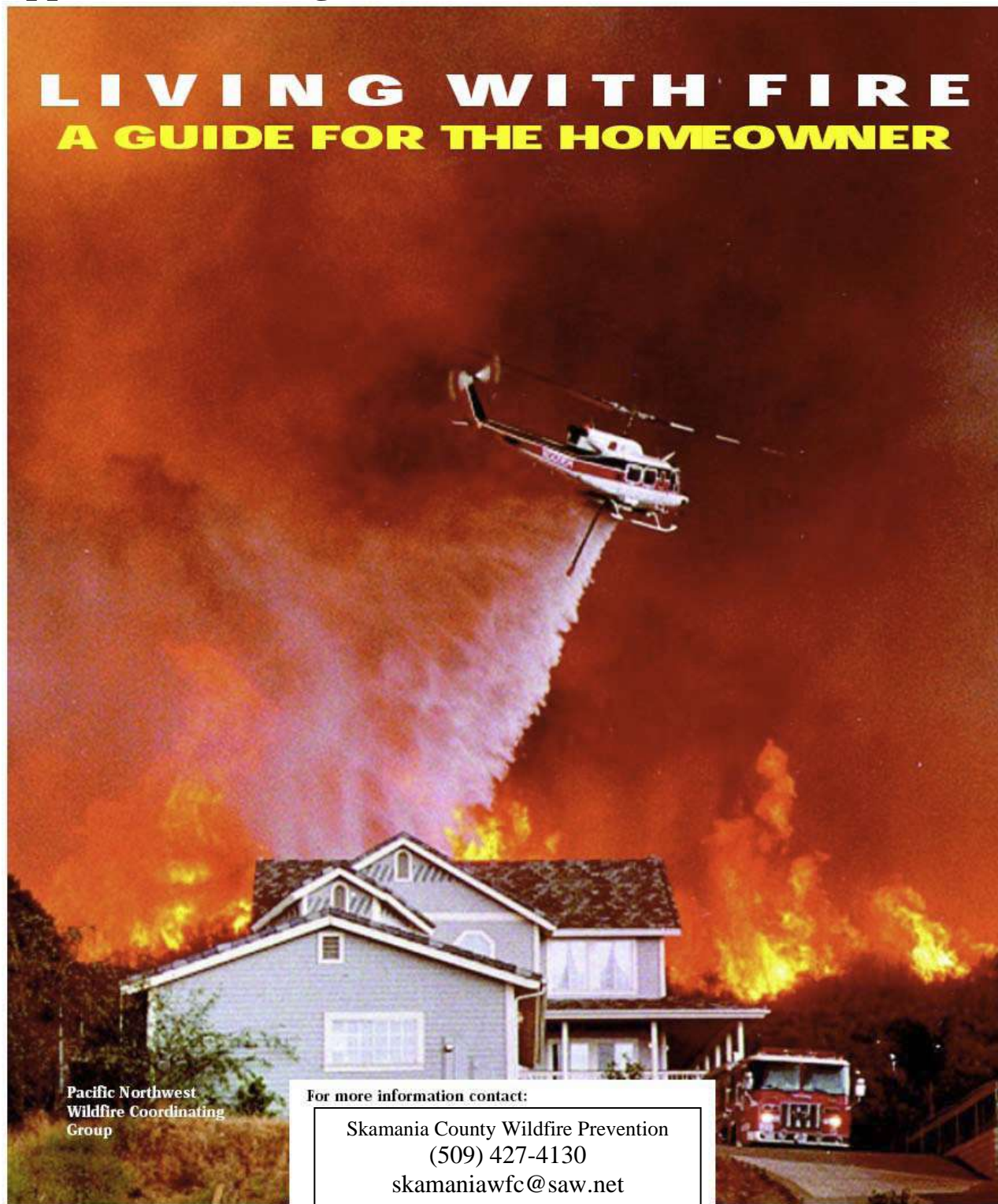
September 2007

Fire Organization: Cowlitz-Skamania Fire District #7

Responder(s) name: Gary Stuart, Fire Chief

Inventory Type (Use 'other' section if needed)	Current Status (Include type and quantity)	Inventory Needed (Include type and quantity)
Fire Station(s)	1 Main station – 6 bays 3 Satellite stations – 2 bays each	Need water and bathrooms for one satellite station
Vehicles (Command, rigs, pumpers, tenders, brush rigs, etc.)	4 – Type 1 Engines 2 – 3200 gallons Tenders 1 - Type 6 Engine 1 – Rescue	
Staffing	39 Volunteers 1 Part Time	
Uniforms/Clothing/PPE	Standard Structure and wildland Turnout	
Training		All staff need Red Card training
Radios	9 Mobile VHF 23 Portable VHF	Half of portables are not capable of narrow band
Pumps and hose lay	None	
Wildfire response capability and sustainability		
Other		
Other		
Other		

Appendix F – Living With Fire, A Guide for the Homeowner



Pacific Northwest
Wildfire Coordinating
Group

For more information contact:

Skamania County Wildfire Prevention
(509) 427-4130
skamaniawfc@saw.net

Available online at: <http://extension.oregonstate.edu/emergency/livingwithfirepnw.pdf>

Appendix G – FEMA Requirements

Swift CWPP

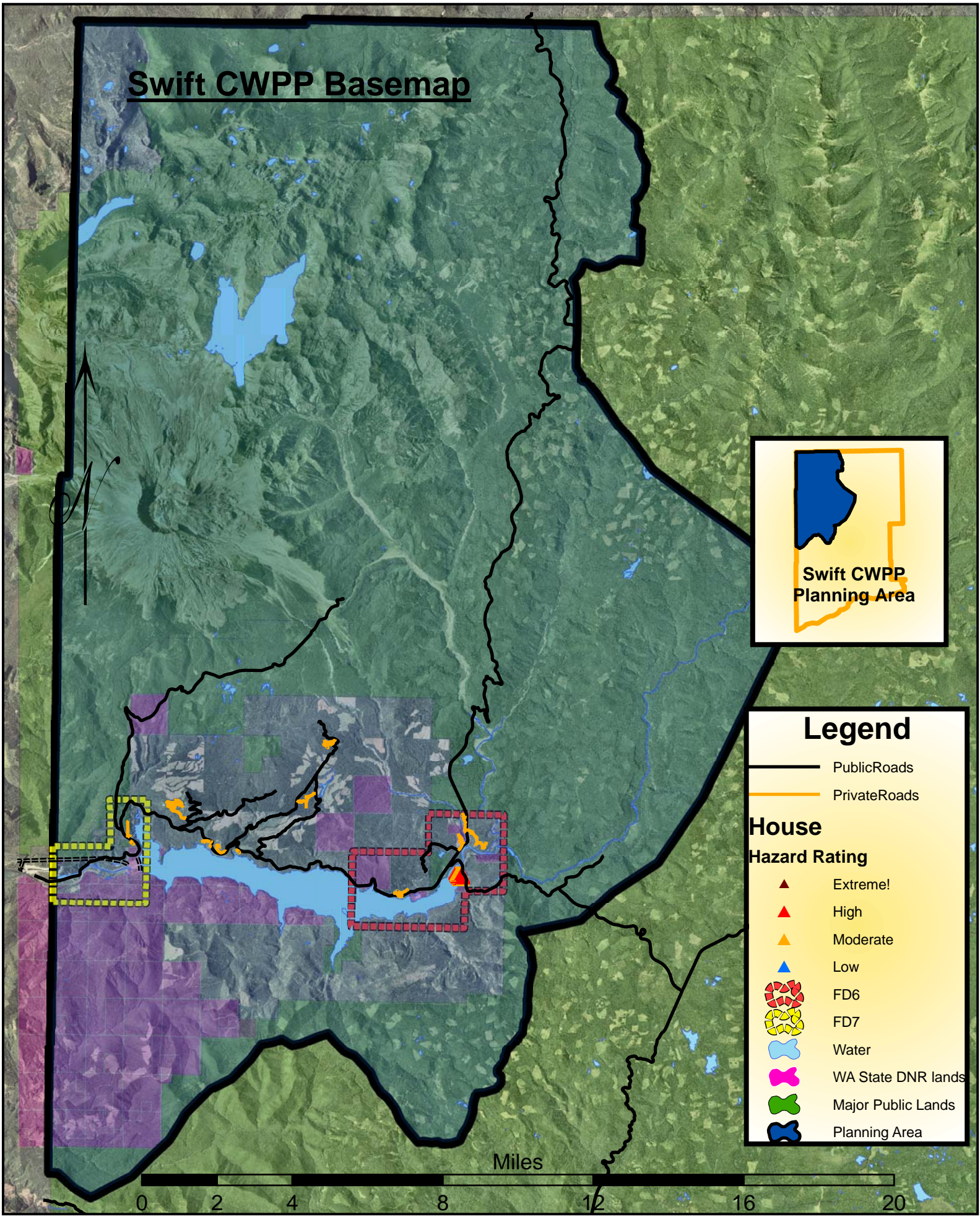
FEMA Pre-Disaster Mitigation Plan Requirements

PDM Requirements	check list	How Swift GWR plans to accomplish
<ul style="list-style-type: none"> Public Comment Opportunity 	<p style="text-align: center;">✓</p>	<ul style="list-style-type: none"> Will do a press release announcing project and allow a sufficient timeframe of 30 days for public comment before approval
<ul style="list-style-type: none"> Neighboring Communities, local and regional agencies involved in hazard mitigation activities 	<p style="text-align: center;">✓</p>	<ul style="list-style-type: none"> Steering Committee includes representatives from the community (stakeholders, business owners, homeowners), Fire District 6 and 7, Skamania County, Washington DNR and Forest Service, see Appendix A for attendance list
<ul style="list-style-type: none"> Review and incorporate into other plans if applicable 	<p style="text-align: center;">✓</p>	<ul style="list-style-type: none"> Klickitat and Skamania County Plan reviewed, Trout Lake, White Salmon, Cascade Locks and Douglas County plans used as reference throughout planning process
<ul style="list-style-type: none"> Documentation of planning process including how prepared, who was involved and particularly public 	<p style="text-align: center;">✓</p>	<ul style="list-style-type: none"> This can be completed, use a timeline and append to show plan development, set up as table with dates in left column, actions taken in right column. Also documented in actual plan as 7 planning steps.
<ul style="list-style-type: none"> Local risk assessment that describes the type, location and extent of all natural hazards 	<p style="text-align: center;">✓</p>	<ul style="list-style-type: none"> Topography, aspect, slope? WA DNR RAMS system used for initial wildfire risk assessment, also risk models from Klickitat Skamania CWPP and local knowledge and professional judgment
<ul style="list-style-type: none"> Information on previous occurrences of hazardous events and the probability of future hazardous events 	<p style="text-align: center;">✓</p>	<ul style="list-style-type: none"> This can be completed by viewing fire history and current hazards that could potentially cause a catastrophic wildfire. Will reference DNR maps of fires as Appendix, reference that this is judged to underestimate actual occurrence and that human caused fire sources are greatest threat
<ul style="list-style-type: none"> Summary of each hazard from the risk assessment and a description of vulnerability in terms of: type and number of structures and critical infrastructure, potential dollar loss and land uses and development trends 		<ul style="list-style-type: none"> Structures based on NFP299 GIS data ranking houses by risk; GIS identification of clusters of houses and important infrastructure in GWR community, dollar loss calculated by multiplying average cost of home in Skamania County to be calculated in future by estimated chance of loss in say five categories, e.g. 0.00, 0.25, 0.50, 0.75, 1.00, by number of houses in each category and by average value
<ul style="list-style-type: none"> Multi-jurisdictional plans will include details for each jurisdiction's risks where they vary from the entire planning area 		<ul style="list-style-type: none"> Wildfire response governed by Federal and Washington state policy with local MOU's coordinating roles of local, state and federal agencies

<ul style="list-style-type: none"> • Mitigation strategy that provides the jurisdiction's blueprint for reducing potential losses from the risk assessment and includes: goals to reduce vulnerability to hazards, analyzing mitigation actions/projects considered to reduce the effects of the hazards with an emphasis on new and existing buildings and infrastructure 		<ul style="list-style-type: none"> • The mitigation strategy calls for planning to increase radio interoperability and coordination of resources in preventing and fighting wildfire in the Swift communities.
<ul style="list-style-type: none"> • Description of how projects will be prioritized implemented and administered by the local jurisdiction. Will include emphasis on the extent to which benefits are maximized 		<ul style="list-style-type: none"> • This plan provides a first approximation of project importance as determined by the steering committee and approved by the Chief. At the Chief's discretion, projects and their implementation will be reviewed, revised and re-ranked annually by the core group.
<ul style="list-style-type: none"> • Multi-jurisdictional plans must include identifiable action items specific to the jurisdiction requesting FEMA approval 		<ul style="list-style-type: none"> • To be determined
<ul style="list-style-type: none"> • Description of plan maintenance including: methods, schedule of monitoring, evaluating and updating the mitigation plan within a 5 year cycle 		<ul style="list-style-type: none"> • The Swift CWPP Steering Committee agreed to meet annually at a minimum to review any amendments and or grants referencing this plan and in general projects will be revised and re-ranked annually by the core committee.
<ul style="list-style-type: none"> • Description of the process by which the local government will incorporate the requirements of mitigation plan into other plans 		<ul style="list-style-type: none"> • This plan will serve as an appendix to the Skamania County FEMA Emergency management plan.
<ul style="list-style-type: none"> • Discussion on how the community will continue public participation in the plan maintenance process 	<p>✓</p>	<ul style="list-style-type: none"> • At the Chief's discretion, projects and their implementation will be reviewed, revised and re-ranked annually by the core committee and CERT committee.
<ul style="list-style-type: none"> • Documentation that the plan has been formally been adopted by each jurisdiction requesting approval of the plan 	<p>✓</p>	<ul style="list-style-type: none"> • The plan is to be signed by the Fire District 6 and Fire District 7 Fire Chiefs, Skamania County Fire Marshall and DEM Coordinator as well as a Washington DNR representative.

Appendix H1 - CWPP Maps - Swift Basemap

Swift CWPP Basemap



Legend

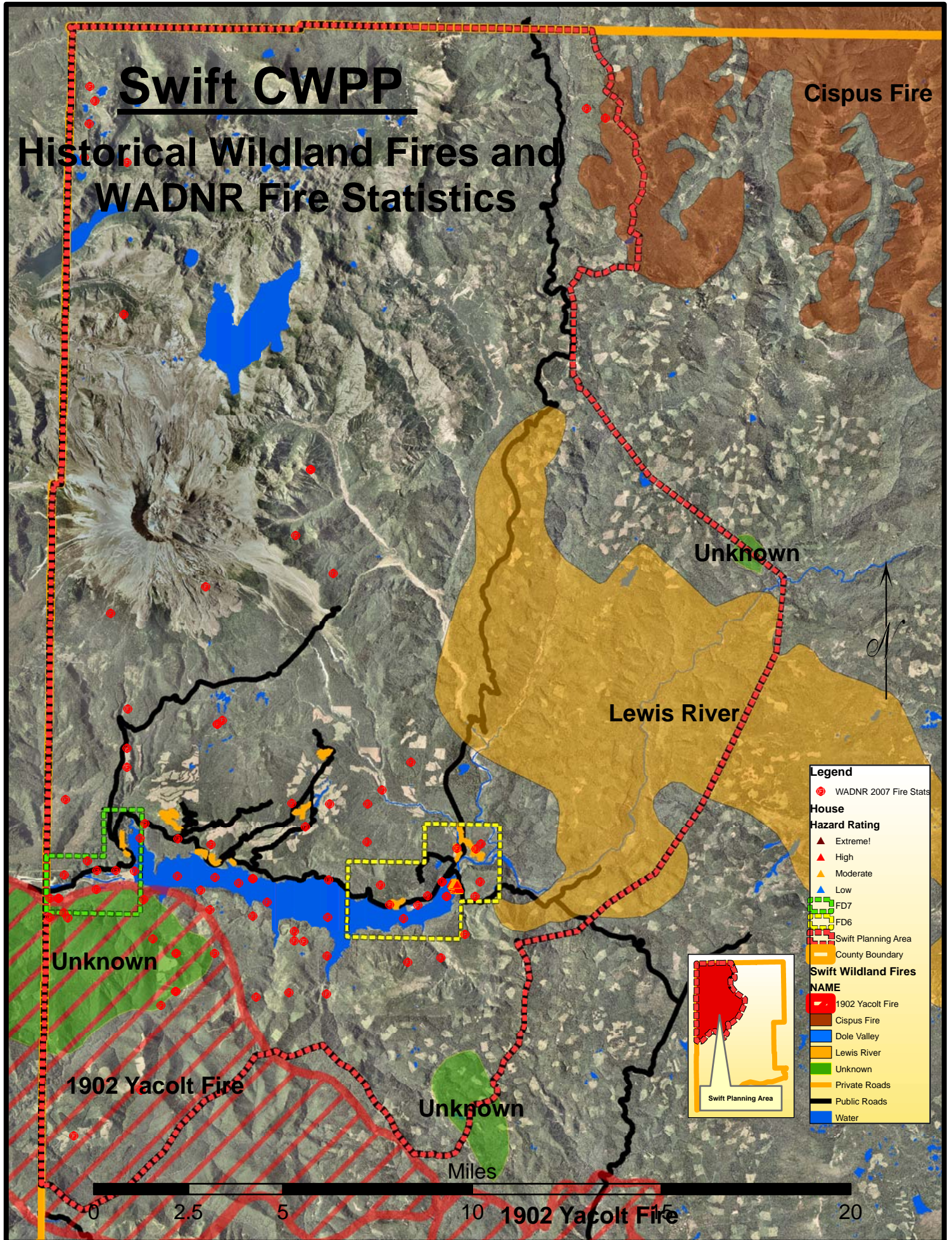
- PublicRoads
- PrivateRoads

House Hazard Rating

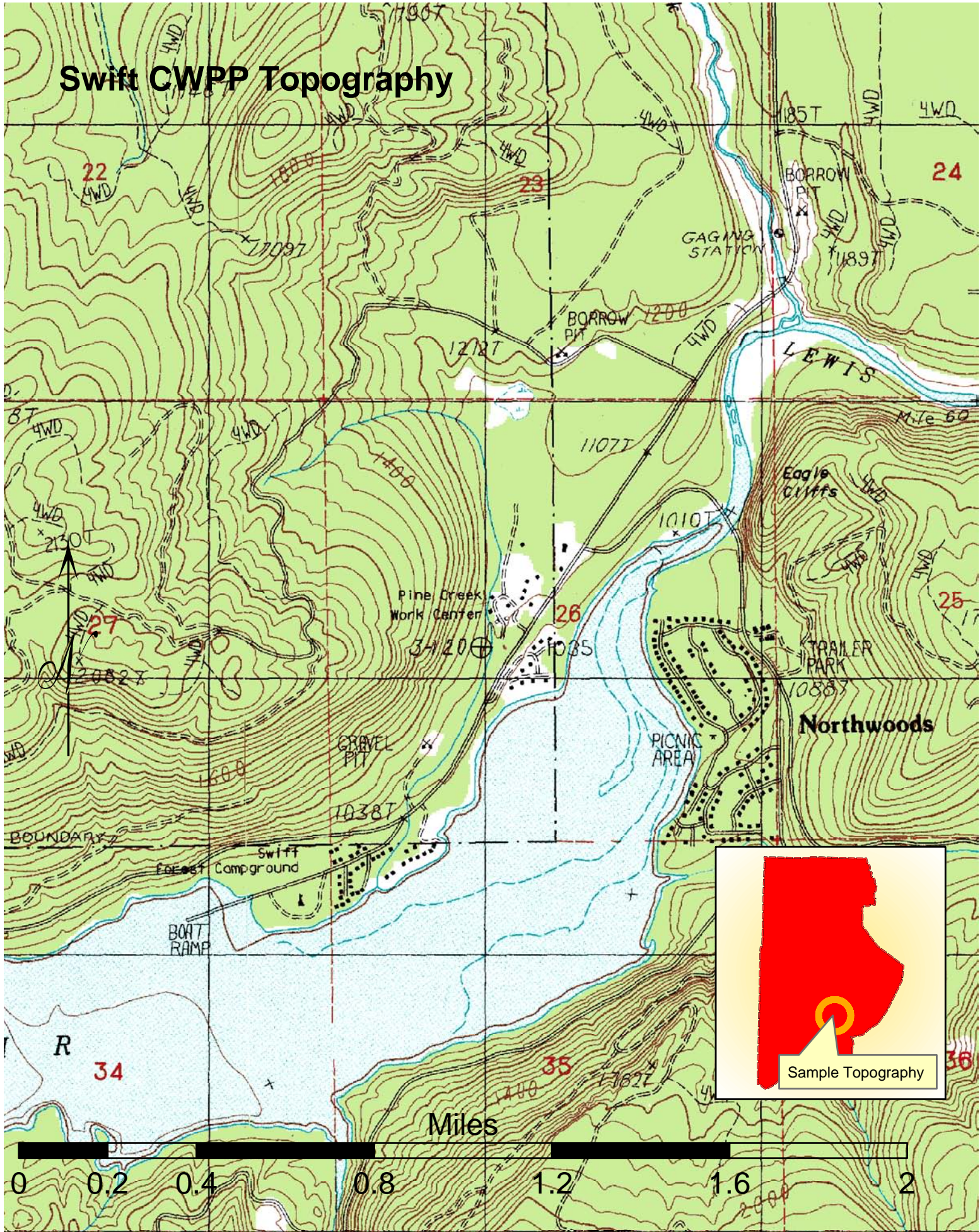
- Extreme!
- High
- Moderate
- Low
- FD6
- FD7
- Water
- WA State DNR lands
- Major Public Lands
- Planning Area



Appendix H2 - CWPP Maps - Swift Historical Fires



Appendix H3 - CWPP Maps - Swift Topography



Appendix H4 - CWPP Maps - High Risk Areas

