

Sanders County Community Fire Protection Plan



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TABLE OF CONTENTS

Partners in the Community Fire Plan	3
Our Purpose	4
Our Challenge	6
Our Strategic Actions	7
A. Fire Prevention & Suppression	8
B. Hazardous Fuel Treatment	14
C. Restoration of Fire-Adapted Ecosystems	19
D. Community Assistance	22
Appendices	
A. Frequently Asked Questions	29
B. Attachments	44
C. References	115
D. Maps	116

**Sanders County Community
Wildfire Protection Plan
APPROVED BY**

Commissioner Chair – Sanders County

Commissioner – Sanders County

Commissioner – Sanders County

Developed In Collaboration With

- Sanders County – Office Of Emergency Management
- Sanders County – Planning Office
- Sanders County Sheriff's Office
- Dixon Rural Fire District
- Heron Rural Fire District
- Hot Springs Rural Fire District
- Hot Springs Municipal Fire District
- Noxon Rural Fire District
- Plains/Paradise Rural Fire District
- Plains Municipal Fire District
- Thompson Falls Rural Fire District
- Thompson Falls Municipal Fire District
- Trout Creek Rural Fire District
- Plains Unit – Montana Department of Natural Resources
- Confederated Salish & Kootenai Tribes – Fire Management
- Cabinet Ranger District – Kootenai National Forest
- Plains/Thompson Falls Ranger District – Lolo National Forest

PURPOSE

The Northwest Resource Conservation and Development Area, Inc. received a grant from the USDI Bureau of Land Management – State & Private Forestry to facilitate the development of a Community-based Wildland Fire Risk Mitigation Plan, or “Community Fire Plan” for Sanders County in 2004. It was decided by the county commissioners in 2010 that the plan needed to be updated.

Diverse groups of Sanders County residents, including representatives from the fire protection agencies, collaborated to prioritize potential actions to address the most pressing issues that affect the County’s ability to reduce the risks associated with wildland fires. The strategy is a cooperative effort of volunteer fire chiefs, county officials, conservationists, community-based non-profit organizations, realtors, tourism, and timber industry leaders, federal and state land managers, business people and interested residents. Reference Appendix B1.

The purpose of this plan is to position fire protection agencies, county leaders, rural communities, county residents, and forest owners and managers to be better prepared to protect the County’s residents and its natural resources from the potentially devastating impacts of wildfire and promote the natural role of fire in the ecosystem.

This plan is intended to meet the requirements of the Healthy Forest Restoration Act (HFRA), and serve as an annex to the Sanders County Pre-disaster Mitigation Plan.

The Community Wildfire Protection Plan (CWPP) identifies and serves the following At-Risk Sanders County communities (as published in the 2001 Federal Register): Heron, Noxon, Trout Creek, Thompson Falls, Plains/Paradise, Hot Springs, Dixon, and other areas where numerous residents live in the Wildland Urban Interface in Sanders County. The resulting revised CWPP reflects consensus among those who participated in its development, updates and among those who, by signing, support the approaches outlined within.

Issues and actions fit into one or more of four primary areas of emphasis. These four primary areas of emphasis are also the main emphasis items identified in the National Fire Plan 10 year Comprehensive Strategy and in the Healthy Forest Restoration Act of 2004:

- **Fire Prevention and Suppression**
- **Hazardous Fuel Treatment**
- **Restoration of Fire-adapted Ecosystems**
- **Community Assistance**

Our plan is founded on, and will guide the implementation of, the National Fire Plan and the related 10 Year Comprehensive Strategy and Implementation Plan, in Sanders County. This plan is intended to be an adaptive document; one that will continue to be updated as needed, to reflect our accomplishments and the newly emerging needs, issues, and opportunities surrounding wildland fire management in Sanders County. The Sanders

County Commissioners, Sanders County Fire Planning Committee, Sanders County Fire Fighters Association, State of Montana DNRC, Confederated Kootenai & Salish Tribes, Kootenai National Forest, and the Lolo National Forest, will share responsibility for facilitation of annual updates. Our CWPP will be updated to reflect the accomplishments of our collaborative efforts this past year, our community's most current priorities for the coming year, and also, the guidance provided by Congress in the Healthy Forest Restoration Act.

Also, this plan will meet the following FEMA requirements so that it co-qualifies as a FEMA approved Fire Mitigation Plan.

- Adoption by the Local Government Body
- Multi-Jurisdictional Planning
- Identification of Hazards and Risk Assessment by:
 1. Profiling Hazard Events
 2. Mapping Juxtaposition of Hazards, Structures, Infrastructure
 3. Potential Dollar Losses to Vulnerable Structures (B/C Analysis)
- Documented Planning Process
- Assessing Vulnerability
- Mitigation Goals
- Analysis of Mitigation Measures
- Monitoring, Evaluation, and Updating the Plan (5 year cycles).
- Implementation through Existing Programs
- Documented Public Involvement

The chronological participatory development of this plan is outlined in Appendix B-2.

CHALLENGE

Few areas in the West have been harder hit in recent years by wildfire than western Montana. Millions of dollars were spent on the suppression efforts with more than 10,000 people supporting our firefighting efforts. Suppressing the fires is only the beginning. Rehab and recovery can take a decade or more and require additional financial resources.

While catastrophic, the magnitude of wildfire in 2000, 2002, and 2007 was not entirely unexpected. According to the Federal Wildland Fire Management Policy and Program Review adopted by the Federal land management agencies in December 1995, “nearly every state has experienced wildland urban interface fire losses.” The Federal Fire Policy further states that the wildfire hazard “has become a major fire problem that will escalate as the nation moves into the 21st century...it is clear from recent episodes that losses will increase in the future”.

Fires originating in relatively remote areas can be driven by winds for long distances in a short time. The east-west orientation of many of the drainages in the County coupled with the prevailing westerly winds and the historic lightning patterns often support fires that start on State, Federal, and Tribal Forest lands, and when the conditions are right, move into the wildland-urban interface where they may threaten private property. Reference Appendix D Maps #2 and #3 to see patterns of historic large fires, and fire starts.

Census data from 2010 establish that Sanders County has increased in population by 8.5% since 2000, with many of the new residents being retirees. Many of the new homes in the County are being constructed in the wildland-urban interface and as more people move into the interface, the potential impacts from wildland fires increase, as does the complexity of protection issues faced by fire protection agencies. Map #4 in Appendix D illustrates the proximity of populated areas within the county and the Wildland Urban Interface Boundary.

Because of the large fire activity in western Montana, most County residents better understand the potential risks associated with living in a fire-dependent ecosystem. Many anticipate that it is a matter of time before another serious wildfire season again threatens homes and communities in Sanders County. In order to protect lives and property when the fires do occur, residents and community leaders developed this strategy to identify the proactive actions which can be taken to mitigate the risks as much as possible, thus better preparing people in Sanders County for the potential of future wildland fires.

STRATEGIC ACTIONS

The issues and actions developed by our community teams, fit into one or more of the four primary areas of emphasis.

Within each area of emphasis, one or more actions are designed to address the need or the opportunity identified. None of the collaborating entities, which have signed this document, are formally required to support these actions, but rather are agreeing that as resources can be secured, these actions are worth pursuit.

Leadership to guide the implementation and monitoring of this strategic plan will be provided by the Sanders County Fire Planning Committee.

The areas for which we emphasize action for Sanders County relate directly to one or more of the four goals established in National Fire Plan's 10-Year Comprehensive Strategy & Implementation Plan. Refer to Appendix A, Frequently Asked Question #8 for a further discussion of the relationships between our goals and those of the National Fire Plan.

A. Improve Wildland Fire Prevention and Suppression

Fire Protection Responsibilities in Sanders County are divided into three areas of responsibility. Reference Appendix A Frequently Asked Question #8, and Appendix D Maps #'s 5, 13, and 14 Fire Protection Boundaries.

Nonstructural Wildland Only – There are three agencies in the county that provide this fire protection within their jurisdictions. These agencies are the Confederated Salish & Kootenai Tribes, the Montana Department of Natural Resources & Conservation, and the U. S. Forest Service.

Wildland & Structural – Located within portions of the wildland agencies protection boundaries, Sanders County has 7 Volunteer Fire Departments serving 7 Fire Districts. The Sanders County Fire Fighters Association (acting as the Rural Fire Council), a cooperative organization with representatives from each of the volunteer departments, works to resolve issues common to all of the members. The Sanders County Office of Emergency Management Officer acts as the County Rural Fire coordinator and the main coordinating agent between the volunteer fire departments, county officials, and other fire agencies.

Municipal – These departments are responsible for providing fire suppression within the communities of Hot Springs, Plains, and Thompson Falls

Public and firefighter safety is the first priority in all wildland fire management activities. The intent of the Community Fire Plan is to improve Federal, State, Tribal, and local firefighting resource capability and readiness to protect Sanders County communities from wildland fires. There is a need to reduce the risks to homes and private property by expanding outreach and education to homeowners and communities about fire prevention and “FIREWISE” principles. The DNRC, USFS, and CS&KT have most of the wildland fire prevention education and suppression responsibilities in the County. The Montana DNRC Unit Office, each Ranger District, and the Confederated Tribes have a prevention technician and fire suppression personnel on staff.

Accomplishments:

- Training conducted and accomplished for VFD's in Sanders County.
- Several VFD's applied for and secured grants for equipment purchase and/or replacement.
- Emergency Operations Guidelines are being completed for Sanders County.
- The Pre-disaster Mitigation Plan for Sanders County has been adopted.
- An effort is being made to develop a single Mutual Aid agreement for the County.

**Action Item A-1
Communication between Sanders County Association of Firefighters and County Commissioners**

Description		Resources Needed	Who is responsible
	<p>During the development of this strategic plan, members of the County Association of Firefighters realized they should discuss several topics with the County Commissioners. A primary need is to discuss the status of the properties and residences that are not in a fire district, and approaches to communicate with the landowners and achieve broader coverage</p>		
Tasks	<p>Work with the County Commissioners to add statement “No Structural Fire Protection” to tax statement for residents who are not located within a fire district nor served by a volunteer fire department. ***** Send a letter from County Commissioners to unprotected property owners explaining their “non-protected” status, ramifications of the status, and process for changing status if desired. ***** Develop a long term RFD plan for placement of sub-stations or additional RFD’s to encompass areas of the county currently lacking in structural fire protection.</p>	<p>Support to prepare materials for presentations.</p>	<p>The OEM Coordinator</p> <p>The OEM Coordinator and the Sanders County Firefighters Association</p>
Notes & Updates			

Each Fire District needs to identify potential sites and priorities for water sources (pump stations, more tenders, dry hydrants, and/or wet hydrants); map existing water sources; identify needs where water sources are not adequate, and negotiate with landowners to secure access to water or develop new water sources.

In order to attract new volunteers, incentives such as exemption from jury duty or state tax exemption need to be explored. Nearly all of the volunteer fire departments have a continuous need to recruit additional fire fighters.

Volunteers need to be trained to meet ICS standards and their training and qualifications entered into the ICS system as appropriate. The goal is to qualify and make available more instructors within departments to teach basic and intermediate wildland fire classes up through engine and crew boss.

Most volunteers spend 2 to 4 hours a week in training at their department, not counting weekends and outside classes. Classes need to be scheduled to meet the volunteer's schedules, and compensation should be considered for missed work during the week. Many higher level classes, Strike Team Leader and above, are only scheduled during the week. Where internal instructors cannot be found, grants should be requested to bring in outside instructors. An additional goal is to qualify more fire fighters at Strike Team Leader and IC3 levels. Explore options to send and compensate fire fighters to higher-level wildland classes (Strike Team Leader and above).

Each fire district should have an urban interface engine to be able to respond to fires that may be inaccessible to larger equipment. There is a continual need to upgrade or replace PPE (fire shelters, hand radios, etc.).

Action Item A-2			
Volunteer Fire Department Needs			
Description	Each fire district operates on tax monies generated by a mill levy, donations, and grants. The need for training, equipment, resources, and public education is continuous.	Resources Needed	Who is responsible
Tasks	Identify and develop additional water sources in each fire district to protect resources. ***** Improve VFD wildland fire and structural training opportunities. ***** Develop an outreach strategy to attract & recruit additional volunteer fire fighters. ***** Upgrade VFD firefighting equipment. ***** Continue to provide grant research and writing assistance to VFD's. Capture the expertise of individual VFD's that have successfully procured grants or other	Funding source to support the activities. Unify grant writing capability within VFD's	Each Fire Chief using his/her VFD with assistance from the County OEM and County Planning Section.

	<p>sources of funding and share this with the other VFD's in the county. *****</p> <p>Provide technical Tools to allow VFD's to access County GIS data. *****</p> <p>Allow for more opportunities for local VFD's to participate in prescribed fire opportunities in support of private land fuel reduction activities with the USFS on projects adjacent to private land on National Forest. *****</p> <p>Require as part of long range planning the set aside of acreage for future RFD substations.</p>		
Notes & Updates	Several Fire Departments are independently applying for training grants.		

Action Item A-3 Monitor and update County Pre-disaster Mitigation Plan			
Description		Resources Needed	Who is responsible
	<p>While there are many organizations with their own policy and procedures, there is a continuing need for one coordinated plan for the County. A coordinated approach with clear roles and expectations would enable all emergency response units to work more efficiently together.</p>		
Tasks	<p>Identify all potential participants. *****</p> <p>Keep state and local emergency response plans on file. *****</p> <p>Work with Local Emergency Planning Committee (LEPC) to guide coordination for Sanders County. *****</p> <p>Review Sanders County Disaster and Emergency Services plans for operating procedures and/or standards. *****</p> <p>Incorporate the Community Fire Plan into the County Pre-disaster Mitigation Plan</p>		County OEM Coordinator
Notes & Updates	OEM has completed a Pre-Disaster Mitigation Plan for Sanders County.		

Action Item A-4			
Review and Revise the Mutual Aid Agreements.			
Description	Mutual aid agreements exist between many of the cooperators in the county. There is a need to combine these into one comprehensive Mutual Aid Agreement which would improve initial attack and extended attack capability in the County.	Resources Needed	Who is responsible
Tasks	Identify all mutual aid agreements. ***** Review to determine status and need for updates. ***** Coordinate the combining of these agreements into one county wide agreement.		OEM Coordinator, VFD's, CS&KT, FS, DNRC, County Commissioners
Notes & Updates			

More than a dozen organizations and agencies can be involved in emergency responses in Sanders County yet there is no centralized communication strategy for the County. Each organization has communication and coordination needs and capabilities that don't always mesh with other groups. Each group has been meeting its needs the best it can but all recognize that sharing resources and defining responsibilities is critical in the event of another catastrophic wildland fire in the County.

Action Item A-5			
Initiate efforts to develop a Communication Plan for Sanders County			
Description	Initiate a comprehensive review of communication capabilities among emergency responders throughout the county.	Resources Needed	Who is responsible
Tasks	Identify communication problems, players involved, and the communication coverage presently in place and what is needed. ***** Explore grant funds to support additional needs. ***** Enable all emergency services to communicate with 911 dispatch from anywhere in the County at any time. ***** Identify equipment or personnel needs in the County and seek ways to meet those needs, and especially on fire, need to work with the Sheriff on evacuation and security in	Single organization or small task force to take lead and coordinate this effort.	The 911 committee in coordination with the County OEM

	fire camps. ***** Clearly identify roles and responsibilities of all those involved in emergency response.		
Notes & Updates			

B. Reduce Hazardous Fuels

Treatment of hazardous fuels is one of the most proactive ways to reduce the potential impacts from wildland fire. Treating fuels reduces the fire risk in an area, while increasing the chance that fire protection agencies can control a fire before it gets out of hand. Defensible space practices and forest fuel treatments are effective ways of protecting residential homes, neighborhoods, communities, and watersheds.

Tens of thousands of acres of fuel treatment have occurred on private, state, and federal lands over the past decade but there is much more to do. One study done by the Montana DNRC and the Forest Service estimated over 162,000 acres of high-risk forested areas within the County's interface need some kind of treatment to adequately lower fire risk and protect area residents. Once treated, regular maintenance is necessary to maintain the conditions that contribute to lower fire risks.

An analysis process was developed for this plan to give guidance to land managers in identifying wildland urban interface areas that are most in need of treatment in the county. This process also aids the land management agencies that adjoin these areas in establishing a priority for their fuel treatment projects. Initial prioritization was done by all the wildland fire protection agencies in the County (Appendix B Attachment B-3). These areas were mapped (Appendix D Maps 15, 16, and 17) and analyzed by the process outlined in (Appendix B Attachment B-4) with the results shown in (Appendix B Attachment B-4A and Attachments B-4B). Site specific analysis for all areas of the county including those outside the mapped wildland urban interface can be done on an as needed basis by utilizing the process outlined in (Appendix B Attachment B-5). This is a dynamic process and should be reevaluated on at least a biannual basis or when new or updated information becomes available.

This analysis process is designed as a guideline only. Final selection of areas to be treated will be the responsibility of the landowner or land manager, but the decision will be guided by collaborative input generated by this process. This process will be particularly instrumental in determining where potential grant dollars or funds allocated to agencies should be invested.

Accomplishments:

- Mapped high fire risk areas in Sanders County. (Appendix D Maps 15, 16, & 17)
- Between 2004 and 2011 private land owners have received \$300,000 to treat hazardous fuels on private land in Sanders County.
- Have held public meetings on treating hazardous fuels on private land.

Action Item B-1			
Identify, Maintain & Update High Risk/Hazard areas for Hazardous Fuel Treatment and revise as needed.			
Description	The VFD's, State, Tribal, and Federal agencies should work together to identify hazardous fuels projects in high-risk areas within the county.	Resources Needed	Who is responsible
Tasks	Continue identifying and updating the high risk/hazard areas in Sanders County. ***** Utilize GIS technology to map & display the high risk/hazard areas. ***** Establish criteria to guide prioritization of high risk/hazard areas for hazardous fuels treatment. ***** Continue to apply the criteria to guide prioritization of areas to be considered for treatment.	Personnel to evaluate and identify high-risk areas; GIS technical assistance to map the areas;	VFD's, DNRC, CS&KT, & USFS
Notes & Updates	High Risk areas within Sanders County were last identified and mapped in 2004. This effort was coordinated with the DNRC, CS&KT, and USFS.		

Action Item B-2			
Support Hazardous Fuel Treatment Projects Within the Interface.			
Description	Support expansion of hazardous fuel treatment projects in the high risk/hazard areas in Sanders County with emphasis on private landownership. (i.e., Western States, Stevens money, and other grant opportunities)	Resources Needed	Who is responsible
Tasks	Continue developing and maintain a list of hazardous fuel treatment contractors and forestry consultants. Set requirements ***** Improve contractor/cooperator effectiveness and fire qualifications through training and sign-up. Develop and put on a workshop for contractors that want to perform hazardous fuel treatment work. ***** Develop and maintain a list of fuel treatment techniques and costs. ***** Provide landowner/manager training pertaining to fuels management methods and techniques	Field personnel with forestry or fuels mgmt knowledge. Skilled grant writer to research and secure grant funds. Money for salaries,	OEM Coordinator

	<p>(including the use of grazing to keep fuels at low levels), forestry skills, utilization of wood products, accounting, and record keeping skills. *****</p> <p>Develop and use Hazardous Fuel Treatment Grant Application procedures. *****</p> <p>Secure matching grants to provide financial assistance to private landowners (i.e. Stevens money). *****</p> <p>Concentrate fuel reduction work in areas of highest priority and effectiveness (highest values, greatest hazards, highest population density, high fire occurrence frequency) and where the negative impacts of wildland fire would be greatest.</p>	mileage, materials, and supplies.	
Notes & Updates	A county community forester position needs to be established to coordinate fuel reduction and grant applications in the county.		

Action Item B-3			
Coordinate hazardous fuel treatment projects between private landowners, state, and federal land managers.			
Description	Ensure the effectiveness of hazardous fuel treatments is maximized by coordinating efforts across private-public landownership boundaries and supporting hazardous fuels treatment programs on public lands within and near the interface.	Resources Needed	Who is responsible
Tasks	<p>Coordinate, at a minimum, semi-annual discussions regarding hazardous fuel treatment programs with DNRC, CS&KT, USFS, and Sanders County Fire Plan Steering Committee (pursue grants, i.e., Steven’s money, etc.) where appropriate on cross boundary projects *****</p> <p>Engage volunteer fire departments and neighborhood groups in identifying desirable cross-boundary projects.</p>	Commitment of DNRC, CS&KT, and USFS fire managers.	<p>Community Forester</p> <p>Community Forester in coordination w/local fire chiefs/managers.</p>
Notes & Updates	The DNRC and USFS have current and proposed projects that have complemented fuel reduction projects on adjacent private lands.		

Action Item B-4

Update and encourage use of Fuel Treatment Guidelines for New Subdivisions in Sanders County.

Description	Fuel treatments may vary on each individual property, depending on owner’s goals, but should be compatible across boundaries.	Resources Needed	Who is responsible
Tasks	Update and provide support for high priority “defensible space” designs and regulations for new developments. ***** Work with County Commissioners on encouraging guidelines for new subdivisions. ***** Designate road names & addresses to developers. Require signing of roads & lots		Community Forester & OEM Coordinator & County Planner
Notes & Updates	Draft guidelines were developed several years ago. These need review and possible updating.		

Action Item B-5

Mitigate the Slash Disposal Problem.

Description	Reducing the standing fuel is just part of the job. Using fire to remove the fuels is usually the most cost effective method but air quality guidelines may limit the use of fire to dispose of the slash. The slash may have commercial value if there is enough quantity and at the right location.	Resources Needed	Who is responsible
Tasks	Identify and inform landowners of opportunities to utilize biomass in lieu of burning when they arise. ***** Identify other equipment and techniques to assist in mitigating the burning issue (i.e., air curtain burner – EPA approved, designated disposal sites, etc.)		Community Forester
Notes & Updates			

Action Item B-6			
Implement a year-end Reporting System to show accomplishments.			
Description	A data base that show's all fuel reduction projects in the county by agency.	Resources Needed	Who is responsible
Tasks	<p>Explore similar guidelines in place in other areas. *****</p> <p>Craft guidelines specifically for residents in Sanders County. *****</p> <p>Ensure coordination with key local, county, state, & federal entities that will have an interest. *****</p> <p>Develop funding for a dedicated GIS technician for the County. *****</p> <p>GIS all of the previous fuel treatments on private lands that have been accomplished through grants and other individual efforts. *****</p> <p>Explore ways to fund GIS capabilities w/other agencies (FS) and resource organizations.</p>		Community Forester to facilitate discussions, conduct research and development guidelines for Sanders County
Notes & Updates	<p>Conduct annual review of Community Fire Plan accomplishments. Report private land hazardous fuel accomplishments when grant money is involved.</p>		

C. Restoration of Fire-Adapted Ecosystems

The guiding principles to restore fire-adapted ecosystems are to:

- Prevent invasive species and restore watershed function and biological communities through short-term rehabilitation.
- Restore healthy, diverse, and resilient ecological systems to minimize uncharacteristically severe fires on a priority watershed basis through long-term restoration. Eradicate or minimize the rate of spread of invasive species that negatively impact natural fire cycles and fire-adapted ecosystems.
- Promote the development and use of the best available science along with local and indigenous knowledge.
- Monitor restoration and rehabilitation projects for effectiveness and share the results in order to facilitate adaptive implementation.

Accomplishments:

- Insect and Disease aerial photo flights have occurred over much of the forested lands in Sanders County. This information will be used in assessing the I&D situation in Sanders County in coordination/cooperation with the State of Mt. Reference Appendix D Insect & Disease Map #18.
- Pre-disaster mitigation planning has started.
- Sanders County Emergency Operations Plan has been adopted.

Action Item C-1: Insect and Disease Assessment (mapping) in the county.			
Description		Resources Needed	Who is responsible
	Mapping of Insect and Disease infestations in Sanders County will assist land management agencies and private landowners in trying to concentrate forest health practices in those areas.		
Tasks	Conduct an I&D flight and map areas with current I&D infestations. ***** Coordinate assessment of I&D infestations between agencies to begin understanding the I&D problems and issues facing Sanders County.		Community Forester
Notes & Updates	I & D flights have been accomplished by DNRC, The Confederated Tribes, and Lolo and Kootenai National Forests.		

Action Item C-2: Develop post-wildland fire disaster mitigation guidelines for private landowners.			
Description	As a result of the 2007 fire season, it has become evident that post-fire disaster mitigation guidelines are needed to assist landowners with rehabilitation efforts on private lands.	Resources Needed	Who is responsible
Tasks	Assign an interagency task force to begin organizing efforts to put together draft post-fire disaster mitigation guidelines. ***** Develop the final guidelines for approval. ***** Advertise that the guidelines exist and make them known to Valley residents.		OEM
Notes & Updates	Statewide effort currently being accomplished by the DNRC and RC&D's.		

Action Item C-3: Help landowners identify and understand how noxious weeds affect the ecosystem.			
Description	This is an effort to help private landowners start or continue dealing with the noxious weed problems in Sanders County. Provide information on the spread of noxious weeds from disturbance activities (hazardous fuels work, wildfire, etc.).	Resources Needed	Who is responsible
Tasks	Identify the high risk and highly infested areas within the County. ***** Continue developing ways, like, brochures and pamphlets that help the County landowners better deal with the weed infestations. ***** Develop other educational efforts to get the word out on landowner responsibilities in dealing with noxious weeds on their properties.		County Weed Board.
Notes & Updates	The Sanders County Weed Board has many helpful guides to assist landowners. They have also provided invaluable assistance and advice to landowners on how to deal with noxious weed problems on their lands.		

Action Item C-4:

Work with private landowners on Hazardous Fuel Reduction projects to incorporate Best Mgmt Practices, Streamside Management Zone Guidelines as well as addressing Forest Health issues.

Description	Hazardous fuel treatment projects need to incorporate HRA's, BMP laws, SMZ guidelines and address forest health issues.	Resources Needed	Who is responsible
Tasks	Ensure HRA's, BMP laws and SMZ guidelines are used in applicable hazardous fuel treatment projects. ***** Address Forest Health issues when designing hazardous fuel treatment prescriptions on private lands. ***** Provide information, engage and coordinate with private landowners as to their responsibilities regarding HRA's, BMP's, SMZ guidelines and Forest Health. Demonstrate how fire risk is tied into forest health issues.		DNRC Service Forester
Notes & Updates	This has been accomplished on hazardous fuel projects in the county.		

D. Community Assistance

As residents' understanding of the risks associated with wildland fire increases, their interest in learning more about living in a fire- dependent ecosystem and actions that can be taken to reduce the risk to lives and property expands.

Through this strategic planning effort, we want to expand our collective abilities to meet these growing interests. An emphasis will be placed on sharing information that enables valley residents and community leaders to understand actions they can take to reduce the "ignitability of structures" and other potential negative impacts of wildfires.

Our **target audiences** include:

- Wildland Urban Interface property owners
- Students and Educators
- Industry Specific Groups such as realtors, contractors, landscapers, insurance agents, and power companies & cooperatives.
- Non-Interface homeowners, conservation groups, Non-Government Organizations, and local, county, state, and federal government agencies.
- Tourists traveling through/to the Valley.

As we work with each of these groups, we will focus on **four goals**:

- Engage people in learning more about the intricacies of, and the benefits and risks of living in, fire dependent ecosystems.
- Increase awareness and understanding of what landowners can do to enhance their enjoyment and reduce the risks, and how we can collectively work together to accomplish some of these things.
- Develop support for hazardous fuels treatments on all lands.
- Encourage utilization of traditionally un-merchantable material.

Accomplishments:

- Expanded awareness of hazardous fuel programs and projects through community, neighborhood, public and individual landowner meetings.
- Secured the services of a community forester/fire plan coordinator.
- Produced news releases and other notifications to public about hazardous fuel treatment programs.
- Monitored and participated in local planning efforts with the Montana Department of Natural Resources and Conservation, Kootenai and Lolo National Forests, and The Confederated Salish & Kootenai Tribes.
- Secured grant funds and implemented nationally acclaimed Fuels for Schools Pilot Project.

Action Item D-1: Maintain A Fire Plan website to disseminate information			
Description	It is essential to have one website that people can go to for correct, current, relevant information.	Resources Needed	Who is responsible
Tasks	Create links to all Community Fire Plan partners' sites to ensure easy access to "Living with Fire" information. ***** Develop goals and objectives for website. ***** Review and update as needed the Communities-at-Risk List for Sanders County		County OEM
Notes & Updates			

Action Item D-2: Expand awareness of need for hazardous fuels treatment and defensible space programs, and encourage engagement of community leaders and landowners, especially in high-risk areas.			
Description	Community Fire Plan partners will work to expand community understanding and engagement for an active hazardous fuels treatment program in Sanders County.	Resources Needed	Who is responsible
Tasks	Expand awareness of areas in need of treatments among neighboring landowners ***** Invite community/neighborhood champions (local landowners) to assist in gaining support for hazardous fuels treatments in high-risk areas. ***** Coordinate with signatory partners and others to develop options for cross-boundary projects.	Coordinator for task(s)	VFD's. & OEM
Notes & Updates			

Action Item D-3: Cooperatively Develop, Staff, Operate, and Maintain A “Living on the Edge” FIRE SMART Wagon patterned off of the one developed by the Bitterroot RC&D.			
Description	This mobile display could be used cooperatively by neighboring counties. The Fire SMART wagon is an excellent tool to use at school and other functions to help spread the word about wildland fire.	Resources Needed	Who is responsible
Tasks	Develop a FIRE SMART Wagon.	Coordinator for task(s)	County Fire Protection Agencies
Notes & Updates			

Action Item D-4: Work with Realtors, Building Contractors, Insurance Industry, and Landscaping Companies to ensure they have knowledge and resources to support FIREWISE projects and actions.			
Description	There is much information available to assist industry in addressing building in the WUI.	Resources Needed	Who is responsible
Tasks	Engage and share information, presentations, landscaping ideas, and building design ideas with local businesses/contractors. ***** Work with Insurance Companies to encourage their involvement in private landowners’ defensible space efforts. ***** Outreach to new county residents – involving the real estate and insurance industry for assistance. ***** Encourage direct communication between the Sanders County Association of Firefighters and area realtors to ensure property protection is well understood. ***** Sanders County Association of Firefighters develops and sends a letter to the Board of Realtors, the C of C, and the Home Insurance Underwriter industry (i.e., State Auditor’s Office) urging this action.		Sanders County Association of Firefighters. Community Forester
Notes & Updates			

Action Item D-5: Produce and disseminate information products such as newsletters and news articles on a regular basis.			
Description	Develop a regular series of information articles on the wildland fire risks, ongoing projects, and any other pertinent topics.	Resources Needed	Who is responsible
Tasks	Develop schedule, topics, and venue for information sharing on a quarterly basis. ***** Coordinate creation of articles - person responsible would not have to write the articles but would be responsible to schedule who would write them, when the articles would be due, and arrange for them to be distributed.		County Fire Plan Committee Community Forester
Notes & Updates	U.S. Forest Service Forest Health Protection will be involved in the creation of articles, new publications, etc.		

Action Item D-6: Produce, Improve, Maintain and Deliver environmental education curriculum to students and increase awareness/knowledge of students and teachers in these areas.			
Description	Develop curriculum for variety of grades and classes, integrating information about “living on the edge” in a fire dependent ecosystem with school-based classes.	Resources Needed	Who is responsible
Tasks	Produce an interactive curriculum for students. ***** Establish a schedule for presentations, exhibits, tours, and field classes for as many schools in the County as possible. ***** Work with teachers to get acceptance. Develop lesson plan & process for student to assess the fire risks associated with their own homes.	Grant funds to support position, and to purchase supplies and equipment	VFD’s take the lead with assistance from DNRC, CS&KT, & FS Education coordinators
Notes & Updates			

Action Item D-7: Communicate about Fire Plan accomplishments.			
Description	There will be many successful accomplishments after the fire plan is adopted. We need to provide information about these successes to everyone.	Resources Needed	Who is responsible
Tasks	Design self-guided information to address public concerns/questions about what hazardous fuel treatments will look like. ***** Engage other groups/individuals to tell our story.		OEM
Notes & Updates			

Action Item D-8: Continue support of Small Diameter Utilization and Biomass Utilization Opportunities.			
Description	Push for increased utilization of small diameter wood and biomass products.	Resources Needed	Who is responsible
Tasks	Target markets for increased utilization of wood products and by-products. ***** Educate contractors and landowners about ways to better utilize wood products and by-products. ***** Conduct local and regional workshops on utilization, encouraging attendance.		Sanders County Economic Development
Notes & Updates			

The Kootenai and Lolo National Forests are revising their Forest plans. Various agencies and entities are developing organizational strategic plans to guide their work in coming months. With the variety of planning efforts occurring at any given time throughout our County, there is a critical need to ensure that issues relevant to community fire planning are visible and integrated in the various planning efforts.

Action Item D-9: Monitor and Coordinate local Policies & Planning Efforts.			
Description	Monitor and Coordinate local policies and planning efforts to insure issues relevant to Community Fire Planning efforts are considered effectively.	Resources Needed	Who is responsible
Tasks	Address Key issues & coordinate cross boundary projects as much as possible. ***** Tie public awareness/engagement efforts into other related meetings (Forest Plan Revision meetings, County Planning, etc.) ***** Increase our capabilities to meet the full range of opportunities.		County Planning Section
Notes & Updates			

There are many worthwhile endeavors outlined in our Community Fire Plan and we greatly appreciate the generosity of volunteers who are willing to provide leadership for specific aspects or action items of this Plan. We also recognize the value in having a staff person who is assigned the responsibility of coordinating all of these efforts, and providing leadership in areas that require specific knowledge and skills.

Many homes in the wildland-urban interface do not have ingress/egress suitable for fire protection vehicles. Bridges are inadequate; roads can be too narrow or too steep and may not be plowed in the winter; and turn-around space near the residences may be inadequate to accommodate the emergency vehicles. Often, landowners are not aware of these problems until they need protection assistance. Guidelines explaining access standards could benefit all interface landowners. While Volunteer Fire Departments may consider acquiring fire equipment that can access tough places, the real incentive needs to be placed on the shoulders of the landowners to improve the condition of their access.

There is also a need to address the efficiency of sharing access information needs among agencies/groups. Sharing will help control costs and will complement the enhanced 911 system.

APPENDICES

APPENDIX A

Frequently Asked Questions

Questions ~ and answers ~ pertaining to the following subjects can be found in this section.

1. **Wildland-Urban Interface and Communities at Risk**
2. **Defensible Space vs. Hazardous Fuels Treatments**
3. **“Good” and “Bad” fire**
4. **Vegetative Condition Class**
5. **Fire Behavior**
6. **Values at Risk**
7. **Wildland Fire Protection Agencies**
8. **National Fire Plan**
9. **Permits for Burning**

1. **What is the Wildland-Urban Interface and At-Risk Communities?**

For the purposes of the CWPP, the Wildland Urban Interface (WUI) is defined as the zone where structures or other human development meet to intermingle with undeveloped wildland or vegetative fuels. The width of the zone is determined on a site-specific basis to protect values at risk from wildland fire.

At-Risk Communities are those communities identified and addressed in the CWPP that are considered at risk by wildland fire. At-Risk Communities, as defined in the Healthy Forest Restoration Act 2004, are comprised of:

- An interface community as defined in the notice “Wildland Urban Interface Communities Within the Vicinity of Federal Lands That Are at High Risk From Wildfire” issued by the Secretary of Agriculture and the Secretary of Interior in accordance with Title IV of the U.S. Dept. of Interior and Related Agencies Appropriations Act, 2001. **OR**
- A group of homes and other structures with basic infrastructure and services (such as utilities and collectively maintained transportation routes) within or adjacent to Federal land **AND**
- In which conditions are conducive to large-scale wildland fire disturbance event **AND**
- For which a significant threat to human life or property exists as a result of a wildland fire disturbance event.

At-Risk Sanders County communities include: Heron, Noxon, Trout Creek, Thompson Falls, Plains, Paradise, Hot Springs, Dixon, and other areas where numerous residents live in the Wildland Urban Interface in Sanders County that meet the above mentioned criteria.

2. Is it necessary to treat fuels throughout the Interface or can we limit hazardous fuel treatments and focus more on creating defensible space within 120 feet of homes? U.S. Forest Service research has studied how structures are ignited during a wildfire, with particular attention given to the home ignition zone. One researcher suggests that in order to protect structures it is only necessary to establish defensible space within 120 feet of a house. Is this a viable option?

A persistent question relates to the need to treat extensive forest areas beyond the immediate vicinity of about 120 feet adjacent to a structure. It is very important that forest county residents understand the needs for maintaining healthy forests in their neighborhood. (Forest Health and Fire. NAFSR 2002)

In the long run one of the major strategies for dealing with destructive fire in our forests is to endeavor to re-establish forest conditions that facilitate the natural role of fire in the forest ecosystems. It is easy to become fixated on the idea that the entire objective of the Fire Plan is to reduce fire losses to human structures. Focusing exclusively on protecting human structures ignores the values that a healthy forest provides to our communities and our quality of life. Severely burnt forests are not sustainable forests and healthy sustainable communities need sustainable forests for life, health, social comfort and mental equanimity. Sustainable, healthy forest values include stable watersheds, pleasant and productive habitat for humans and wildlife, scenic vistas that not only are pleasant to view but that contribute to a healthful air shed and that contribute to the role of the forest in carbon sequestration and climate moderation. Very intense fires fed by excessive hazardous fuel build-ups and dried by lingering drought destroy these values for extended periods of time. It is essential that we treat extensive areas so that fires of moderate to low intensity can be tolerated without contributing to excessive soil movement and unacceptable loss of native plants. We must also keep in mind that the invasion and establishment of noxious weed species often is accelerated by intensive wildfire that destroys the pre-fire existing vegetation.

Another factor that must be borne in mind in this plan is that many land and property owners expect this plan to provide information on the most effective methods of protecting their lives and property. This plan cannot, in all good conscience, recommend protective measures that are not the most effective measures known at the time of the plan preparation. Whereas, providing “defensible space” areas around structures may indeed prevent some structures from ignition, and indeed there are no guaranteed “safe” techniques to provide to people who chose to live in the Wildland/Urban Interface (WUI) this plan must provide the most effective measures that are known to the authors. In any case, there are no guarantees. Living in the WUI involves accepting a measure of risk of loss due to wildfire. As seasons and forest conditions evolve, that risk varies. Where there are forests in the inland west there is fire. Our challenge is to deal with that natural factor in the most positive manner possible. Strong agreement was reached during the development of our Community Wildfire Protection Plan that simply preserving a structure provides a very limited and unacceptable approach to protecting the attributes of the interface that county resident’s value so strongly.

Our values include:

- Firefighter and public safety
- Homes and community
- Healthy watersheds and forests

Firefighter and Public Safety: Few of us – and certainly none of the agencies charged with providing fire protection – would be comfortable allowing a wildfire to move off the mountain ridges and burn towards our communities without attempting to deploy firefighters; instead, trusting that the defensible space created around individual structures would be all that is necessary to ensure the safety of homes, communities and people. Without hazardous fuels treatments on lands near and within the interface, the potential intensity of wildfires create such dangerous conditions that it becomes difficult to engage in effective firefighting strategies and tactics. With our expanded understanding of the already dangerous job of firefighting, we, as a community, are unwilling to not take prudent steps to reduce the fuels thus giving firefighters a safer and more likely chance to successfully protect us.

Homes and Communities: During the fires of 2000, 2003, and 2007 we heard from many people who felt that their homes are much more than simply a house or a structure. The setting in which the home exists is as important to some as the structure itself. Fewer are choosing to live in a landscape highly susceptible to fire when it is possible to reduce the fuel loads and thus the fire danger without compromising too greatly, the aesthetic values of the forests surrounding their homes.

Healthy Watersheds and Forests: Many in western Montana can attest to the trials of surviving the wildfires of 2000, 2003, and 2007 only to be threatened by post-fire mudflows near streams and overland sediment flows which clog access roads, irrigation ditches and ponds. Others are concerned about changing patterns in water storage and run off in drainages heavily burned and the potential impacts this will have on wells and irrigation systems. Some, looking further out in time, view the tens of thousands of acres of standing dead as tinder for the next wildfire that may roar off the mountain and into the interface and our communities. Businesses and residents in Sanders County value the health of the forests and watersheds, which as established in recent research, contribute importantly, to our quality of life and the quality of our economy.

3. How can we distinguish between “good fire” and “bad fire” or balance the negative impacts with the positive benefits of returning fire to this ecosystem?

The difference between “good fire” and “bad fire” relates to a subjective judgment based on values at risk and the intensity of fires.

The Sanders County ecosystem is fire dependent. Prior to 1900 fire occurred unsuppressed on a regular cycle cleaning the litter mat, down woody material and under story in ponderosa pine stands. Some of these same fires would either reduce fuels or completely replace stands in Douglas fir and lodge pole pine. From about 1940, humans started effectively suppressing fire, thus trying to eliminate fire, a natural change agent in the county’s forest ecosystem. The results of effectively removing fire from the ecosystem are that the ecosystem is no longer naturally cleaned by fire and fuel continues to build up to the point of becoming hazardous. Unsuppressed fire no longer plays its traditional cleaning role in much of our ecosystem but now produces lethal stand replacement rather than non-lethal under burning or mixed severity fires. Because of the build up of hazardous fuels, fires are also much larger (1,000’s of acres rather than 100’s of acres) than occurred historically in the ponderosa pine and Douglas fir habitats. Fires of these intensities and sizes cause greater damage to the natural resources within these ecosystems and threaten lives and property within the Wildland Urban Interface. Wildland fires under these conditions are termed as “bad” fires because of their negative impacts. When these fires occur, they are controlled by fire protection agencies.

The use of fire as a tool is called prescribed fire. Prescribed fire is used to return fire into the ecosystem under controlled conditions. Fire introduced back into these ecosystems is done during times of the year and weather conditions that do not give the high intensities that an uncontrolled wildland fire would give under normal summer fire season conditions. Prescribed fire or “good” fire cleans up the forest floor of the downed woody debris that accumulates over a period of years, reduces the ladder fuels that cause high intensity fires, rejuvenates plant species used by a multitude of animal species for food, recycles nutrients back into the soil, and puts fire back into an ecosystem that always had fire prior to man’s intervention through fire suppression.

It is important to note that a combination of wildland fire suppression (controlling of “bad” fire) and application of prescribed fire (“good” fire) will allow the proper balance of fire into the ecosystem, over time. Fire is a force of nature that will never be eliminated. We need to understand fire and work toward “Living with fire” in order to reduce the negative impacts of fire and reap the positive benefits of fire in the ecosystem.

4. How can I better understand “Vegetative Condition Class” and what this means to forest health and fire risk?

The vegetative Condition Class is one approach to define and interpret the importance of fire frequency in ecosystems. Current “Condition Class” is defined in terms of departure from the historic fire regime, as determined by the number of missed fire return intervals. Fire has always been a part of the wildland, changing and shaping the structure and composition of vegetation in an area.

Many of the Wildland Urban Interface areas in Sanders County were historically maintained by fire. Because of the predominance of Ponderosa Pine on these sites, fire helped maintain them. Low intensity surface fires burned, keeping ground vegetation from becoming ladder fuels. As fire became less of a factor (fire suppression) in maintaining the vegetation in these areas, the vegetation has changed. As a result, there are more vegetation, ladder fuels, and ground fuels (litter mat and down woody materials) that contribute to higher intensity fires than occurred historically. This has increased the risks, hazards and threats to today’s growing population within the Wildland Urban Interface.

There are three “Condition Classes” that have been developed to categorize the current condition with respect to each of the five historic Fire Regime Groups. The relative risk of fire-caused losses of key components that define the system increases for each respective higher numbered condition class, with little or no risk at Condition Class 1 level.

The following table describes each Condition Class. Maps of the Condition Classes in Sanders County can be found in Appendix D maps # 15, 16, & 17. Careful study of these maps shows how the lower elevations, adjacent to and within the Wildland Urban Interface have changed and are currently in Condition Class 2 and/or 3.

Condition Class	Description
1	Forested areas with a historically short fire return interval which usually have frequent fires of low intensity.
2	One or more fire return intervals have been missed, possibly resulting in increased fire sizes and intensities and decreased landscape mosaics and diversity.
3	Multiple fire return intervals have been missed resulting in dramatic departure from historical conditions.

Condition Class 3 would normally be stands classified as “high-risk”.

5. How does Fire Behavior influence wildland fires in Sanders County?

Fire Behavior describes the way fires ignite and spread. Topography, fuel conditions, and weather all influence fire behavior and how wildland fires burn in Sanders County. Fuel is the only factor influencing fire behavior that we have the ability to manage. The following fire behavior assessment shows fire intensities and fire spread rates in different fuel types/models that are found in Sanders County. It is important to understand this information to determine what areas contribute to the fire protection problems in the County and thus may need treatment.

The following fuel types/models were used for analyzing potential fire behavior:

Fuel Model	Fuel Model Description
1	Grass that is dominated by short grass where very little shrubs or timber is present over less than 1/3 rd of the area. The fine, porous, and continuous fuels that have cured or are nearly cured govern fire spread. This model represents the harvested or recently burned over land that is now covered with grasses and/or newly regenerated timber, the high mountain meadows, and low lands covered with short grass.
2	Grass with open timber overstory that cover 1/3 rd to 2/3 rd 's of the area. This model represents the open grass and ponderosa pine/Douglas fir stands and harvested areas where an overstory of timber remains. Fire spread is primarily by surface fire through the curing or dead grasses with the litter and dead down wood from the open shrub or timber overstory contributing to fire intensity.
5	Predominantly shrubs with an overstory of timber. The live fuel moisture in the shrubs normally has a dampening effect on any surface fire. Surface fire normally burns in the dead and downed woody fuels on the forest floor. Under drought conditions, live fuel moistures are less than normal, causing shrubs to be more flammable.
8	A closed canopy timber stand of short-needled conifers with a compact litter layer of needles, leaves, and twigs that has little undergrowth present in the stand. This model is represented in the areas of immature lodgepole pine, Douglas fir stands that have little down-dead ground fuels and the higher elevation stands of whitebark pine. Slow burning ground fires with low flame lengths are generally the case, although a fire here may encounter an occasional "jackpot" or heavier fuel buildup that can flare up. Late season fires in drought years may cause this fuel type to burn with stand replacement intensities.
10	Older mature timber stands that have large loads of dead material on the forest floor. This would include areas that are insect and disease ridden, wind-thrown stands, and over mature situations with dead fall or heavy accumulations of debris. Ladder fuels are usually present. Fires burn in the surface and ground fuels with greater intensity than the other timber types. Crowning, spotting, and torching of individual trees are more frequent in this fuel type. This is typical of some Condition Class 2 stands and most Condition Class 3 stands.

Fire behavior calculated for these five fuel types/models were made using the fuels, weather, and topographic conditions prevalent for Sanders County. Two scenarios were developed. One for normal August fire season conditions, called Normal Case, and one for extreme August fire season conditions, called Most Severe Case. The most severe case also takes into consideration severe drought conditions. These conditions would be present in August and September when all the vegetation has cured and dried.

Weather	Normal Case	Most Severe Case
High Temperature	80 degrees	90 degrees
Low Relative Humidity	20%	10%
Mid Flame Wind Speed	5 mph	15 mph
Fuel Moistures		
Fine Fuels, 0-1/4 in. dia.	6%	3%
Small Fuels, 1/4-1 in. dia.	9%	4%
Medium Fuels, 1-3 in. dia.	10%	5%
Large Fuels, >3 in. dia.	14%	8%
Shrubs, Live Fuel Moisture	80%	50%
Trees, Live Crown Moisture	100%	60%

The following table shows the fire behavior interpretations that should be used for the fire behavior outputs.

Flame Length	Fireline Intensity	Interpretation
Less than 4 feet	Less than 100 Btu/ft/s	Persons using hand tools can generally attack fire at the head or flanks. Handline should hold the fire.
4-8 feet	100 - 500 Btu/ft/s	Fires are too intense for direct attack on the head by persons using hand tools. Handline can't be relied on to hold line. Equipment such as plows, dozers, pumpers, and retardant can be effective.
8-11 feet	500 – 1000 Btu/ft/s	Fires may present serious control problems – torching, crowning and spotting. Control efforts at the fire head will probably be ineffective.
Greater than 11 ft.	Greater than 1000 Btu/ft/s	Major fire runs are probable. Control efforts at the head of the fire are ineffective.

Fires are classified according to the fuels they are burning in; ground fires, surface fires, and crown fires. Each burns with different intensities and spread rates depending on fuel, wind, and topography. The following fuel types/models were used for analyzing potential fire behavior:

**Fire Behavior Outputs
Normal and Most Severe Cases**

Fuel Type/ Model	Rate of Spread (Miles/hour)		Flame Length (Feet)		Fire Size after 1 hour (Acres)	
	Normal	Most Severe	Normal	Most Severe	Normal	Most Severe
1	1.3	5.6	5	10	385	4812
2	.5	4.6	7	20	61	2333
5	.4	2.7	7	18	57	752
8	.025	.1	1	2	<1	2
10	.125	.9	6	15	4	77

The transition from a fire burning in the surface fuels on the forest floor to a fire that burns in the crowns of the trees is determined by the amount of available fuel, the fire intensity or flame length, the presence of ladder fuels to carry the fire into the standing trees, and the wind. A fire may start out torching a single tree or small group of trees. When a fire becomes established in the tree crowns, the wind will usually carry the fire in the crowns creating fire intensities that cannot be dealt with by fire suppression forces.

Crown fires are normally driven by the wind but, as experienced in western Montana in 2000 and 2003 fire season, the dryness of the fuels and tree crowns caused what is known as a plume dominated crown fire. These kinds of crown fires take off because of the dry, explosive, and drought conditions present in the forest. A plume dominated crown fire does not necessarily need wind to keep it sustained.

Spot fires are caused by burning embers carried aloft by the wind and smoke column and dropped ahead of the main fire front. Spot fires need a dry fuel bed to ignite and it is not uncommon for these fires to start ¼ to ¾ of a mile ahead of the main fire front. These fires create serious problems for fire suppression forces trying to protect lives and property well ahead of an advancing fire. As spot fires start and gain intensity, they can become as active as the main fire front. This was experienced during the fires in western Montana in 2000, 2003, and 2007. Some fires traveled so quickly through a combination of crowning and spotting that there was absolutely no way for fire suppression forces to gain control of them before they did their damage. As was the case of the Chippy Creek fire in 2007.

Many of the timber stands in Sanders County are ripe for crown fires because of the presence of ladder fuels and heavy, down woody debris on the forest floor. These high-risk stands are shown on Condition Class Maps #15, 16, & 17 in this plan. This is exactly why private landowners, county, city, state and federal agencies in the county need to implement a hazardous fuels treatment program.

6. What are the “Values at Risk” or those things which are important to Sanders County residents which are most threatened by wildfire?

The whole intent of fire protection is to protect the values at risk and maintain healthy forests. The purpose of a successful fire management program is to reduce the risks associated with values that are important to communities, people, and the natural resources. Values at risk will be used to assist fire protection agencies in prioritizing areas for hazardous fuels treatments.

Some of the values at risk in Sanders County are:

- Health & Safety – Public & Firefighters
- Air Quality
- Endangered Species
- Recreation
- Property, Improvements & Facilities – Private & Public
- Community Impacts – Economic & Social
- Forest/Ecosystem Health
- Historical
- Aesthetics/Scenery
- Soils
- Timber/Lumber
- Water Quality
- Wildlife

There are multiple threats from a wildland fire occurring in Sanders County. The **immediate threats** are to:

- **Homes and other Infrastructure** – Few wildfires burn where there is not some threat to homes, structures, fences, power lines, communication sites, or some other type of infrastructure. Treatments in the immediate area around structures, designed to reduce fire intensity, can dramatically improve their survival potential. However, restricting treatments to these areas does little to protect other values-at-risk, some of which may be equally or more important from a neighborhood and/or a community standpoint.
- **Public Fear** – Wildfires can induce fear, concern, and panic. This can result in a marked increase in call volume at the local dispatch center, thereby reducing the ability to service other emergency calls. In addition, access routes into an incident may be clogged as people either flee the scene, attempt to return home to protect their property, or remove other family members or pets.
- **Public Health** – During the 2000, 2003, and 2007 fire season, western Montana provided dramatic evidence of the danger of living in a fire-zone. Besieged by numerous fires, residents of the area were exposed to heavy smoke for several weeks during August and into early September. This resulted in a dramatic increase in both doctor visits and hospital admissions during and immediately after the fires. Many of those affected lived miles from the actual fires. The Chippy Creek fire besieged the Hot Springs Valley with smoke for several weeks.
- **Firefighter Safety** – In 1997, the “TriData Study: Wildland Firefighter Safety Awareness Study” was commissioned to find ways to improve firefighter safety. Of the 114 recommendations, the #1 was to “Implement a large-scale, long-range fuel management program.” Fire protection agencies, county officials, and the public must insist on hazardous fuel reduction efforts on a landscape-basis if they are truly serious about improving safety of not only firefighters but the public in general. Treating small areas do not provide the level of protection necessary.

The **secondary threats** from a wildfire occurring in Sanders County are:

- **Financial** – Every fire season, stories emerge about the loss of revenue suffered by local businesses attributed to an ongoing fire in the area. This can be particularly acute during the height of a summer tourist season. Multiplied throughout a community, the result can be very serious.
- **Transportation** – Fires can disrupt travel corridors. This may involve air or vehicle routes. After fire effects can also impact vehicle travel from debris flows crossing roadways.
- **Recreation** – Opportunities to enjoy the outdoor recreation activities can also be severely hampered by wildfire. Areas can become closed to the public because of fire activity or fire danger. After fire effects include impacts to popular recreation sites from the fire leaving areas “blackened” which reduces visitor popularity.
- **Rebuilding** – For most areas, structures and infrastructure damaged or destroyed during a wildfire will need to be repaired or replaced. For many communities, this involves re-zoning requests, public hearing, issuance of new permits, and necessary work-related inspections. Building and engineering Departments can be quickly overtaxed.
- **Environmental** – A devastating wildfire can affect a variety of environmental concerns. One of the most obvious is wildlife and plant habitat. Some of the sites most at risk are home to various Threatened and Endangered Species. Watershed values can be severely damaged by wildfire. Soil erosion can be a major impact after a wildfire along with the rehabilitation work that needs to take place to prevent further damage. After a wildfire increased insect and disease activity can impact forest health.
- **Public Confidence/Support** – Following a major incident, public review of officials and programs can occur. Confidence in individuals, institutions, and activities may be questioned and or supported. This can also be directed to private groups who have either opposed or advocated a particular course of action contrary to the public’s desire. These examinations should focus on how to constructively improve programs.
- **Scenic** – Picturesque long-distance vistas are an important component of our landscape; many travel great distances to partake of experiencing Sanders County. Wildfires impact the aesthetics of an area, which can further impact individual landowner property values. Many moved into Sanders County and bought property for the view.
- **Emotional/Spiritual** – Many individuals and groups may have intense bonds to a particular site or area. This bond is often overlooked and under appreciated; nonetheless, it is true and powerful. Damage, real or perceived, to these sites/areas can cause mental or even physical pain.

7. Who are the “Wildland Fire Protection Agencies” and how are their efforts coordinated?

There are four kinds of wildland fire protection agencies in Sanders County; Sanders County Fire Departments, Montana DNRC, Confederated Salish & Kootenai Tribes, Kootenai National Forest, and Lolo National Forest. Through mutual aid agreements, firefighters from each of these agencies are able to unify and assist each other with wildfires in the Valley. Every effort is made to stop wildfires before they reach housing areas, but only county volunteer departments are qualified to provide direct structure fire suppression. Maps of the fire protection boundaries for each agency are included in Appendix D. The wildland fire protection agencies are:

- ❖ **Sanders County City and Rural Fire Districts** – Sanders County has an all-volunteer fire fighting force. There are nine fire districts and nine fire companies or departments. All fire departments train in both Wildland and Structural fire fighting and maintain mutual aid agreements through the Sander County Association of Firefighters.
 - Dixon Rural Fire Department
 - Heron Rural Fire Department
 - Hotsprings Rural Fire Department
 - Noxon Volunteer Fire Department
 - Plains City Fire Department
 - Plains/Paradise Rural Fire Department
 - Thompson Falls City Fire Department
 - Thompson Falls Rural Fire Department
 - Trout Creek Rural Fire Department

- ❖ **State of Montana** – Department of Natural Resources and Conservation. The Montana DNRC is responsible for fire protection on state and private lands statewide. The Plains Unit of the Northwestern Land Office (NWLO) – Montana DNRC has two major wildfire responsibilities in Sanders County.
 - Direct protection of 275,000 acres of forested lands.
 - Management of the State/County Cooperative Wildfire Management Program.The Plains Unit has a fire prevention specialist, who promotes public fire awareness. The DNRC’s primary mission is to manage School Trust Land. The Plains Unit has a fire prevention specialist, who promotes public fire awareness. The DNRC’s primary mission is to manage School Trust land to generate long-term income to the School Trust. The Plains Unit provides forestry staff support to the county fire plan committee

- ❖ **Confederated Salish & Kootenai Tribes** – The CS&KT is responsible for direct protection to certain lands within the boundaries of the Flathead Indian Reservation. About one third of the Reservation lies in Sanders County. Lands on the Reservation that the CS&KT is responsible by congressional mandate to protect include all lands owned by the Tribes as well as Trust and Allotment lands. In addition, the State has contracted the CS&KT to protect all State owned lands on the Reservation, as well as all privately owned forested lands (non-tribal forest landowners pay a fire protection assessment to the State, which then contracts with CS&KT for protection services). The only areas of the Reservation that they are not responsible for fire protection on are the privately owned non-forested lands, and lands within incorporated city limits. In the past, however, the CS&KT has responded to all wildfires on the Reservation, because of the intermingled land ownership patterns. These actions are taken because almost any wildfire on the Reservation constitutes a threat to lands under CS&KT protection.

- ❖ **U. S. FOREST SERVICE** – There are portions of two National Forest lying within Sanders County:
 - Kootenai NF** – Administered by the Cabinet Ranger District office in Trout Creek.
 - Lolo NF** – Administered by the Plains Thompson Falls Ranger District office in Plains.And a small portion where the Clark Fork River enters the county is administered by The Superior Ranger District in Superior.

Both Forests provide direct fire protection within their respective protection boundaries. The Forest Services primary protection responsibility is National Forest Land, whether forested or not. But it also protects state and private forested lands within its jurisdictional boundary through a protection exchange with the State of Montana. Both the Kootenai and the Lolo also each support fire prevention specialists who work individually and cooperatively with the Northwest R C & D and the Sanders County Fire Planning Committee.

8. Over the past few years, we've heard a great deal about the National Fire Plan and the related 10-Year Comprehensive Strategy and Implementation Plan. What are these? Does our Community Wildfire Protection Plan follow the guidelines established in these national documents? And how do they affect what can or may occur in Sanders County?

The planning process for this plan was guided by direction in the National Fire Plan, the National Fire Plan Comprehensive Strategy and 10-Year Implementation Strategy/Action Plan, and the March 2004 Handbook for Wildland-Urban Interface Communities entitled "Preparing a Community Wildfire Protection Plan as follows:

The Core Principles for the comprehensive strategy:

- **Collaboration:** Facilitate a collaborative approach at the local, regional, and national levels.
- **Priority Setting:** Emphasize the protection of communities, municipal, and other high-priority watersheds at risk. Long-term emphasis is to maintain and restore fire prone ecosystems at the landscape scale.
- **Accountability:** Establish uniform and cost-effective measures, standards, reporting processes, and budget information in implementation plans that will fold into the Government Performance and Results Act process.

The goals and guiding principles for the 10- year Comprehensive Strategy:

1. Improve Prevention and Suppression efforts and reduce the threat to lives and property due to wildfire.
 - Firefighting Readiness – Public and firefighter safety is the first priority in all fire management activities.
 - Prevention through Education – Reduce risks to homes and private property through prevention education.
2. Reduce Hazardous Fuels and concentrate fuel reduction work in areas of highest priority and effectiveness (highest values, greatest hazards, highest population density, high fire occurrence frequency)
 - Prioritize hazardous fuels reduction where the negative impacts of wildland fire are greatest.
 - Concentrate fuel reduction work in areas of highest priority and effectiveness (highest values, greatest hazards, highest population density, and high fire occurrence frequency).
3. Restore Fire-adapted Ecosystems
 - **Rehabilitation:** Prevent invasive species and restore watershed function and biological communities through short-term rehabilitation.
 - **Restoration:** Restore healthy, diverse, and resilient ecological systems to minimize uncharacteristically severe fires on a priority watershed basis through long-term restoration.
 - **Using science and information:** Promote the development and use of the best available science along with local and indigenous knowledge.
 - **Monitoring:** Monitor restoration and rehabilitation projects for effectiveness and share the results in order to facilitate adaptive implementation.

4. Promote Community Assistance by providing for seamless cooperation between agencies and individuals.
 - Increase Local Capacity: Where appropriate, stimulate local capacity to accomplish hazardous fuels reduction and rehabilitation work.
 - Incentives: Promote better fire prevention planning and actions in local communities through technical assistance and cost-sharing incentives.
 - Biomass Utilization: Employ all appropriate means to stimulate industries that will utilize small-diameter, woody material resulting from hazardous fuel reduction activities, such as for biomass electric power,
 - Provide for seamless cooperation between agencies and individuals

Priorities for Restoration within the 10-year Comprehensive Strategy:

- **Wildland Urban Interface.** WUI areas include those areas where flammable wildland fuels are adjacent to homes and communities.
- **Readily accessible municipal watersheds.** Clean water is the most critical resource in many western states. Watersheds impacted by uncharacteristic wildfire effects are less resilient to disturbance and unable to recover as quickly as those that remain within the range of ecological conditions characteristic of the fire regime under which they developed.
- **Accountability:** Establish uniform and cost-effective measures, standards, reporting processes, and budget information in implementation plans that will fold into the Government Performance and Results Act process.
- **Threatened and endangered species habitat.** The extent of recent fires demonstrates that in fire-adapted ecosystems few areas are isolated from wildfire. Dwindling habitat for many threatened and endangered species will eventually be impacted by wildland fire. The severity and extent of fire could eventually push declining populations beyond recovery.
- **Maintenance of existing low risk Condition Class 1 areas.** This is especially important in the Ponderosa Pine habitat types where invasion by more shade tolerant species can eliminate the effects of treatment in 5-12 years. Recent droughts have caused severe wildland fire problems in the forestlands of the Western United States.

Preparing a Community Wildfire Protection Plan

This Sanders County Community Wildfire Protection Plan meets the minimum requirements for a Community Wildfire Protection Plan as described in the Healthy Forest Restoration Act. These requirements are:

- 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.

9. If I treat the hazardous fuels on my property and want to burn them, do I need a burn permit, and if I do, how do I get one?

Because of poor smoke ventilation no burning is allowed from December 1 through April 30 of each year. The general open burning season starts March 1 and runs through November 31. Montana State law requires burning permits during the fire season; from May 1 to September 31 (fire season may be extended depending upon conditions). This law states that “During the forest fire season or an expansion thereof, a person may not ignite or set a forest fire, slash-burning fire, land-clearing fire, debris-burning fire, or an open fire within forest lands without an official written permit to ignite or set the fire from the recognized protection agency for that protection area.”

Although permits are not required during the entire open burning season, contacting your local fire protection agency can provide information on drought and fire conditions and may help avoid an escaped fire and potential liability. It also allows local protection agencies to know where burns are taking place and avoid false alarm callouts to non-emergency situations. Before you burn at any time you should call the non-emergency Sheriff’s Office phone number (827-3584) to let them know you will be burning.

APPENDIX B

(Attachment B-1)

SANDERS COUNTY FIRE PLANNING COMMITTEE MEMBERS

Tony Cox – Sanders County Commissioner and committee chair.

Kathy Matthew – Sanders County Planner.

Tom Rummel – Sanders County Sheriff.

Bill Naegeli – Sanders County Director Office Of Emergency Management

Rick Carlson – Sanders County Community Forester.

Jim Steele – Fire Management Director Confederated Salish & Kootenai Tribes.

Calvin Minemyer – Fire Manager Plains Unit Montana Department Of Natural Resources and Conservation.

Everett Young – Service Forester Plains Unit Montana Department Of Natural Resources and Conservation.

J.J. Goodman – Chief Trout Creek Rural Volunteer Fire Department

Mark Reeser – Chief Thompson Falls Rural Volunteer Fire Department.

John Holland – Chief Plains Rural Volunteer Fire Department

Travis Wilson – Noxon Rural Volunteer Fire Department

Levi Hebert – Heron Rural Volunteer Fire Department

Randy Woods – Hot Springs Rural Volunteer Fire Department

Doug King – Dixon Rural Volunteer Fire Department.

Alan Osborn – Fire Management Officer Cabinet Ranger District Kootenai National Forest

Scott Schrenk – Fire Management Officer Plains/Thompson Falls Ranger District Lolo National Forest.

(Attachment B-2)

**SANDERS COUNTY COMMUNITY FIRE PLAN
CHRONOLOGY**

2004

- August 12, Rick Carlson, Sanders County Community Forester, assigned to write the Sanders County CFPP. Funded by Agreement #ESA04T021 USDI, Bureau of Land Management.
- September 14, Plains Public Meeting for Western States Fuels Mitigation Grants and development input on the Sanders County CFPP.
- September 16, Collaboration meeting with Tony Harwood Fire Manager Confederated Salish & Kootenai Tribes, Jack Athern Dixon Rural Volunteer Fire Department, and Randy Woods Hot Springs Rural Volunteer Fire Department.
- September 21, Collaboration meeting with Calvin Minemyer Fire Management Officer Plains Unit Montana Department of Natural Resource and Conservation, Dave Petteys Fire Management Officer Plains/Thompson Falls Ranger District Lolo National Forest, John Holland Fire Chief Plains/Paradise Rural Volunteer Fire Department, and Jim Inman Fire Chief Thompson Falls Rural Volunteer Fire Department.
- September 27, Collaboration meeting with Kert Werst Fire Management Officer Cabinet Ranger District Kootenai National Forest, Howard Hudson Fire Chief Trout Creek Rural Volunteer Fire Department, Martin Dickerson Fire Chief Noxon Rural Volunteer Fire Department, Pete Lilly Fire Chief Heron Rural Volunteer Fire Department, and Jim Inman Fire Chief Thompson Falls Rural Volunteer Fire Department.
- September 30, Sanders County Fire Planning Committee Meeting.
- October 14, Thompson Falls Public Meeting for Western States Fuels Mitigation Grants and development input on the Sanders County CFPP.
- October 27, Presentation of Sanders County CFPP to the Sanders County Firefighters Association.
- November 10, Collaborative meeting with Sanders County Planner and GIS specialists from MT DNRC, Kootenai NF, and Lolo NF.
- November 30, Sanders County Fire Planning Committee Meeting. Draft Plan presentation.
- December 15, Trout Creek Public Meeting for Western States Fuels Mitigation Grants and development input on the Sanders County CFPP.

2005

- March 15, Public Meeting for input on the County Disaster Mitigation Plan and Sanders County CFPP. Plains.
- March 16, Public Meeting for input on the County Disaster Mitigation Plan and Sanders County CFPP. Thompson Falls.
- March 24, Public Meeting for Stevens Funds Fuels Mitigation Grant for the Game Range Area and development of the Sanders County CFPP. Thompson Falls.
- April 12, Public Meeting for input into the Sanders County CFPP at Hot Springs.
- April 14, Public Meeting for input into the Sanders County CFPP at Noxon.
- May 18, Formal Approval of the Sanders County CFPP by the Sanders County Commissioners.

2010

- February 4, Rick Carlson agrees to update the CFFP in meeting with Dan Miles County Planner and Bill Naegeli Director of Office of Emergency Management.
- May 26, met with Alan Osborn Fire District Fire Management Officer Cabinet Ranger District Kootenai National Forest.
- June 2, secured services of Steve Snell Kootenai National Forest for GIS assistance.
- June 14-21, met with all rural fire chiefs in the county.
- July 14, met with Jim Steele Fire Manager of the Confederated Kootenai Tribes.
- August 2, met with Calvin Minnemyer Fire Management Officer Plains Unit Montana DNRC and Rick Cavill Fire Management Officer Plains/Thompson Falls Ranger District Lolo National Forest.

2011

- August 23, Draft completed for initial review by Sanders County Land Services and Office of Emergency Management.
- October 26, Review completed with implementation of final review after mapping of new Heron Rural Fire District is completed.

2012

- December 20, Final Public Meeting and commissioners approval.

(Attachment B-3)

Initial Results of Priority Fuel Treatment Identification

Protection Agency	Priorities within Fire Protection Areas			
Dixon Rural Fire Department	Revais Creek	Magpie Creek		
Heron Rural Fire Department	Heron Interface			
Hotsprings Rural Fire Department	Hot Springs Interface	Camus Interface		
Noxon Rural Fire Department	Bull River South	Noxon South	Noxon North	
Plains/Paradise Volunteer Fire Department	Ranchettes	Buffalo Bill	Cedar Creek	River Road E.
	Swamp Creek	Henry - Deemer		
Thompson Falls Rural Fire Department	Cherry Creek	Webber	Blue Slide	Beaver
	Prospect	Thompson River	Eddy Flats	
Trout Creek Rural Fire Department	Trout Creek North	Trout Creek South	White Pine	
*Confederated Salish & Kootenai Tribes				
*MT Department of Natural Resources	McLaughlin			
*Kootenai National Forest	Bull River North			
*Lolo National Forest	River Road West	Cutoff		

Priority areas within Rural Fire Districts are a consensus between State, Tribal, and Federal Agencies that have co-protection with the rural fire department.

*Areas of private lands protected outside Rural Fire District Boundaries.

(Attachment B-4)

**SANDERS COUNTY
WILDLAND/URBAN INTERFACE AREA
RATING GUIDE**

WILDLAND URBAN INTERFACE AREAS – Areas identified as specific areas at risk from wildfire by Rural, State, Tribal, and Federal agencies with fire protection responsibilities in Sanders County. Once identified these areas were tied into the Wildland Urban Interface Boundary as established by the Healthy Forests Restoration Act. This boundary served as a general guide for large scale risk planning, but at the specific project planning level more detailed modeling of fire risk may adjust this boundary. The municipalities of Thompson Falls, Paradise, and Hot Springs were not included in the analysis even though they are within WUI boundaries because sufficient fuel breaks surround them to put them at a lower risk of wildfire incursion. Heron, Noxon, and Trout Creek were treated as a part of the WUI.

VALUES AT RISK:

- Residences* – Residences* as per County Data as of 6/2004. Valued at an average value of \$82,900 per residence (Sanders County Census 2000).
- Business Structures – Valued at \$250,000 per business.
- Historic Structures/Sites – Those registered in the National Register of Historic Places. No \$ value assigned.
- *Private Commercial Forestland* – Valued at an average of \$742/Acre as per 2004.
- *High Value Improvements – Regional Powerlines & Electronic Sites. No \$ value assigned.

**Final rating numbers were reduced by 50% for these values to reflect the higher social value for the loss of a residence or business.*

FIRE RISK:

- Acres of each Fire Regime Condition Class (FRCC) by % within each WUI Area.
FRCC 0 – Nonforest (Rocks, clearings, etc.).
FRCC 1 – Low departure from historic fire frequency. (indicative of low fire hazard).
FRCC 2 – Moderate departure from historic fire frequency. (indicative of moderate fire hazard).
FRCC 3 – High departure from historic fire frequency. (indicative of high fire hazard).
- Miles of perimeter of each FRCC adjacent and exterior to each WUI area.
- Topography – Effect of topography on prevailing westerly winds to each WUI area by percentage of area unsheltered, partially sheltered, or sheltered.
- Access – General difficulty of ingress or egress for each WUI area in the event of a wildfire.

\$ VALUE AT RISK: This is the sum of residence, business, and private commercial timber land value in each WUI.

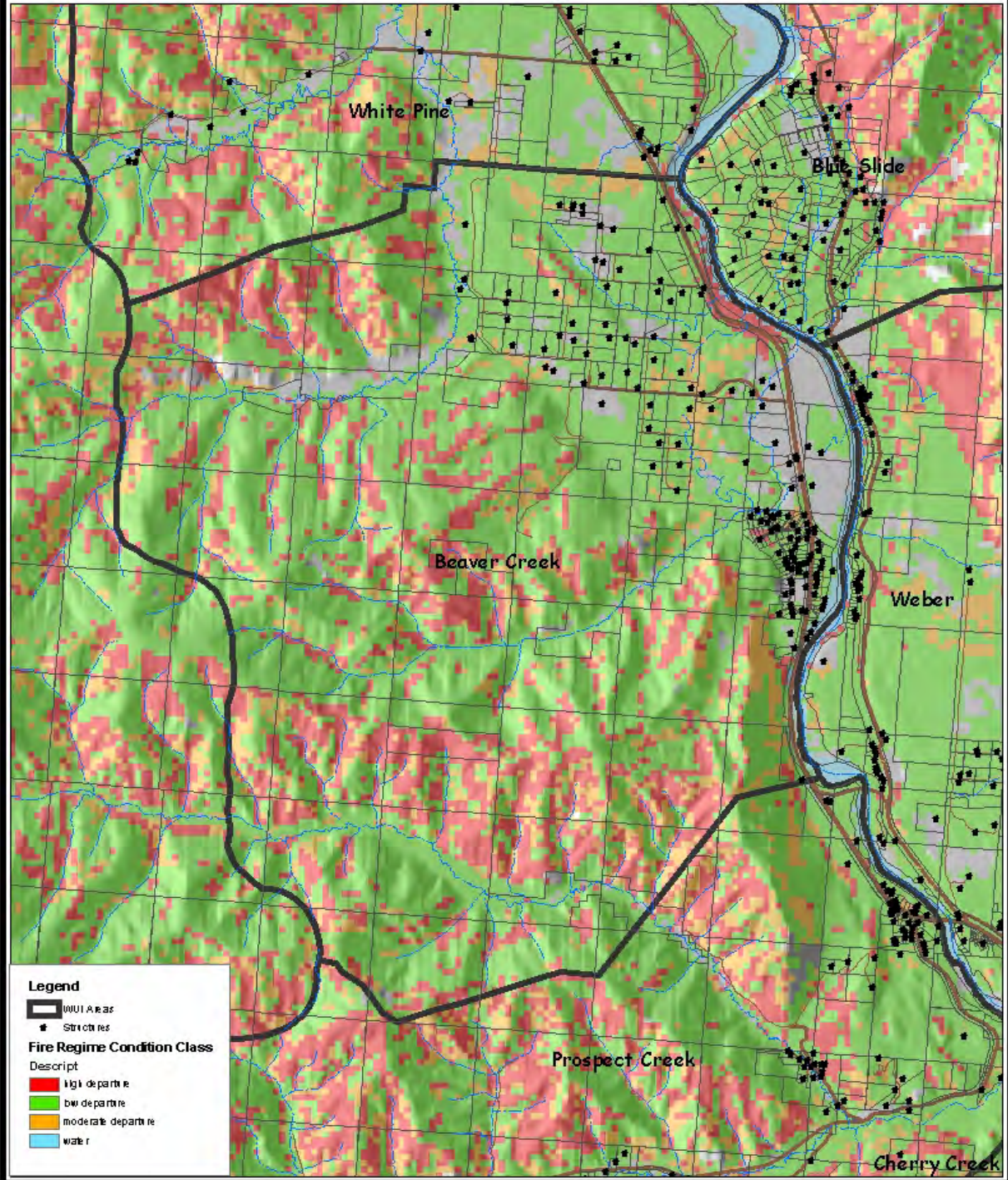
(Attachment B-4A)

Overall Rating
2005 Sanders County WUI Areas
High Score = Higher Risk

Ranking	Area	Fire Risk Score	Value Risk Score	Total Risk Score	\$ Values At Risk
1	Trout Creek South	16	24	40	\$35,743,492
2	Noxon South	21	17	38	\$22,135,270
3	Cedar Creek	29	8	37	\$13,569,036
4	Heron Interface	20	17	37	\$38,885,794
5	Ranchettes	31	4	35	\$8,166,826
6	Trout Creek North	18	17	35	\$32,929,274
7	Noxon North	15	20	35	\$25,956,428
8	Buffalo Bill	27	7	34	\$12,629,310
9	Paradise-McLaughlin	26	6	32	\$9,271,088
10	Swamp Creek	21	11	32	\$16,601,866
11	Prospect Creek	18	14	32	\$15,755,166
12	Henry Deemer	25	6	31	\$11,285,194
13	Cherry Creek	19	11	30	\$20,047,646
14	Magpie Creek	27	2	29	\$834,602
15	River Road East	21	8	29	\$14,679,918
16	Cutoff	21	7	28	\$10,160,494
17	Bull River South	19	9	28	\$6,523,020
18	Weber	17	11	28	\$14,438,052
19	Hot Springs	23	4	27	\$9,176,746
20	White Pine	14	13	27	\$20,149,782
21	River Road West	19	7	26	\$5,754,176
22	Blue Slide	17	9	26	\$13,302,622
23	Beaver Cr.	16	10	26	\$15,699,084
24	Thompson River	16	5	21	\$4,715,616
25	Eddy Flats	15	6	21	\$4,591,948
26	Revais Creek	17	3	20	\$1,804,194
27	Bull River North	15	3	18	\$4,067,480
28	Camas	14	2	16	\$1,454,562



Beaver Creek



(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING

OVERALL RATING
23 of 28

AREA NAME: Beaver Creek **TOTAL ACRES:** 23,918
FIRE PROTECTION DISTRICT: T. Falls VRFD, Kootenai NF, Lolo NF **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences**	Each	134	4
Other structures (Businesses)**	Each	5	2
Historical Sites	Each	0	0
Private Commercial Forestland**	Acres	4502	2
High Value Improvements <ul style="list-style-type: none"> • Regional Powerline – 3.5 miles • Electronic Site • 	Each	1 1	2
TOTAL VALUE AT RISK			10

FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Acres - % Acres - % Acres - % Acres - %	392 – 2% 14924 – 62% 3739 – 16% 4859 – 20%	4
Condition Class Perimeter Adjacent To Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Miles - % Miles - % Miles - % Miles - %	6.1 – 31% 6.6 – 33% 1 – 5% 6.1 – 31%	3
Topography <ul style="list-style-type: none"> • Unsheltered Prevailing Winds • Partially Sheltered To Prevailing Winds • Sheltered From Prevailing Winds 	% % %	70% 20% 10%	7
Access (Ingress/Egress) <ul style="list-style-type: none"> • Difficult • Difficult/Easy Combination • Easy 	% % %	0% 10% 90%	2
TOTAL FIRE RISK			16

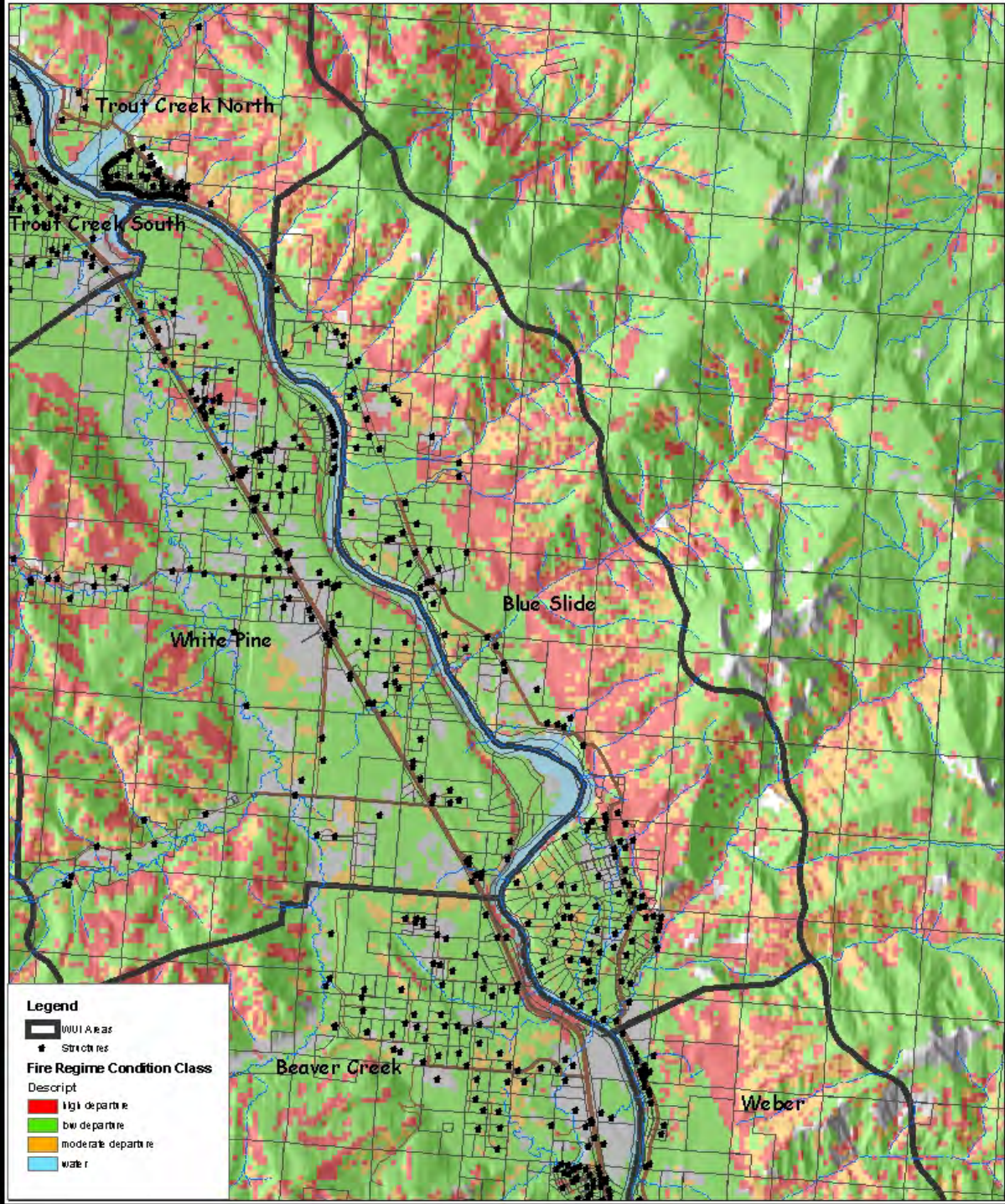
GRAND TOTAL ALL RISK **26**

\$ VALUE AT RISK: ***\$15,699,084**

COMMENTS:



Blue Slide



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING

22 of 28

AREA NAME: Blue Slide **TOTAL ACRES:** 17,664
FIRE PROTECTION DISTRICT: T. Falls VRFD, Kootenai NF, Lolo NF **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences**	Each	112	3
Other structures (Businesses)**	Each	2	3
Historical Sites	Each	0	0
Private Commercial Forestland**	Acres	4741	3
High Value Improvements	Each	0	0
•			
•			
•			
TOTAL VALUE AT RISK			9

FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area	Acres - %	664 – 4% 8712 – 49% 3482 – 20% 4799 – 27%	6
• Condition Class 0			
• Condition Class 1			
• Condition Class 2			
• Condition Class 3	Miles - %	11 - 50% 8 - 37% 1 – 5% 2 – 8%	1
Condition Class Perimeter Adjacent To Area			
• Condition Class 0			
• Condition Class 1			
• Condition Class 2	%	20% 70% 10%	7
• Condition Class 3			
Topography			
• Unsheltered Prevailing Winds	%	10% 20% 70%	3
• Partially Sheltered To Prevailing Winds			
• Sheltered From Prevailing Winds			
Access (Ingress/Egress)	%	10% 20% 70%	3
• Difficult			
• Difficult/Easy Combination			
• Easy	TOTAL FIRE RISK		17

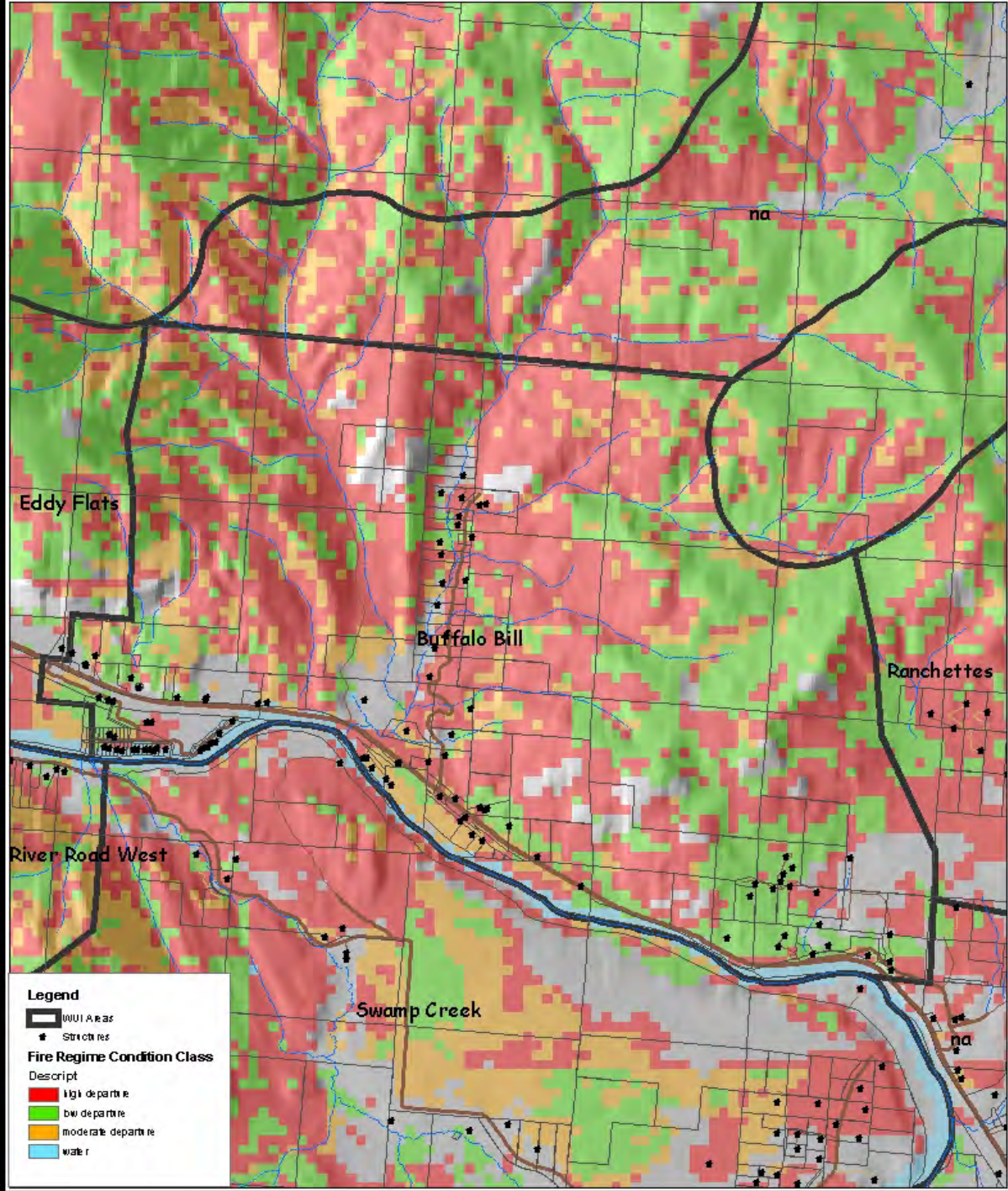
GRAND TOTAL ALL RISK **26**

\$ VALUE AT RISK: ***\$13,302,622**

COMMENTS: Spring Valley School



Buffalo Bill



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING

8 of 28

AREA NAME: Buffalo Bill **TOTAL ACRES:** 7,952
FIRE PROTECTION DISTRICT: Plains VRFD, MT DNRC **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences**	Each	92	3
Other structures (Businesses)**	Each	1	1
Historical Sites	Each	0	0
Private Commercial Forestland**	Acres	6405	3
High Value Improvements	Each	0	0
•			
•			
•			
TOTAL VALUE AT RISK			7

FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area			9
• Condition Class 0	Acres - %	320 – 4%	
• Condition Class 1	Acres - %	2179 – 27%	
• Condition Class 2	Acres - %	1622 – 20%	
• Condition Class 3	Acres - %	3821 – 48%	
Condition Class Perimeter Adjacent To Area			4
• Condition Class 0	Miles - %	5 – 38%	
• Condition Class 1	Miles - %	1.7 – 13%	
• Condition Class 2	Miles - %	.7 – 5%	
• Condition Class 3	Miles - %	5.6 – 43%	
Topography			6
• Unsheltered Prevailing Winds	%	50%	
• Partially Sheltered To Prevailing Winds	%	40%	
• Sheltered From Prevailing Winds	%	10%	
Access (Ingress/Egress)			8
• Difficult	%	80%	
• Difficult/Easy Combination	%	10%	
• Easy	%	15%	
TOTAL FIRE RISK			27

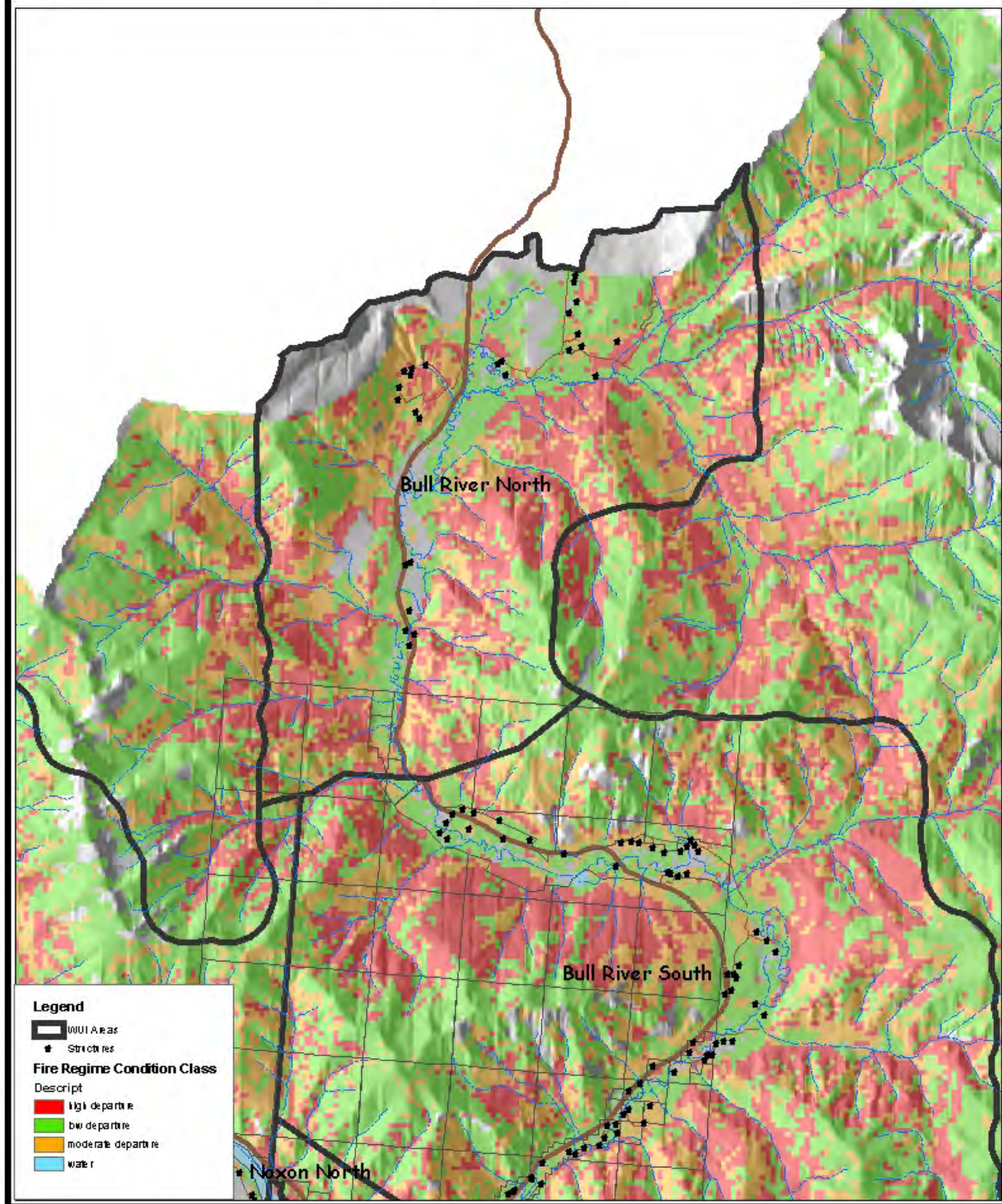
GRAND TOTAL ALL RISK **34**

\$ VALUE AT RISK: ***\$12,629,310**

COMMENTS:



Bull River North



(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING

OVERALL RATING

27 of 28

AREA NAME: Bull River North **TOTAL ACRES:** 16,512
FIRE PROTECTION DISTRICT: Kootenai NF **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	26	1
Other structures (Businesses)*	Each	1	1
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	2240	1
High Value Improvements • • •	Each	0	0

TOTAL VALUE AT RISK **3**

FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

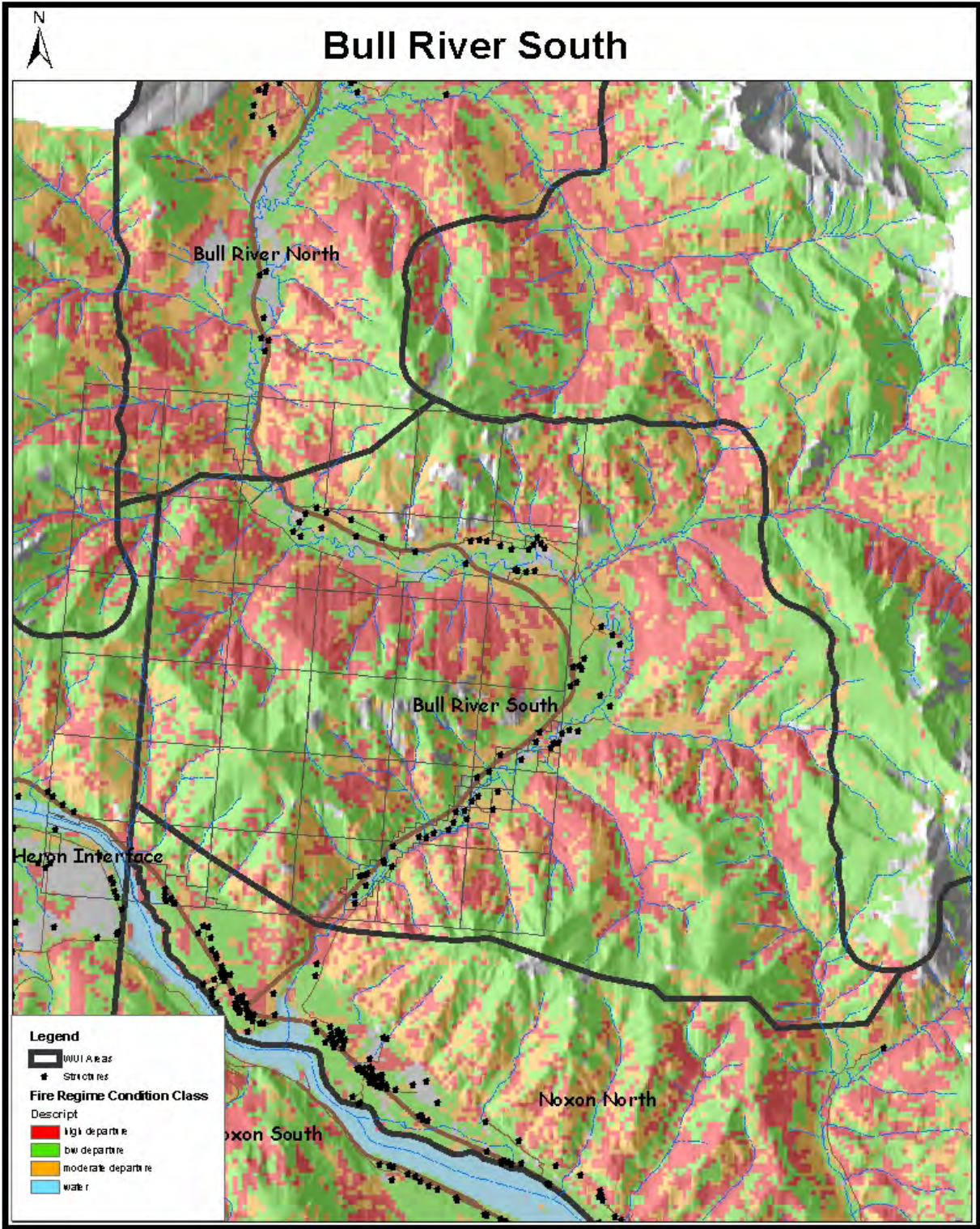
Value	Unit of Measure	Amount	Rating
Condition Class Within Area • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3	Acres - % Acres - % Acres - % Acres - %	3302 – 20% 6439 – 39% 2807 – 17% 3964 – 24%	4
Condition Class Perimeter Adjacent To Area • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3	Miles - % Miles - % Miles - % Miles - %	7 – 36% 5 – 28% 3 – 13% 4 – 23%	2
Topography • Unsheltered Prevailing Winds • Partially Sheltered To Prevailing Winds • Sheltered From Prevailing Winds	% % %	10% 50% 40%	4
Access (Ingress/Egress) • Difficult • Difficult/Easy Combination • Easy	% % %	20% 60% 20%	5

TOTAL FIRE RISK **15**

GRAND TOTAL ALL RISK **18**

\$ VALUE AT RISK: ***\$4,067,480**

COMMENTS:



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RATING**

OVERALL RATING

17 of 28

AREA NAME: Bull River South **TOTAL ACRES:** 30,846
FIRE PROTECTION DISTRICT: Noxon VRFD, Kootenai NF **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	72	2
Other structures (Businesses)*	Each	1	1
Historical Sites	Each	1	5
Private Commercial Forestland*	Acres	410	1
High Value Improvements	Each	0	0
•			
•			
•			
TOTAL VALUE AT RISK			9

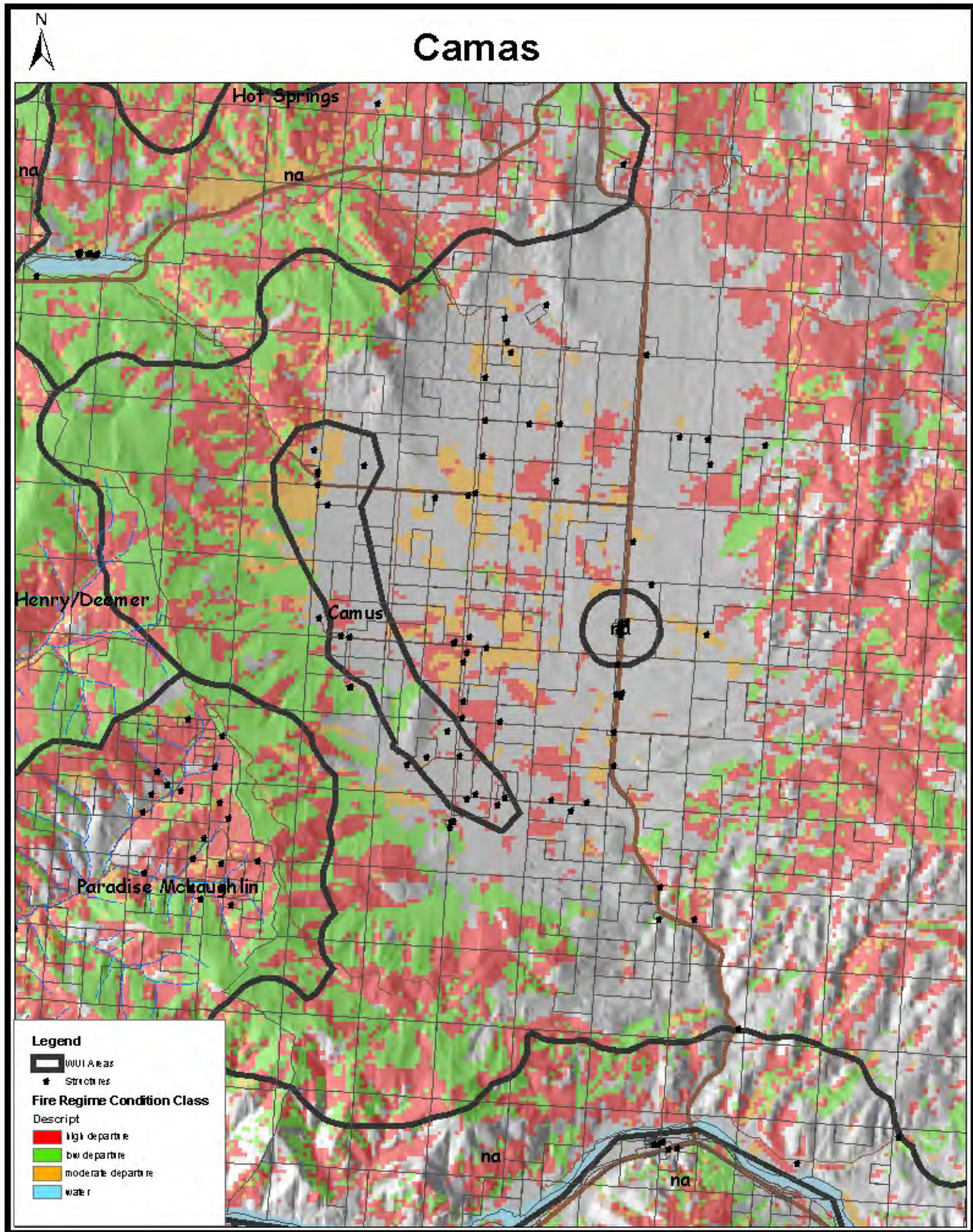
FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area			6
• Condition Class 0	Acres - %	498 – 2%	
• Condition Class 1	Acres - %	13639 – 44%	
• Condition Class 2	Acres - %	7329 – 24%	
• Condition Class 3	Acres - %	9362 – 30%	
Condition Class Perimeter Adjacent To Area			2
• Condition Class 0	Miles - %	.3 – 2%	
• Condition Class 1	Miles - %	11 – 58%	
• Condition Class 2	Miles - %	4 – 23%	
• Condition Class 3	Miles - %	3 – 18%	
Topography			6
• Unsheltered Prevailing Winds	%	50%	
• Partially Sheltered To Prevailing Winds	%	30%	
• Sheltered From Prevailing Winds	%	20%	
Access (Ingress/Egress)			5
• Difficult	%	10%	
• Difficult/Easy Combination	%	30%	
• Easy	%	60%	
TOTAL FIRE RISK			19

GRAND TOTAL ALL RISK **28**

\$ VALUE AT RISK: ***\$6,523,020**

COMMENTS:



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING

28 of 28

AREA NAME: Camas **TOTAL ACRES:** 3,213
FIRE PROTECTION DISTRICT: Hot Springs RVFD, CS&KT **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	17	1
Other structures (Businesses)*	Each	0	0
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	61	1
High Value Improvements	Each	0	0
•			
•			
•			
TOTAL VALUE AT RISK			2

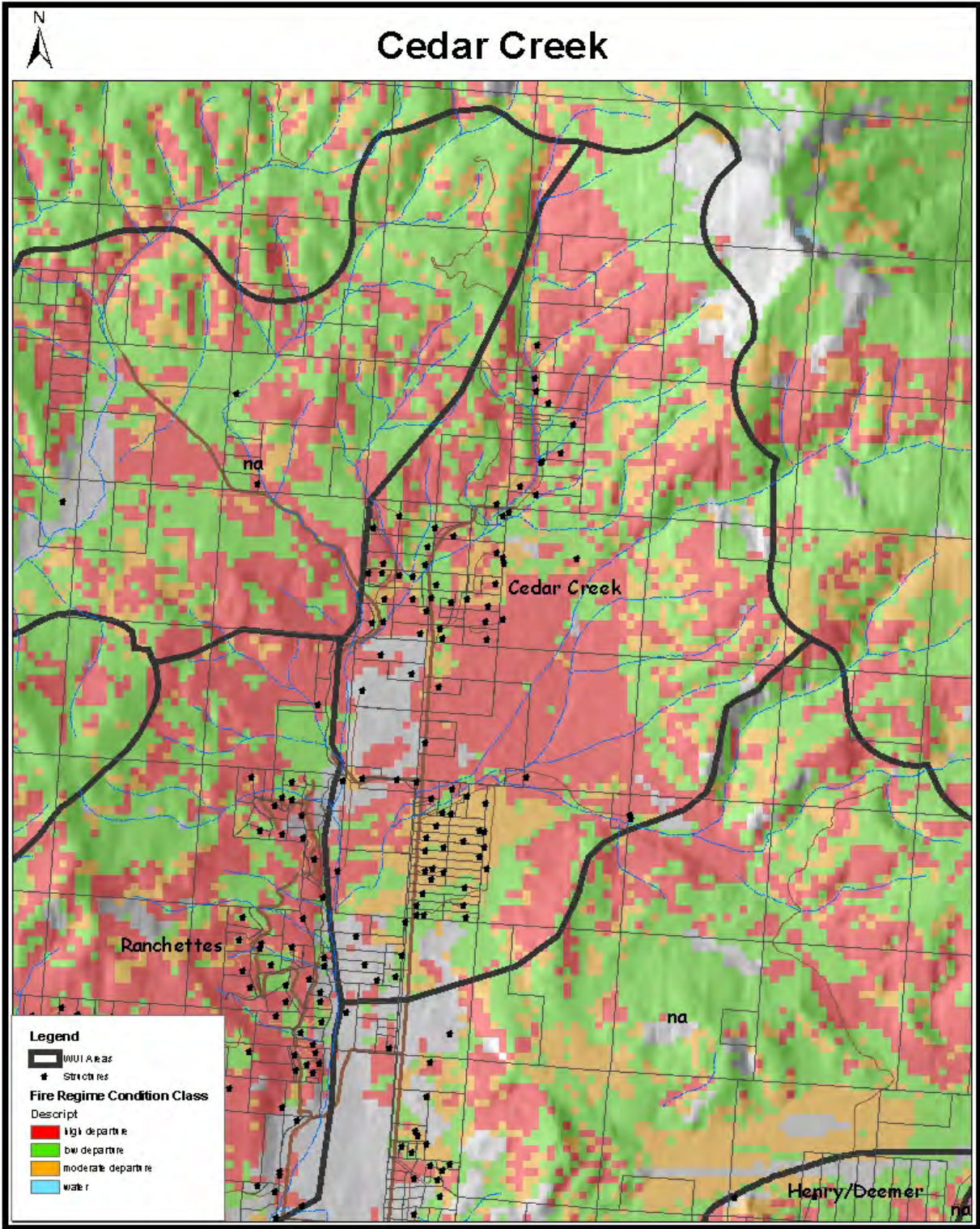
FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area			2
• Condition Class 0	Acres - %	1009 – 31%	
• Condition Class 1	Acres - %	248 – 8%	
• Condition Class 2	Acres - %	1725 – 54%	
• Condition Class 3	Acres - %	236 – 7%	
Condition Class Perimeter Adjacent To Area			1
• Condition Class 0	Miles - %	7 – 71%	
• Condition Class 1	Miles - %	1 – 10%	
• Condition Class 2	Miles - %	.6 – 6%	
• Condition Class 3	Miles - %	1 – 13%	
Topography			8
• Unsheltered Prevailing Winds	%	100%	
• Partially Sheltered To Prevailing Winds	%	0%	
• Sheltered From Prevailing Winds	%	0%	
Access (Ingress/Egress)			3
• Difficult	%	0%	
• Difficult/Easy Combination	%	20%	
• Easy	%	80%	
TOTAL FIRE RISK			14

GRAND TOTAL ALL RISK **16**

\$ VALUE AT RISK: *** \$1,454,562**

COMMENTS:



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING

3 of 28

AREA NAME: Cedar Creek **TOTAL ACRES:** 8,441
FIRE PROTECTION DISTRICT: Plains RFVD, MT DNRC, Lolo NF **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	90	3
Other structures (Businesses)*	Each	2	1
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	7558	4
High Value Improvements • • •	Each	0	0
TOTAL VALUE AT RISK			8

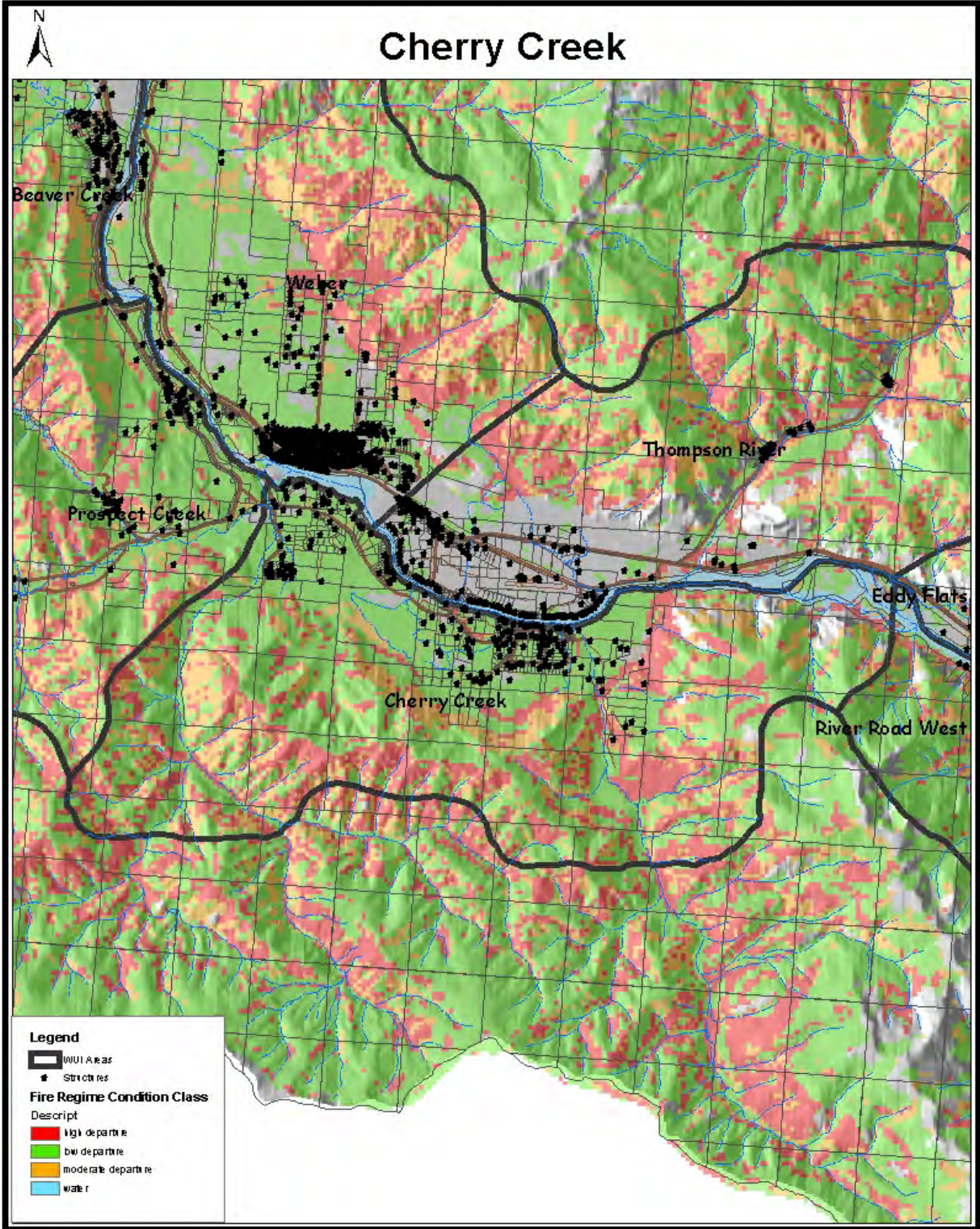
FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3	Acres - % Acres - % Acres - % Acres - %	284 – 3% 2490 – 30% 1709 – 20% 3955 – 47%	9
Condition Class Perimeter Adjacent To Area • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3	Miles - % Miles - % Miles - % Miles - %	3 – 28% 3 – 29% 1 – 7% 4 – 36%	4
Topography • Unsheltered Prevailing Winds • Partially Sheltered To Prevailing Winds • Sheltered From Prevailing Winds	% % %	80% 20% 0%	9
Access (Ingress/Egress) • Difficult • Difficult/Easy Combination • Easy	% % %	30% 50% 20%	7
TOTAL FIRE RISK			29

GRAND TOTAL ALL RISK **37**

\$ VALUE AT RISK: *** \$13,569,036**

COMMENTS:



(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING

OVERALL RATING
13 of 28

AREA NAME: Cherry Creek **TOTAL ACRES:** 19,820
FIRE PROTECTION DISTRICT: T. Falls VRFD, Lolo NF **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	202	7
Other structures (Businesses)*	Each	1	1
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	4413	2
High Value Improvements <ul style="list-style-type: none"> • Regional Powerline – 1.5 miles • Yellowstone Petroleum Pipeline Site • Electronic Site 	Each	1 1 1	1
TOTAL VALUE AT RISK			11

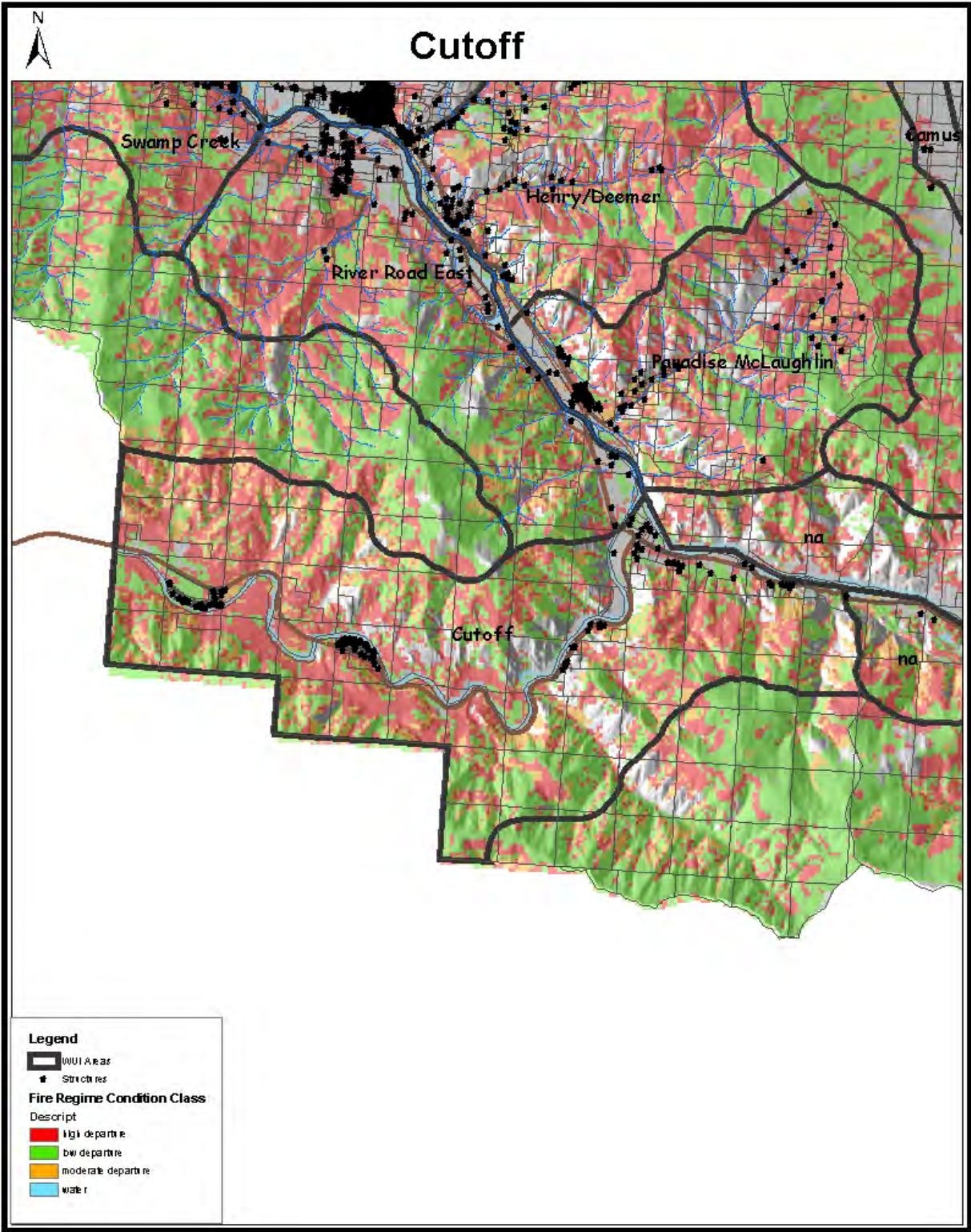
FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Acres - % Acres - % Acres - % Acres - %	774 – 4% 11055 – 56% 3226 – 16% 4787 – 24%	4
Condition Class Perimeter Adjacent To Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Miles - % Miles - % Miles - % Miles - %	9.5 – 37% 6 – 23% 1.6 – 6% 8.8 – 34%	3
Topography <ul style="list-style-type: none"> • Unsheltered Prevailing Winds • Partially Sheltered To Prevailing Winds • Sheltered From Prevailing Winds 	% % %	10% 70% 20%	5
Access (Ingress/Egress) <ul style="list-style-type: none"> • Difficult • Difficult/Easy Combination • Easy 	% % %	20% 70% 10%	7
TOTAL FIRE RISK			19

GRAND TOTAL ALL RISK **30**

\$ VALUE AT RISK: * \$20,047,646

COMMENTS:



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING
16 of 28

AREA NAME: Cutoff **TOTAL ACRES:** 30,111
FIRE PROTECTION DISTRICT: Lolo NF **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	96	3
Other structures (Businesses)*	Each	3	2
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	1957	1
High Value Improvements			
• Electronics Site	Each	1	1
•			
•			
TOTAL VALUE AT RISK			7

FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

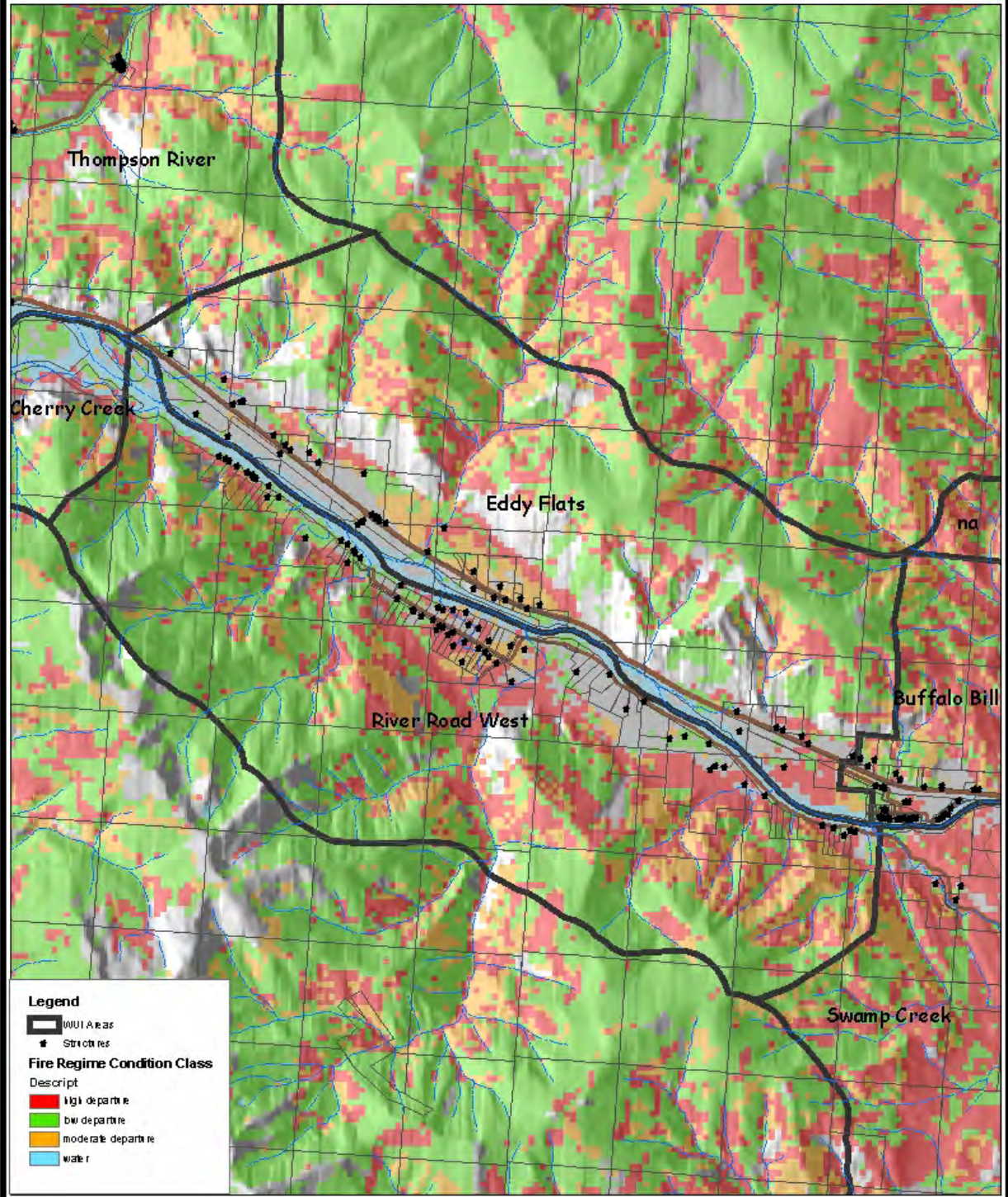
Value	Unit of Measure	Amount	Rating
Condition Class Within Area			
• Condition Class 0	Acres - %	2586 – 9%	8
• Condition Class 1	Acres - %	9196 – 31%	
• Condition Class 2	Acres - %	6813 – 23%	
• Condition Class 3	Acres - %	11434 – 38%	
Condition Class Perimeter Adjacent To Area			
• Condition Class 0	Miles - %	5.9 – 22%	3
• Condition Class 1	Miles - %	10.3 – 38%	
• Condition Class 2	Miles - %	2 – 7%	
• Condition Class 3	Miles - %	8.9 – 33%	
Topography			
• Unsheltered Prevailing Winds	%	80%	7
• Partially Sheltered To Prevailing Winds	%	20%	
• Sheltered From Prevailing Winds	%	0%	
Access (Ingress/Egress)			
• Difficult	%	10%	3
• Difficult/Easy Combination	%	20%	
• Easy	%	70%	
TOTAL FIRE RISK			21
GRAND TOTAL ALL RISK			28

\$ VALUE AT RISK: ***\$10,160,494**

COMMENTS:



Eddy Flats



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING

25 of 28

AREA NAME: Eddy Flats **TOTAL ACRES:** 10,562
FIRE PROTECTION DISTRICT: T. Falls RVFD, Lolo NF **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	37	1
Other structures (Businesses)*	Each	3	2
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	1044	1
High Value Improvements			
• Regional Powerline – 7 miles	Each	1	2
•			
•			
TOTAL VALUE AT RISK			6

FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area			
• Condition Class 0	Acres - %	2299 – 22%	3
• Condition Class 1	Acres - %	4135 – 39%	
• Condition Class 2	Acres - %	2310 – 22%	
• Condition Class 3	Acres - %	1815 – 17%	
Condition Class Perimeter Adjacent To Area			
• Condition Class 0	Miles - %	8.2 – 51%	1
• Condition Class 1	Miles - %	4.6 – 29%	
• Condition Class 2	Miles - %	1.2 – 7%	
• Condition Class 3	Miles - %	2.1 – 13%	
Topography			
• Unsheltered Prevailing Winds	%	80%	8
• Partially Sheltered To Prevailing Winds	%	20%	
• Sheltered From Prevailing Winds	%	0%	
Access (Ingress/Egress)			
• Difficult	%	0%	3
• Difficult/Easy Combination	%	20%	
• Easy	%	80%	
TOTAL FIRE RISK			15

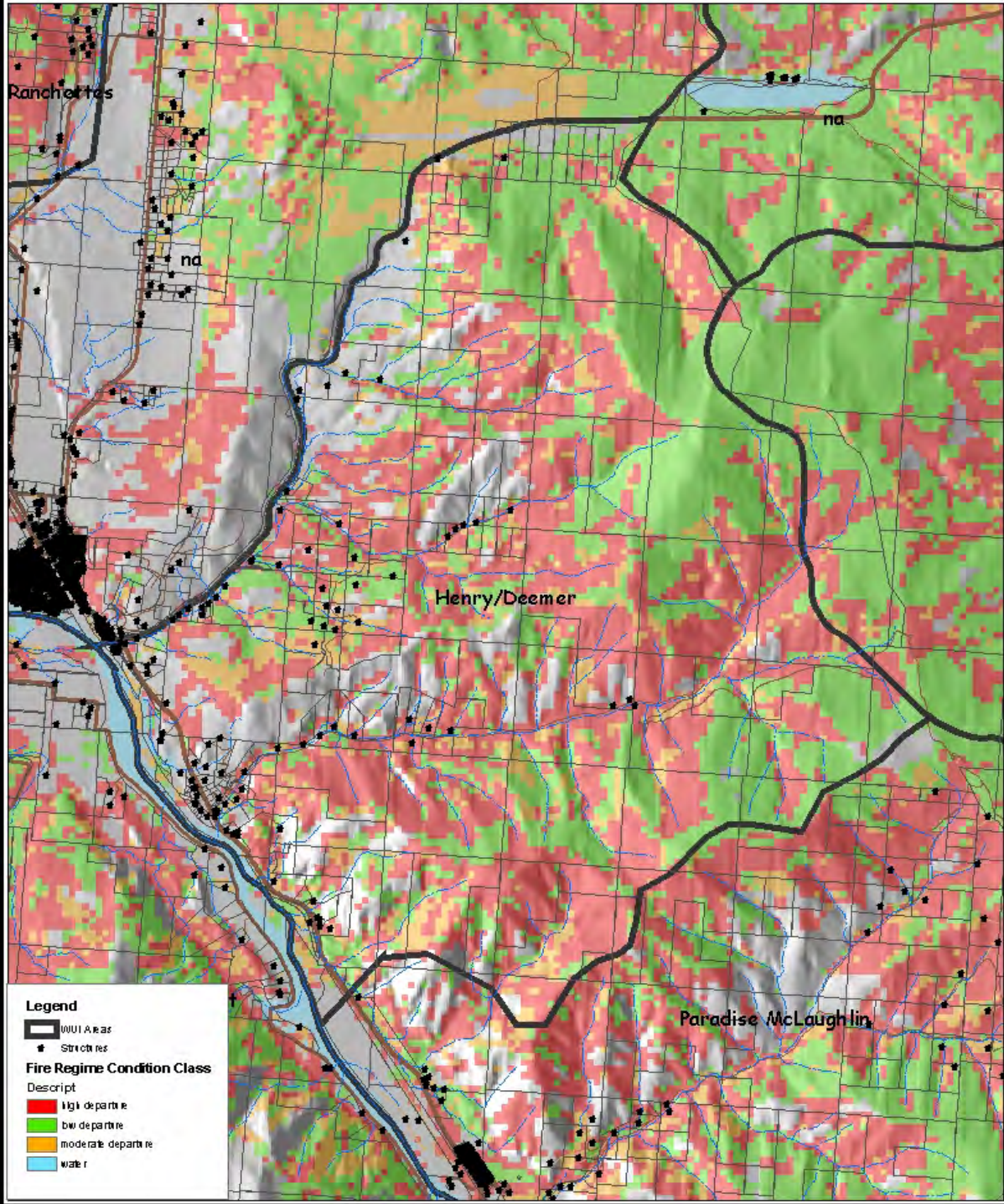
GRAND TOTAL ALL RISK **21**

\$ VALUE AT RISK: ***\$4,591,948**

COMMENTS:



Henry / Deemer



(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING

OVERALL RATING

12 of 28

AREA NAME: Henry/Deemer **TOTAL ACRES:** 19,385
FIRE PROTECTION DISTRICT: Plains RVFD, MT DNRC **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	94	3
Other structures (Businesses)*	Each	0	1
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	4707	2
High Value Improvements	Each	0	0
•			
•			
•			
TOTAL VALUE AT RISK			6

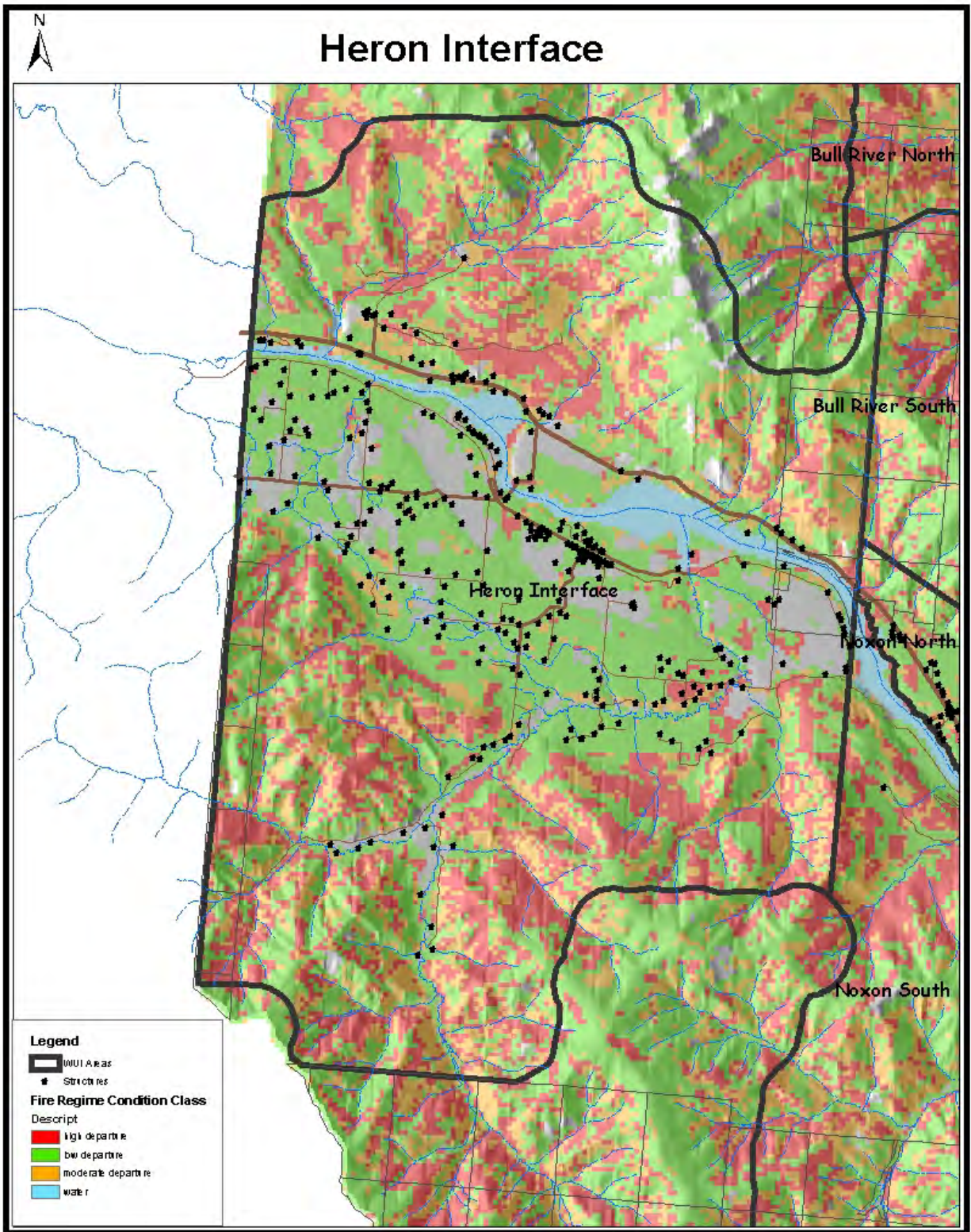
FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area			8
• Condition Class 0	Acres - %	404 – 2%	
• Condition Class 1	Acres - %	6006 – 31%	
• Condition Class 2	Acres - %	5091 – 26%	
• Condition Class 3	Acres - %	7917 – 41%	
Condition Class Perimeter Adjacent To Area			3
• Condition Class 0	Miles - %	9 – 46%	
• Condition Class 1	Miles - %	3 – 16%	
• Condition Class 2	Miles - %	1 – 6%	
• Condition Class 3	Miles - %	6 – 32%	
Topography			8
• Unsheltered Prevailing Winds	%	80%	
• Partially Sheltered To Prevailing Winds	%	20%	
• Sheltered From Prevailing Winds	%	0%	
Access (Ingress/Egress)			6
• Difficult	%	50%	
• Difficult/Easy Combination	%	40%	
• Easy	%	10%	
TOTAL FIRE RISK			25

GRAND TOTAL ALL RISK **31**

\$ VALUE AT RISK: ***\$11,285,194**

COMMENTS:



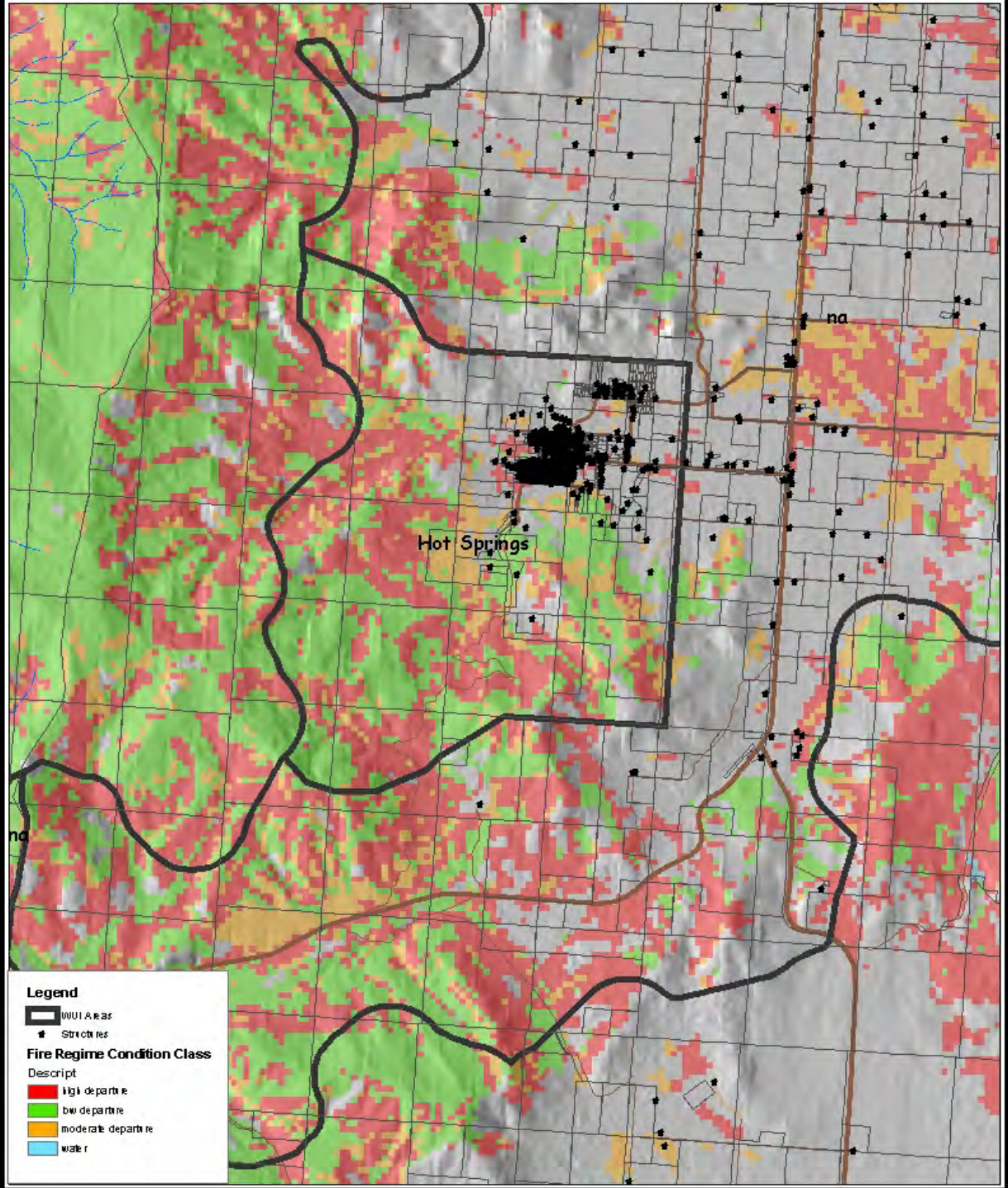
(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING

OVERALL RATING
4 of 28

AREA NAME: Heron Interface		TOTAL ACRES: 45,081	
FIRE PROTECTION DISTRICT: Heron VFD, Kootenai NF		YEAR RATED: 2004	
VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk			
Value	Unit of Measure	Amount	Rating
Residences*	Each	328	9
Other structures (Businesses)*	Each	15	6
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	10707	5
High Value Improvements <ul style="list-style-type: none"> • Regional Powerlines – 16 miles • • 	Each	2	3
TOTAL VALUE AT RISK			17
FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk			
Value	Unit of Measure	Amount	Rating
Condition Class Within Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Acres - % Acres - % Acres - % Acres - %	2198 – 5% 21188 – 47% 11003 – 24% 10687 – 24%	4
Condition Class Perimeter Adjacent To Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Miles - % Miles - % Miles - % Miles - %	2 – 7% 12 – 43% 6 – 21% 8 – 28%	3
Topography <ul style="list-style-type: none"> • Unsheltered Prevailing Winds • Partially Sheltered To Prevailing Winds • Sheltered From Prevailing Winds 	% % %	40% 50% 10%	7
Access (Ingress/Egress) <ul style="list-style-type: none"> • Difficult • Difficult/Easy Combination • Easy 	% % %	5% 60% 35%	6
TOTAL FIRE RISK			20
GRAND TOTAL ALL RISK			37
\$ VALUE AT RISK:			*\$38,885,794
COMMENTS:			



Hot Springs



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING

19 of 28

AREA NAME: Hot Springs

TOTAL ACRES: 8,931

FIRE PROTECTION DISTRICT: Hot Springs RVFD, CS&KT

YEAR RATED: 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	107	3
Other structures (Businesses)*	Each	0	0
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	413	1
High Value Improvements	Each	0	0
•			
•			
•			
TOTAL VALUE AT RISK			4

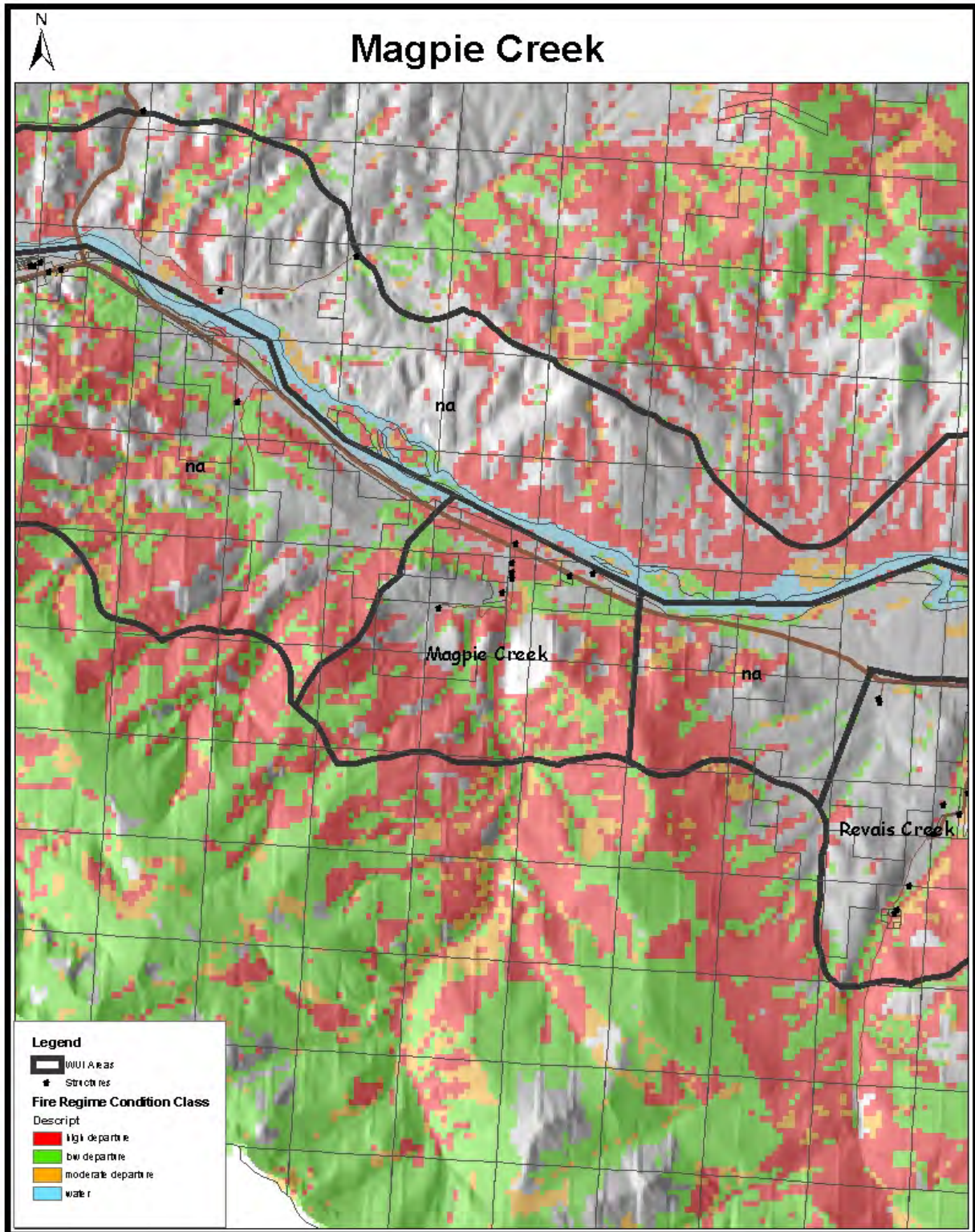
FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area	Acres - %	750 – 8%	6
• Condition Class 0		2698 – 30%	
• Condition Class 1		2942 – 33%	
• Condition Class 2		2542 – 28%	
• Condition Class 3			
Condition Class Perimeter Adjacent To Area	Miles - %	5 – 42%	4
• Condition Class 0		2 – 19%	
• Condition Class 1		0 – 0%	
• Condition Class 2		5 – 39%	
• Condition Class 3			
Topography	%	80%	8
• Unsheltered Prevailing Winds		20%	
• Partially Sheltered To Prevailing Winds		0%	
• Sheltered From Prevailing Winds			
Access (Ingress/Egress)	%	20%	5
• Difficult		50%	
• Difficult/Easy Combination		30%	
• Easy			
TOTAL FIRE RISK			23
GRAND TOTAL ALL RISK			27

\$ VALUE AT RISK:

***\$9,176,746**

COMMENTS:



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING

14 of 28

AREA NAME: Magpie Creek **TOTAL ACRES:** 3,884
FIRE PROTECTION DISTRICT: Dixon RVFD, CS&KT **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	8	1
Other structures (Businesses)*	Each	0	0
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	231	1
High Value Improvements • • •	Each	0	0
TOTAL VALUE AT RISK			2

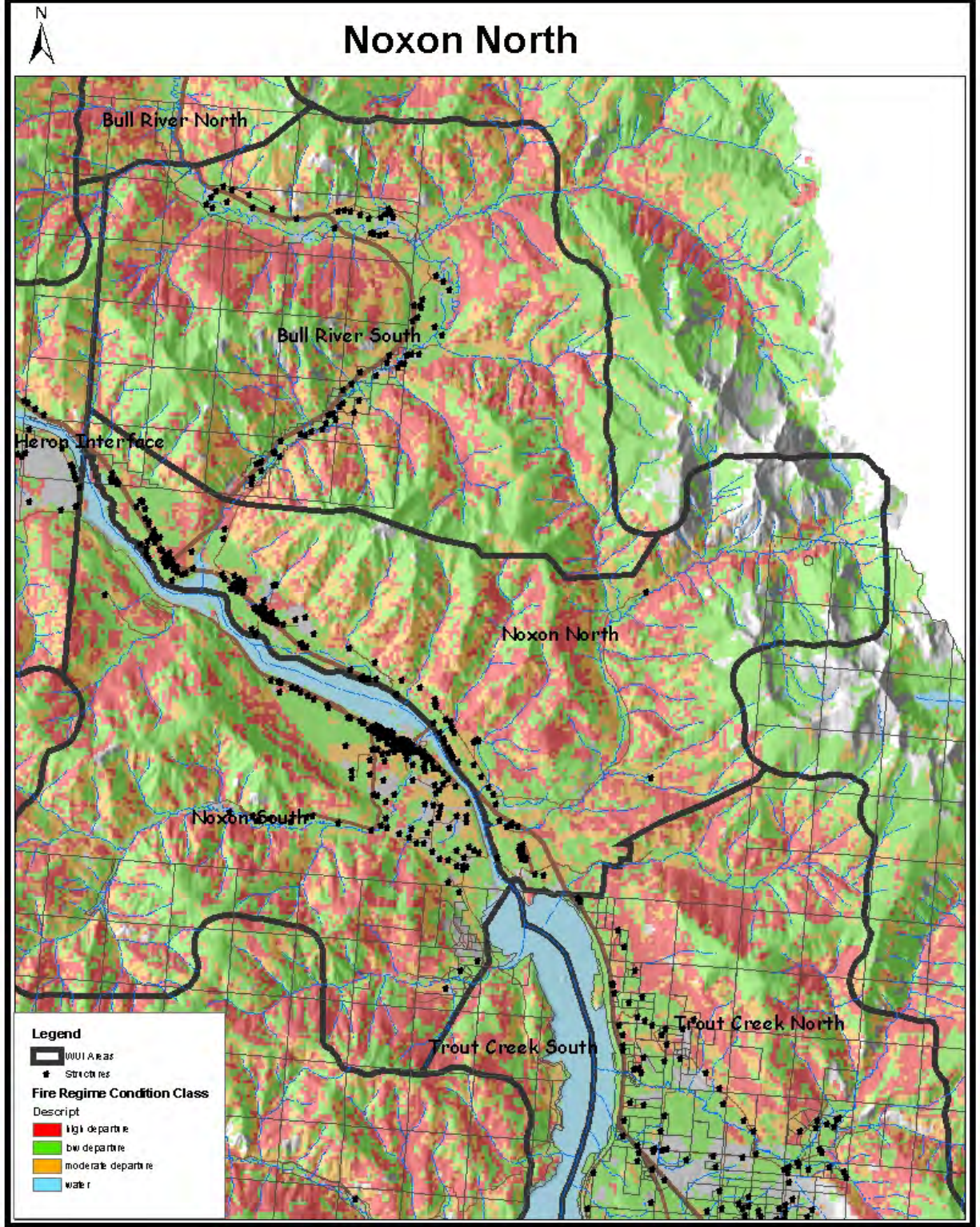
FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3	Acres - % Acres - % Acres - % Acres - %	278 – 7% 805 – 21% 929 – 24% 1857 – 48%	9
Condition Class Perimeter Adjacent To Area • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3	Miles - % Miles - % Miles - % Miles - %	2.1 – 25% 1.4 – 17% .2 – 2% 4.6 – 55%	5
Topography • Unsheltered Prevailing Winds • Partially Sheltered To Prevailing Winds • Sheltered From Prevailing Winds	% % %	0% 100% 0%	6
Access (Ingress/Egress) • Difficult • Difficult/Easy Combination • Easy	% % %	10% 80% 10%	7
TOTAL FIRE RISK			27

GRAND TOTAL ALL RISK **29**

\$ VALUE AT RISK: ***\$834,602**

COMMENTS:



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING

7 of 28

AREA NAME: Noxon North **TOTAL ACRES:** 26,884
FIRE PROTECTION DISTRICT: Noxon RVFD, Kooetenai NF **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	214	7
Other structures (Businesses)*	Each	20	8
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	4334	2
High Value Improvements			
• Regional Powerline – 9.75 miles	Each	1	3
• Electronic Site		1	
•			
TOTAL VALUE AT RISK			20

FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area			4
• Condition Class 0	Acres - %	2490 – 9%	
• Condition Class 1	Acres - %	11974 – 44%	
• Condition Class 2	Acres - %	5890 – 22%	
• Condition Class 3	Acres - %	6556 – 24%	
Condition Class Perimeter Adjacent To Area			1
• Condition Class 0	Miles - %	16 – 53%	
• Condition Class 1	Miles - %	9 – 29%	
• Condition Class 2	Miles - %	2 – 6%	
• Condition Class 3	Miles - %	4 – 12%	
Topography			5
• Unsheltered Prevailing Winds	%	40%	
• Partially Sheltered To Prevailing Winds	%	50%	
• Sheltered From Prevailing Winds	%	10%	
Access (Ingress/Egress)			5
• Difficult	%	30%	
• Difficult/Easy Combination	%	40%	
• Easy	%	30%	
TOTAL FIRE RISK			15

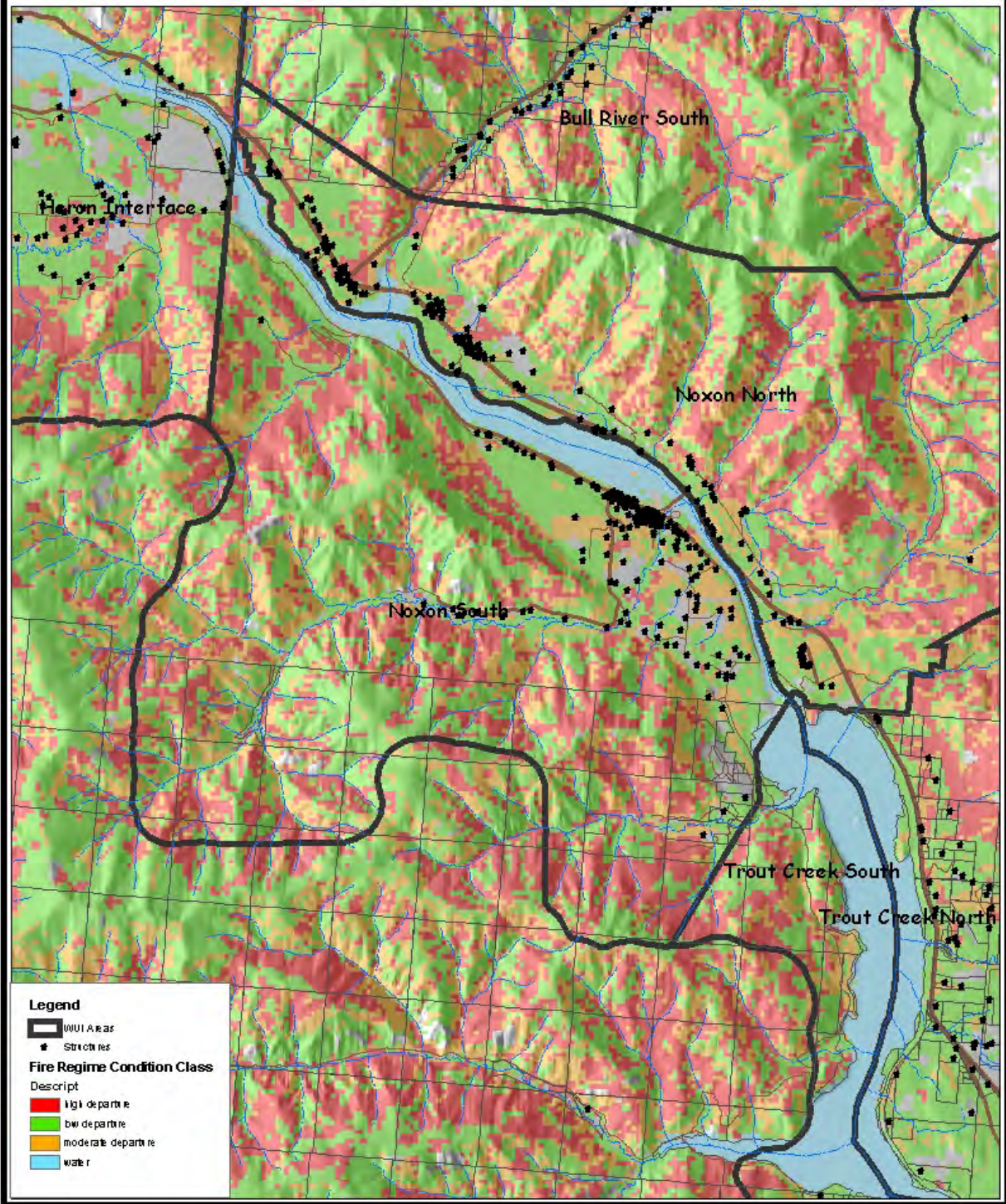
GRAND TOTAL ALL RISK **35**

\$ VALUE AT RISK: ***\$25,956,428**

COMMENTS:



Noxon South



(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING

OVERALL RATING

2 of 28

AREA NAME: Noxon South **TOTAL ACRES:** 2,6375
FIRE PROTECTION DISTRICT: Noxon RVFD, Kootenai NR **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	185	6
Other structures (Businesses)*	Each	17	7
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	3435	2
High Value Improvements <ul style="list-style-type: none"> • Regional Powerline – 6.5 miles • • 	Each	1	2

TOTAL VALUE AT RISK **17**

FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Acres - % Acres - % Acres - % Acres - %	1909 – 7% 10979 – 42% 5772 – 22% 7719 – 29%	6
Condition Class Perimeter Adjacent To Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Miles - % Miles - % Miles - % Miles - %	10 – 40% 5 – 20% 2 – 8% 8 – 32%	3
Topography <ul style="list-style-type: none"> • Unsheltered Prevailing Winds • Partially Sheltered To Prevailing Winds • Sheltered From Prevailing Winds 	% % %	50% 40% 10%	7
Access (Ingress/Egress) <ul style="list-style-type: none"> • Difficult • Difficult/Easy Combination • Easy 	% % %	10% 50% 40%	5

TOTAL FIRE RISK **21**

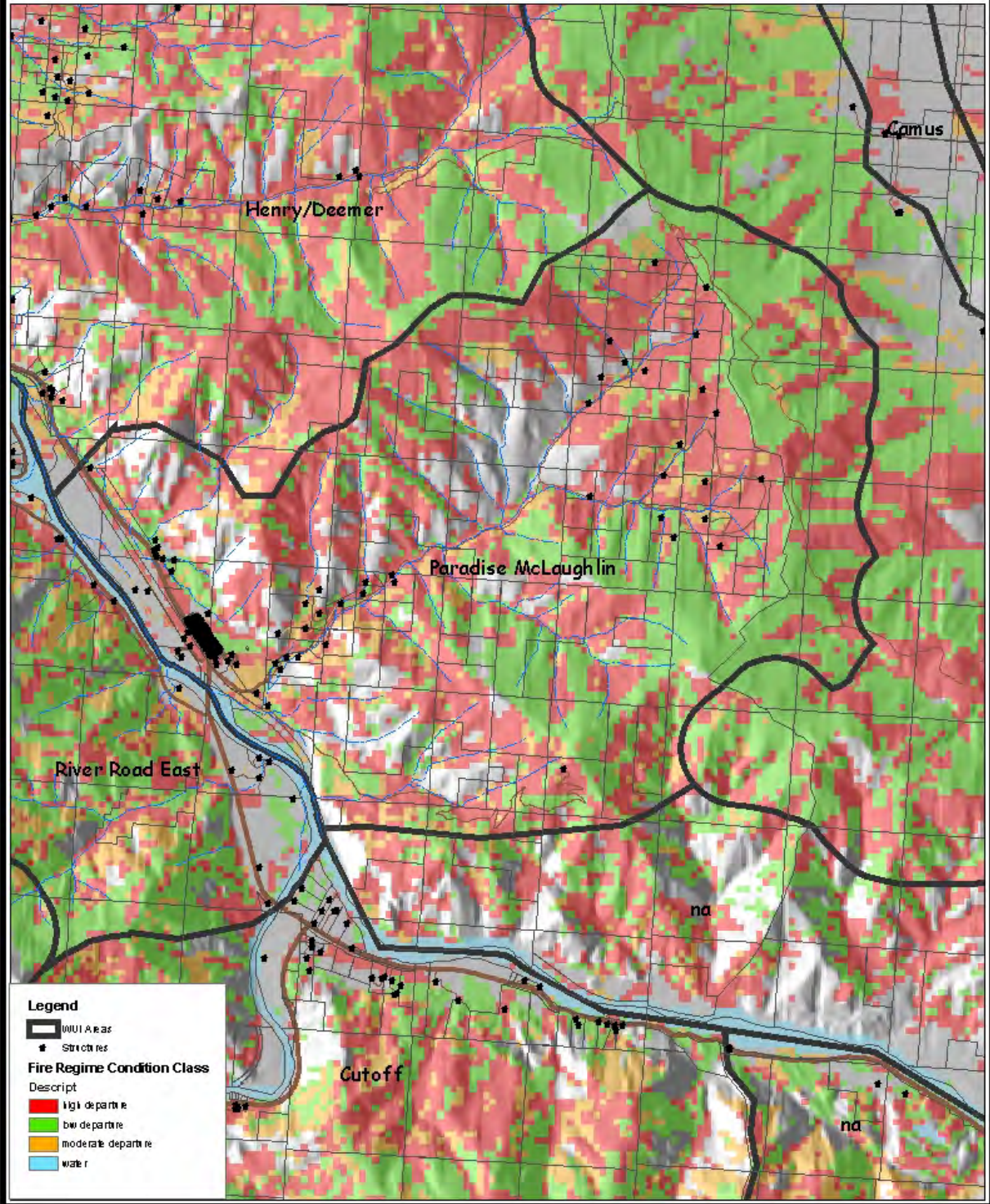
GRAND TOTAL ALL RISK **38**

\$ VALUE AT RISK: ***\$22,135,270**

COMMENTS:



Paradise McLaughlin



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING

9 of 28

AREA NAME: Paradise- McLaughlin **TOTAL ACRES:** 15,707
FIRE PROTECTION DISTRICT: Plains/Paradise RVFD, MT DNRC **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	41	2
Other structures (Businesses)*	Each	0	0
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	7914	4
High Value Improvements • • •	Each	0	0
TOTAL VALUE AT RISK			6

FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3	Acres - % Acres - % Acres - % Acres - %	955 – 6% 4917 – 31% 3000 – 19% 6821 – 43%	8
Condition Class Perimeter Adjacent To Area • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3	Miles - % Miles - % Miles - % Miles - %	4 – 24% 5 – 32% .5 – 3% 6 – 41%	4
Topography • Unsheltered Prevailing Winds • Partially Sheltered To Prevailing Winds • Sheltered From Prevailing Winds	% % %	80% 20% 0%	8
Access (Ingress/Egress) • Difficult • Difficult/Easy Combination • Easy	% % %	60% 30% 10%	6
TOTAL FIRE RISK			26

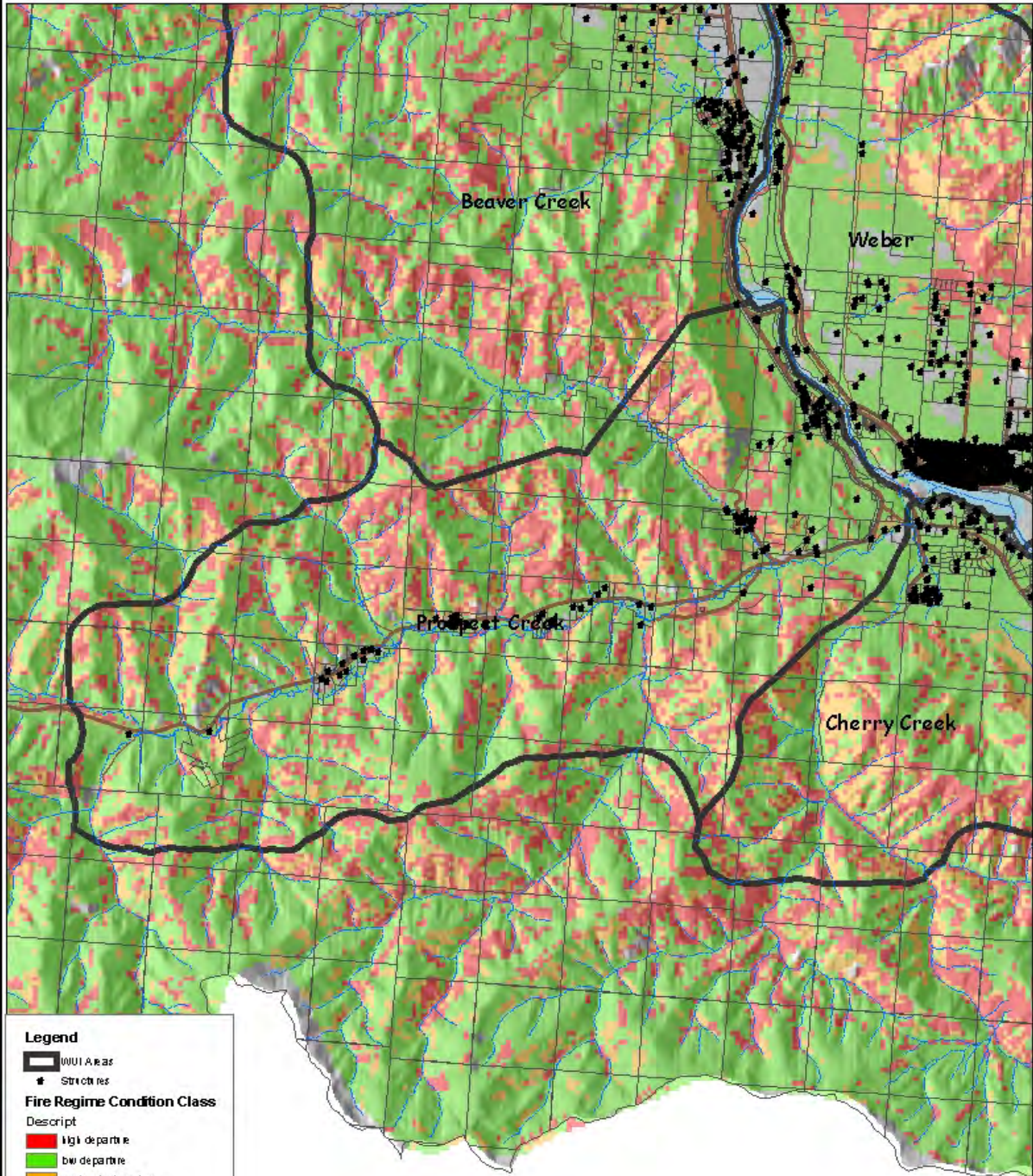
GRAND TOTAL ALL RISK **32**

\$ VALUE AT RISK: ***\$9,271,088**

COMMENTS:



Prospect



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING

11 of 28

AREA NAME: Prospect Creek **TOTAL ACRES:** 2,4171
FIRE PROTECTION DISTRICT: T. Falls RVFD **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	109	3
Other structures (Businesses)*	Each	9	4
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	6023	3
High Value Improvements			
• Regional Powerlines – 25 miles	Each	3	4
• Yellowstone Pipeline Access Points		2	
• Electronic Site		1	
TOTAL VALUE AT RISK			14

FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area			4
• Condition Class 0	Acres - %	88 – 1%	
• Condition Class 1	Acres - %	14554 – 59%	
• Condition Class 2	Acres - %	3882 – 16%	
• Condition Class 3	Acres - %	5638 – 23%	
Condition Class Perimeter Adjacent To Area			4
• Condition Class 0	Miles - %	2.1 – 25%	
• Condition Class 1	Miles - %	1.4 – 17%	
• Condition Class 2	Miles - %	.2 – 2%	
• Condition Class 3	Miles - %	4.6 – 55%	
Topography			5
• Unsheltered Prevailing Winds	%	50%	
• Partially Sheltered To Prevailing Winds	%	40%	
• Sheltered From Prevailing Winds	%	10%	
Access (Ingress/Egress)			5
• Difficult	%	10%	
• Difficult/Easy Combination	%	30%	
• Easy	%	60%	
TOTAL FIRE RISK			18

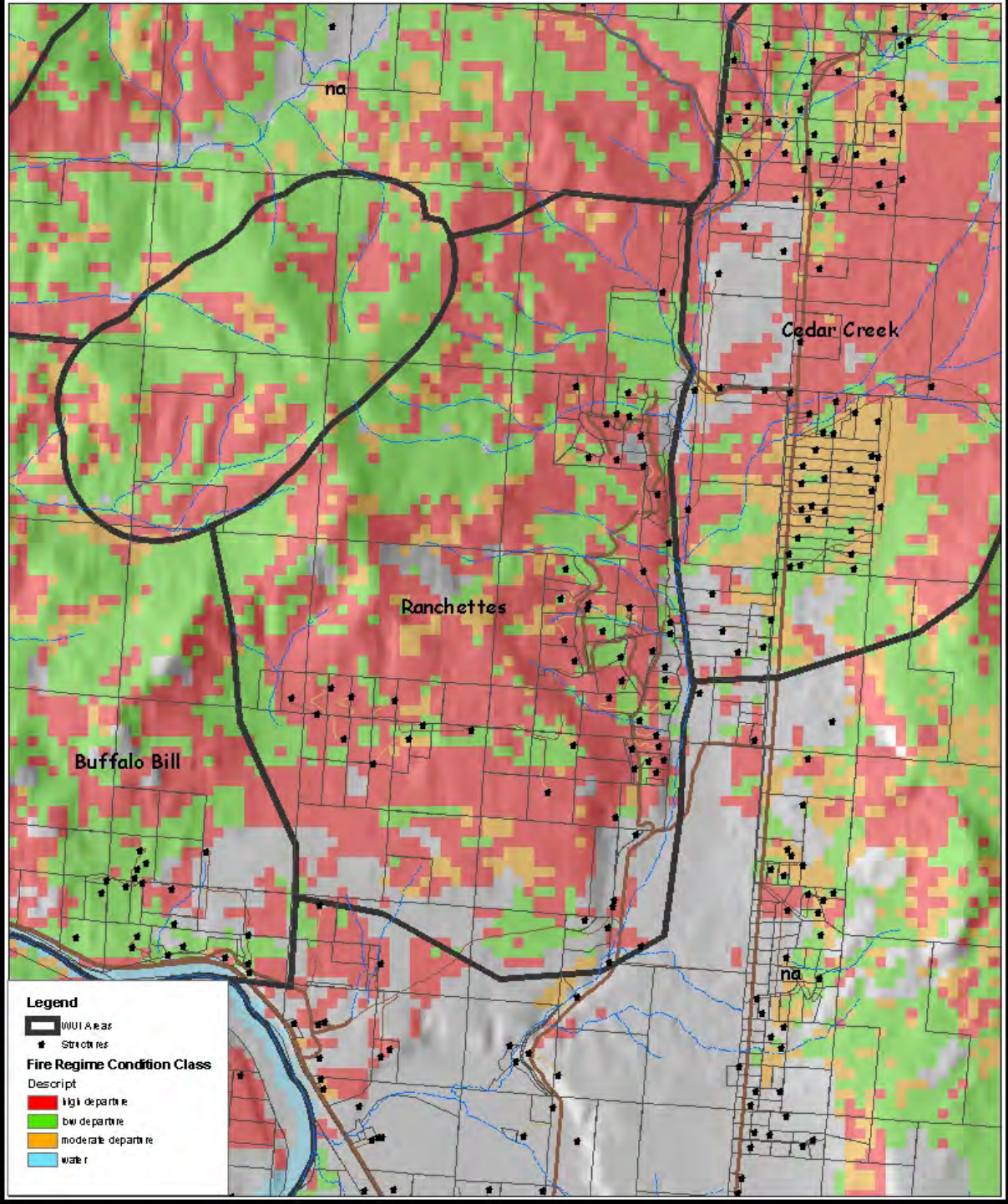
GRAND TOTAL ALL RISK **32**

\$ VALUE AT RISK: ***\$15,755,166**

COMMENTS:



Ranchettes



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING

5 of 28

AREA NAME: Ranchettes **TOTAL ACRES:** 5,268
FIRE PROTECTION DISTRICT: Plains/Paradise RVFD, MT DNRC **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	60	2
Other structures (Businesses)*	Each	0	0
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	4303	2
High Value Improvements • • •	Each	0	0
TOTAL VALUE AT RISK			4

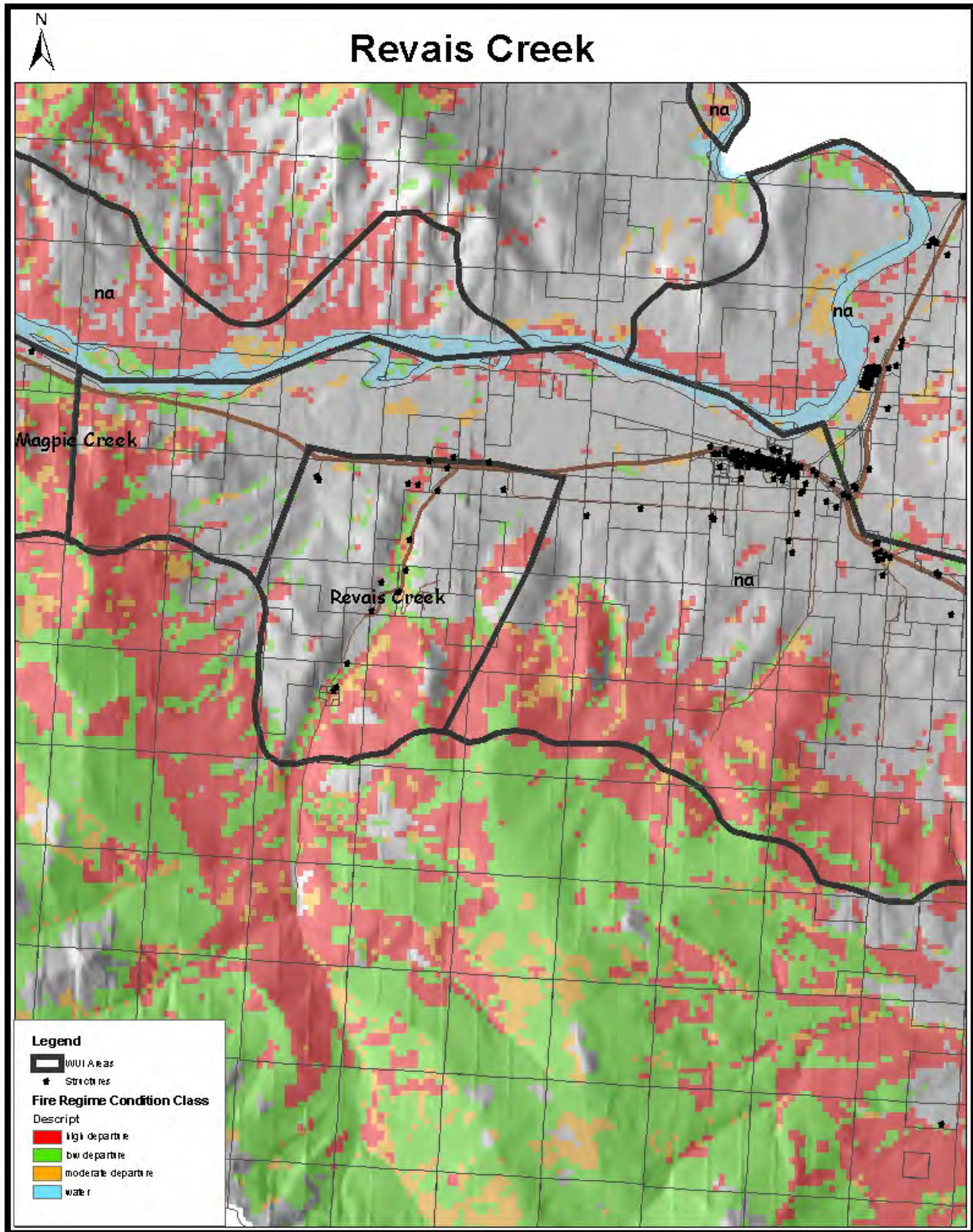
FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3	Acres - % Acres - % Acres - % Acres - %	120 – 2% 1467 – 28% 842 – 16% 2834 – 54%	9
Condition Class Perimeter Adjacent To Area • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3	Miles - % Miles - % Miles - % Miles - %	3.5 – 32% 2.1 – 19% .4 – 4% 5.1 – 46%	5
Topography • Unsheltered Prevailing Winds • Partially Sheltered To Prevailing Winds • Sheltered From Prevailing Winds	% % %	50% 50% 0%	7
Access (Ingress/Egress) • Difficult • Difficult/Easy Combination • Easy	% % %	50% 30% 20%	6
TOTAL FIRE RISK			27

GRAND TOTAL ALL RISK **31**

\$ VALUE AT RISK: ***\$8,166,826**

COMMENTS:



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING

26 of 28

AREA NAME: Revais Creek **TOTAL ACRES:** 4,255
FIRE PROTECTION DISTRICT: Dixon RVFD, CS%KT **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	16	1
Other structures (Businesses)*	Each	1	1
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	307	1
High Value Improvements • • •	Each	0	0
TOTAL VALUE AT RISK			3

FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3	Acres - % Acres - % Acres - % Acres - %	144 – 3% 402 – 9% 2682 – 63% 1025 – 24%	4
Condition Class Perimeter Adjacent To Area • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3	Miles - % Miles - % Miles - % Miles - %	4.6 – 53% 1.3 – 15% .2 – 2% 2.5 – 29%	3
Topography • Unsheltered Prevailing Winds • Partially Sheltered To Prevailing Winds • Sheltered From Prevailing Winds	% % %	0% 90% 10%	5
Access (Ingress/Egress) • Difficult • Difficult/Easy Combination • Easy	% % %	50% 40% 10%	5
TOTAL FIRE RISK			17

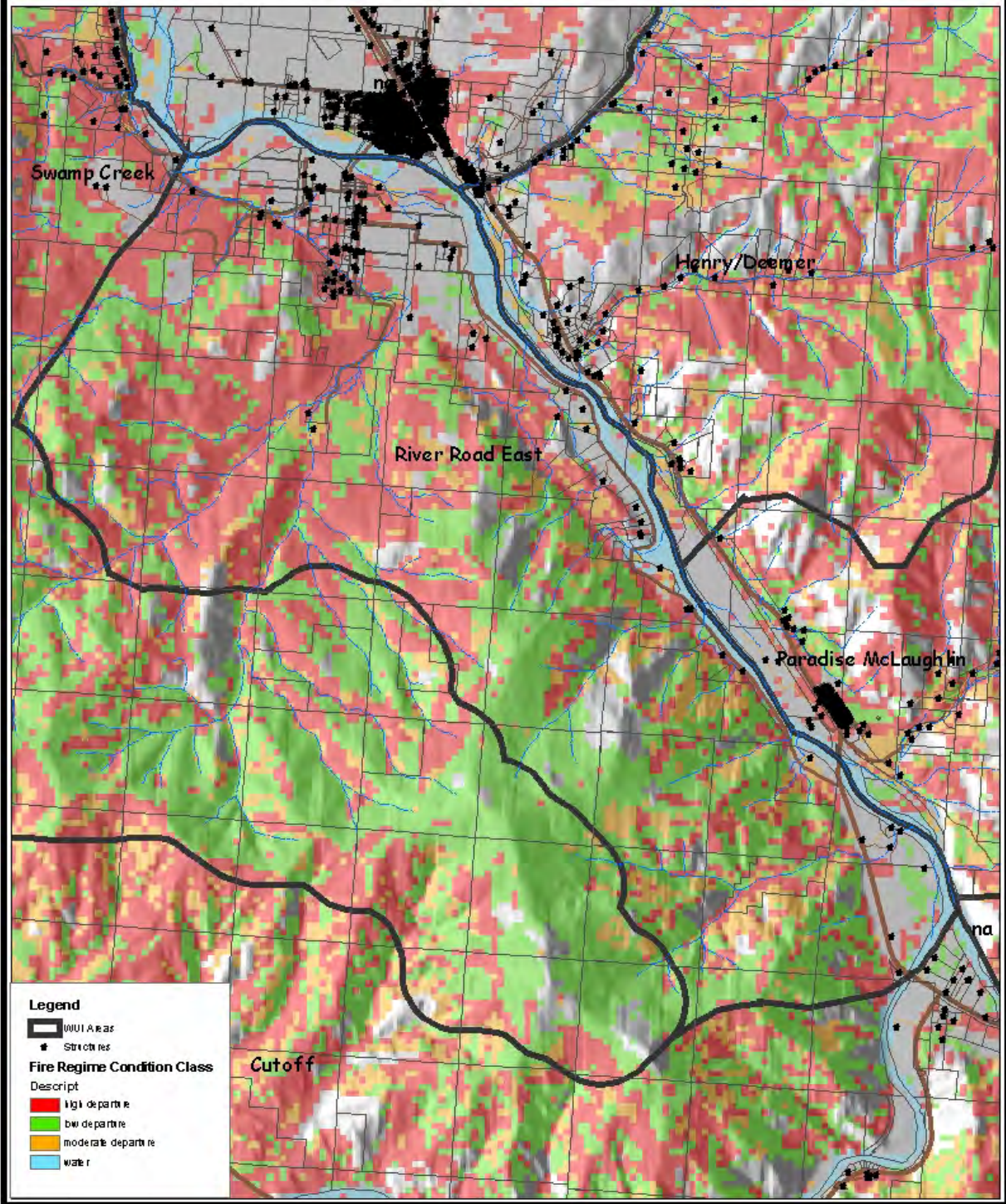
GRAND TOTAL ALL RISK **20**

\$ VALUE AT RISK: ***\$1,804,194**

COMMENTS:



River Road East



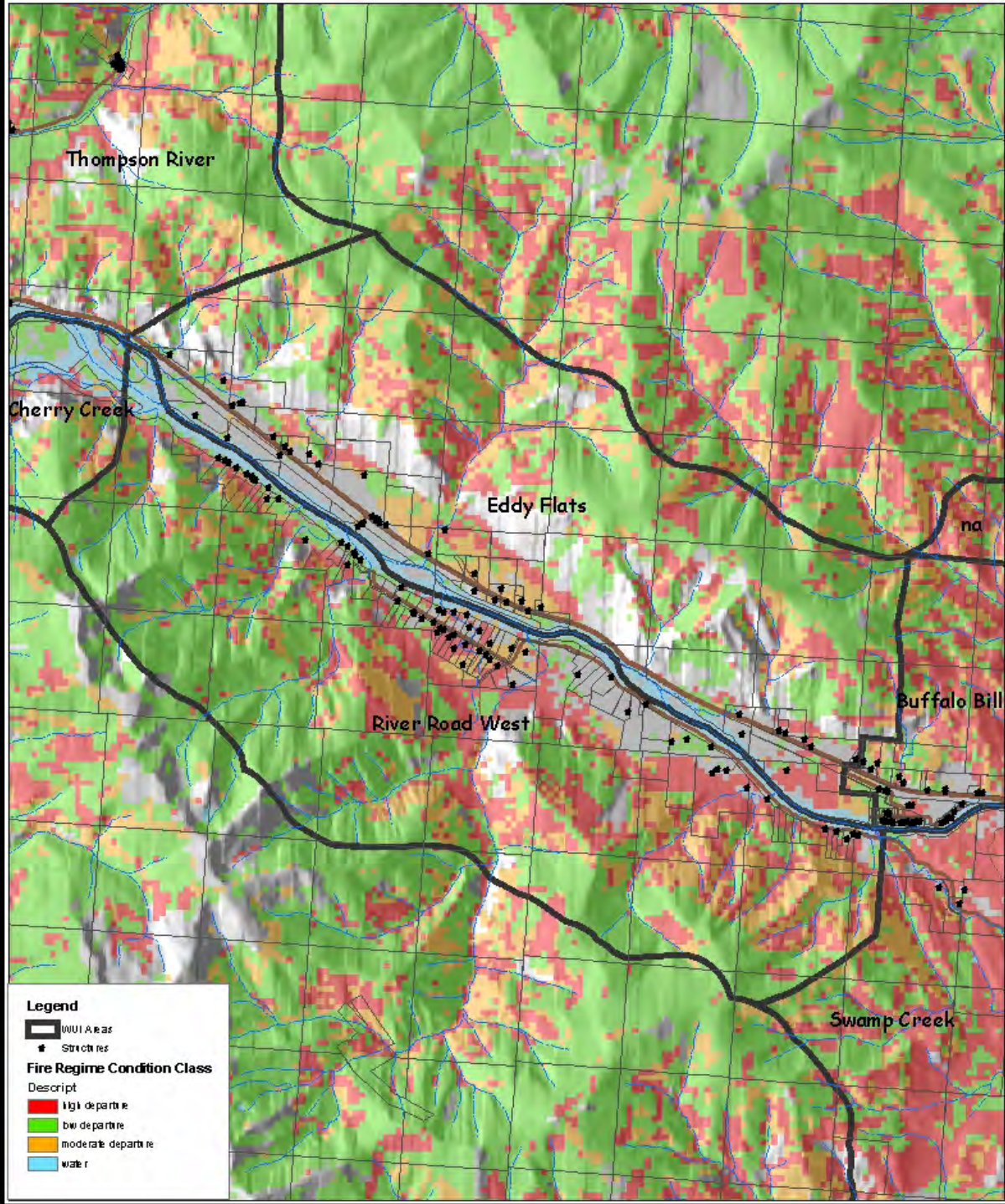
(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING

OVERALL RATING
15 of 28

AREA NAME: River Road East		TOTAL ACRES: 15,630	
FIRE PROTECTION DISTRICT: Plains/Paradise RVFD, MT DNRC, Lolo NF		YEAR RATED: 2004	
VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk			
Value	Unit of Measure	Amount	Rating
Residences*	Each	90	3
Other structures (Businesses)*	Each	0	0
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	9729	5
High Value Improvements • • •	Each	0	0
TOTAL VALUE AT RISK			8
FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk			
Value	Unit of Measure	Amount	Rating
Condition Class Within Area • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3	Acres - % Acres - % Acres - % Acres - %	1352 – 9% 4965 – 32% 3482 – 22% 5830 – 37%	8
Condition Class Perimeter Adjacent To Area • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3	Miles - % Miles - % Miles - % Miles - %	11.3 – 56% 4 – 20% .5 – 2% 4.3 – 21%	2
Topography • Unsheltered Prevailing Winds • Partially Sheltered To Prevailing Winds • Sheltered From Prevailing Winds	% % %	30% 70% 0%	6
Access (Ingress/Egress) • Difficult • Difficult/Easy Combination • Easy	% % %	10% 40% 50%	5
TOTAL FIRE RISK			21
GRAND TOTAL ALL RISK			29
\$ VALUE AT RISK:			*\$14,679,918
COMMENTS:			



River Road West



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING

21 of 28

AREA NAME: River Road West **TOTAL ACRES:** 11,471
FIRE PROTECTION DISTRICT: Lolo NF **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	62	2
Other structures (Businesses)*	Each	0	0
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	828	1
High Value Improvements <ul style="list-style-type: none"> • Regional Powerlines – 21.5 miles • • 	Each	3	4
TOTAL VALUE AT RISK			7

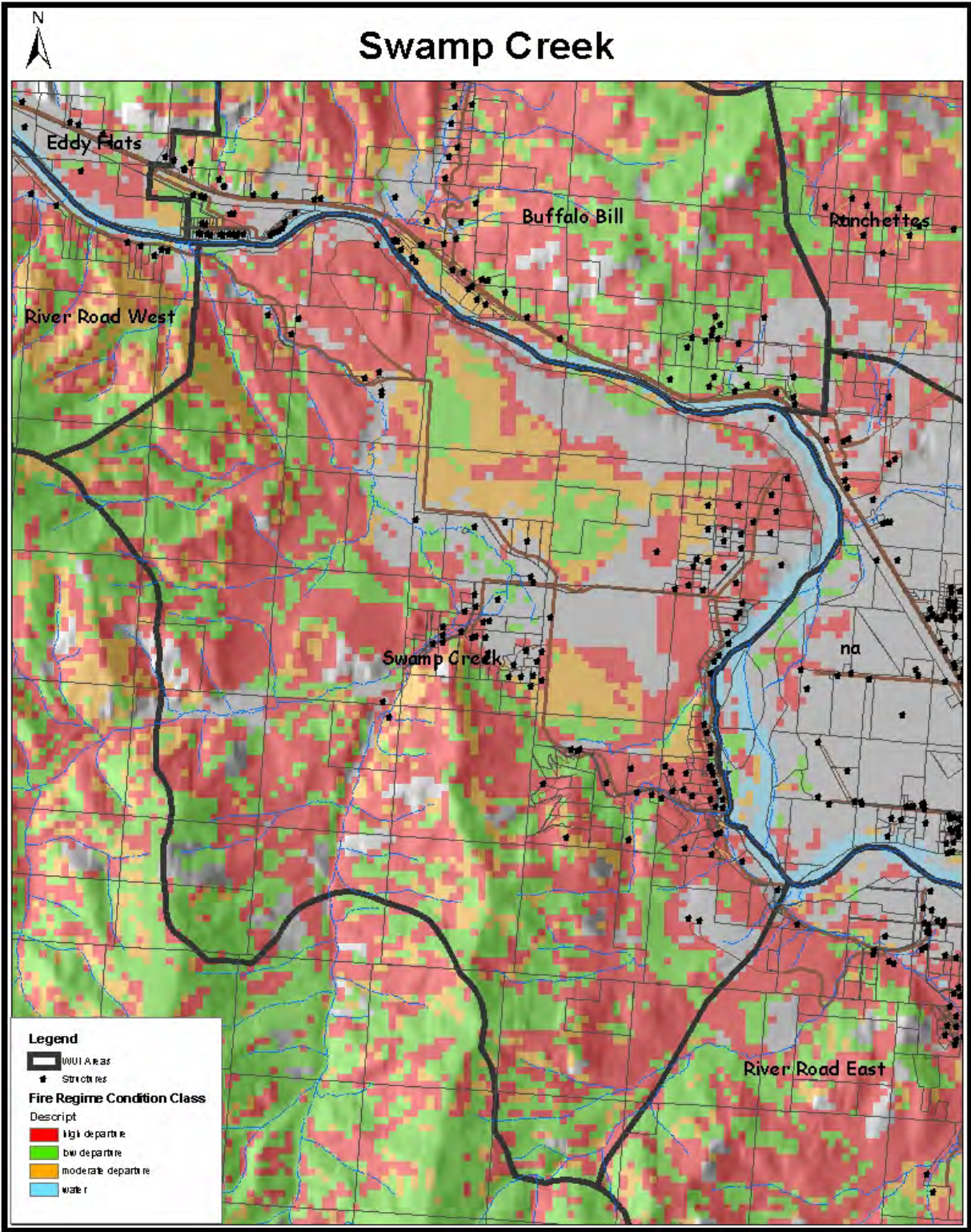
FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Acres - % Acres - % Acres - % Acres - %	1056 – 9% 5304 – 46% 2377 – 21% 2740 – 24%	4
Condition Class Perimeter Adjacent To Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Miles - % Miles - % Miles - % Miles - %	9.5 – 49% 7.3 – 38% 1.3 – 7% 1.2 – 6%	1
Topography <ul style="list-style-type: none"> • Unsheltered Prevailing Winds • Partially Sheltered To Prevailing Winds • Sheltered From Prevailing Winds 	% % %	20% 70% 10%	6
Access (Ingress/Egress) <ul style="list-style-type: none"> • Difficult • Difficult/Easy Combination • Easy 	% % %	80% 20% 0%	8
TOTAL FIRE RISK			19

GRAND TOTAL ALL RISK **26**

\$ VALUE AT RISK: ***\$5,754,176**

COMMENTS:



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING

10 of 28

AREA NAME: Swamp Creek **TOTAL ACRES:** 15,938
FIRE PROTECTION DISTRICT: Plains/Paradise RVFD, MT DNRC, Lolo NF **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	111	3
Other structures (Businesses)*	Each	0	0
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	9973	5
High Value Improvements <ul style="list-style-type: none"> • Regional Powerlines – 10.6 miles • • 	Each	3	3
TOTAL VALUE AT RISK			11

FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Acres - % Acres - % Acres - % Acres - %	526 – 3% 3743 – 23% 4543 – 28% 7133 – 45%	8
Condition Class Perimeter Adjacent To Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Miles - % Miles - % Miles - % Miles - %	8.9 – 48% 4.9 – 27% 1 – 5% 3.6 – 20%	2
Topography <ul style="list-style-type: none"> • Unsheltered Prevailing Winds • Partially Sheltered To Prevailing Winds • Sheltered From Prevailing Winds 	% % %	60% 40% 0%	6
Access (Ingress/Egress) <ul style="list-style-type: none"> • Difficult • Difficult/Easy Combination • Easy 	% % %	10% 30% 60%	5
TOTAL FIRE RISK			21

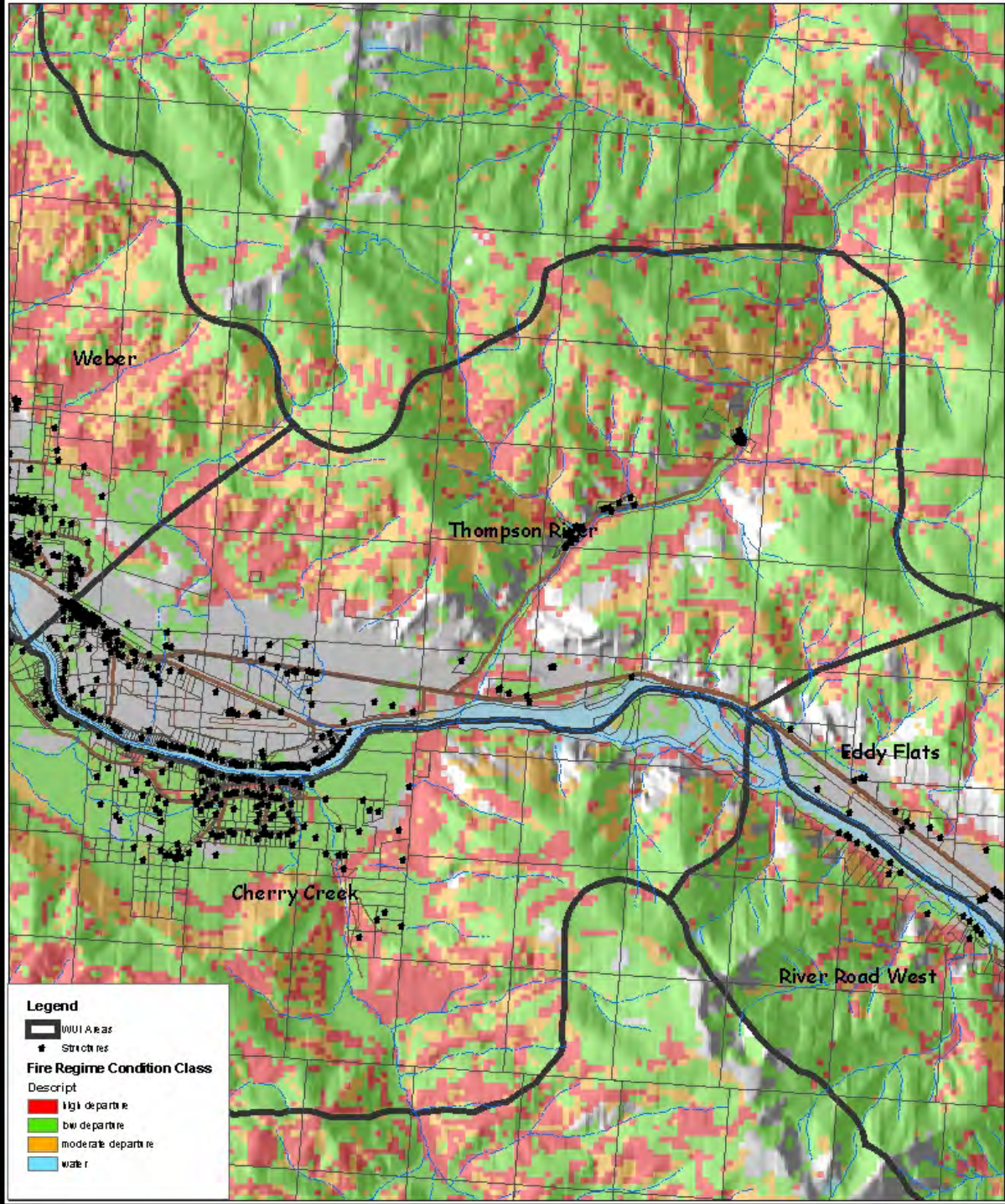
GRAND TOTAL ALL RISK **32**

\$ VALUE AT RISK: ***\$16,601,866**

COMMENTS:



Thompson River



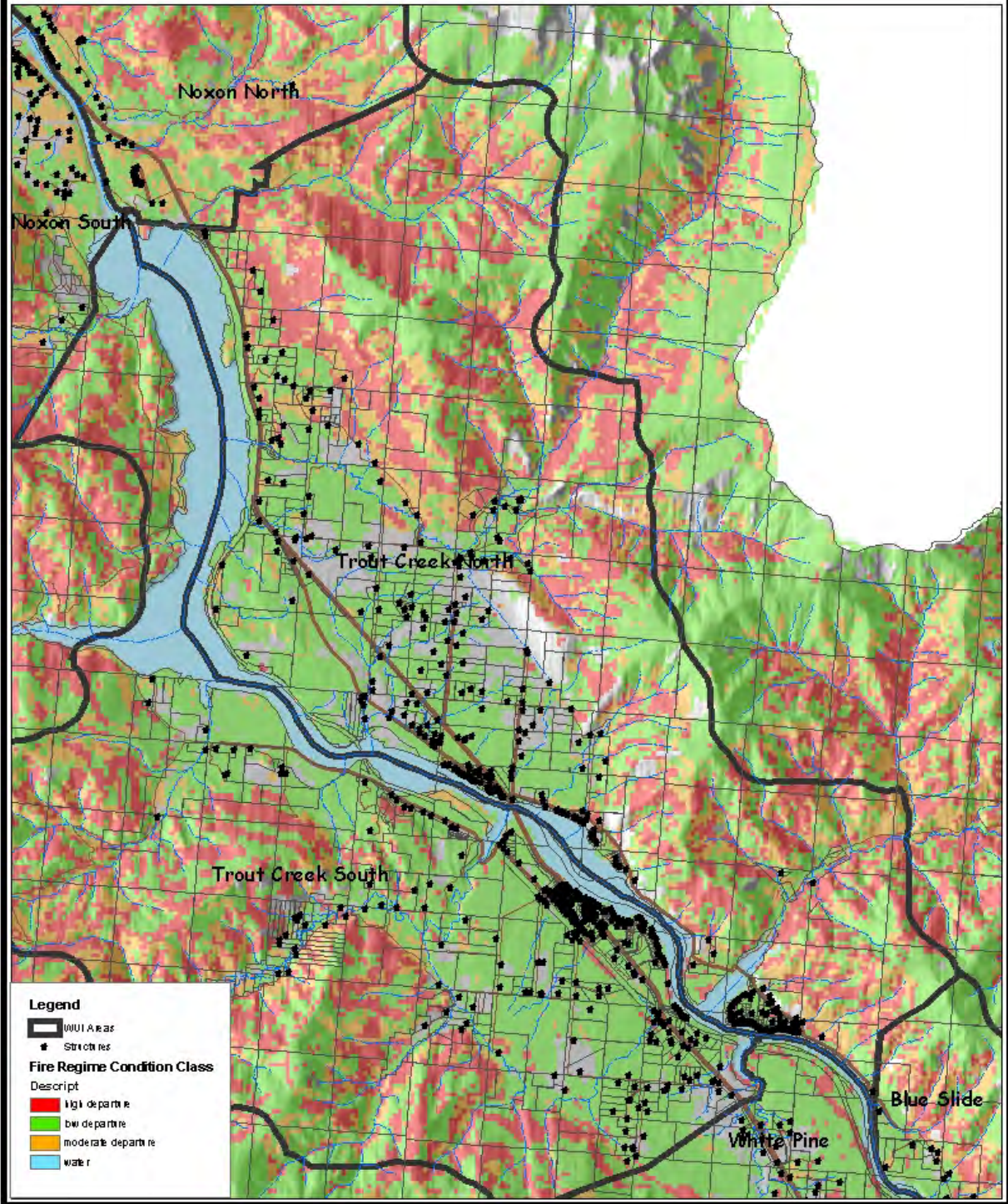
**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING
24 of 28

AREA NAME: Thompson River		TOTAL ACRES: 17,020	
FIRE PROTECTION DISTRICT: T. Falls RVFD, Lolo NF		YEAR RATED: 2004	
VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk			
Value	Unit of Measure	Amount	Rating
Residences*	Each	39	1
Other structures (Businesses)*	Each	0	0
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	1998	1
High Value Improvements	Each	3	3
• Regional Powerlines – 15 miles		1	
• Electronics Site			
•			
TOTAL VALUE AT RISK			5
FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk			
Value	Unit of Measure	Amount	Rating
Condition Class Within Area	Acres - %	1861 – 11%	4
• Condition Class 0		6538 – 38%	
• Condition Class 1		5556 – 33%	
• Condition Class 2		3064 – 18%	
Condition Class Perimeter Adjacent To Area	Miles - %	8.4 – 40%	1
• Condition Class 0		7.8 – 37%	
• Condition Class 1		1.9 – 9%	
• Condition Class 2		3 – 14%	
Topography	%	80%	7
• Unsheltered Prevailing Winds		20%	
• Partially Sheltered To Prevailing Winds		0%	
Access (Ingress/Egress)	%	10%	4
• Difficult		30%	
• Difficult/Easy Combination		60%	
• Easy			
TOTAL FIRE RISK			16
GRAND TOTAL ALL RISK			21
\$ VALUE AT RISK:			*\$4,715,616
COMMENTS:			



Trout Creek North



(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING

OVERALL RATING
6 of 28

AREA NAME: Trout Creek North **TOTAL ACRES:** 38,316
FIRE PROTECTION DISTRICT: Trout Cr. RVFD, Kootenai NF **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	312	9
Other structures (Businesses)*	Each	2	1
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	8847	4
High Value Improvements <ul style="list-style-type: none"> • Regional Powerline – 12.5 miles • Electronic Site • 	Each	1 1	3
TOTAL VALUE AT RISK			17

FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Acres - % Acres - % Acres - % Acres - %	3535 – 9% 16561 – 43% 8636 – 23% 9622 – 25%	5
Condition Class Perimeter Adjacent To Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Miles - % Miles - % Miles - % Miles - %	17 – 53% 8 – 25% 2 – 5% 5 – 17%	2
Topography <ul style="list-style-type: none"> • Unsheltered Prevailing Winds • Partially Sheltered To Prevailing Winds • Sheltered From Prevailing Winds 	% % %	70% 30% 0%	7
Access (Ingress/Egress) <ul style="list-style-type: none"> • Difficult • Difficult/Easy Combination • Easy 	% % %	5% 15% 80%	4
TOTAL FIRE RISK			18

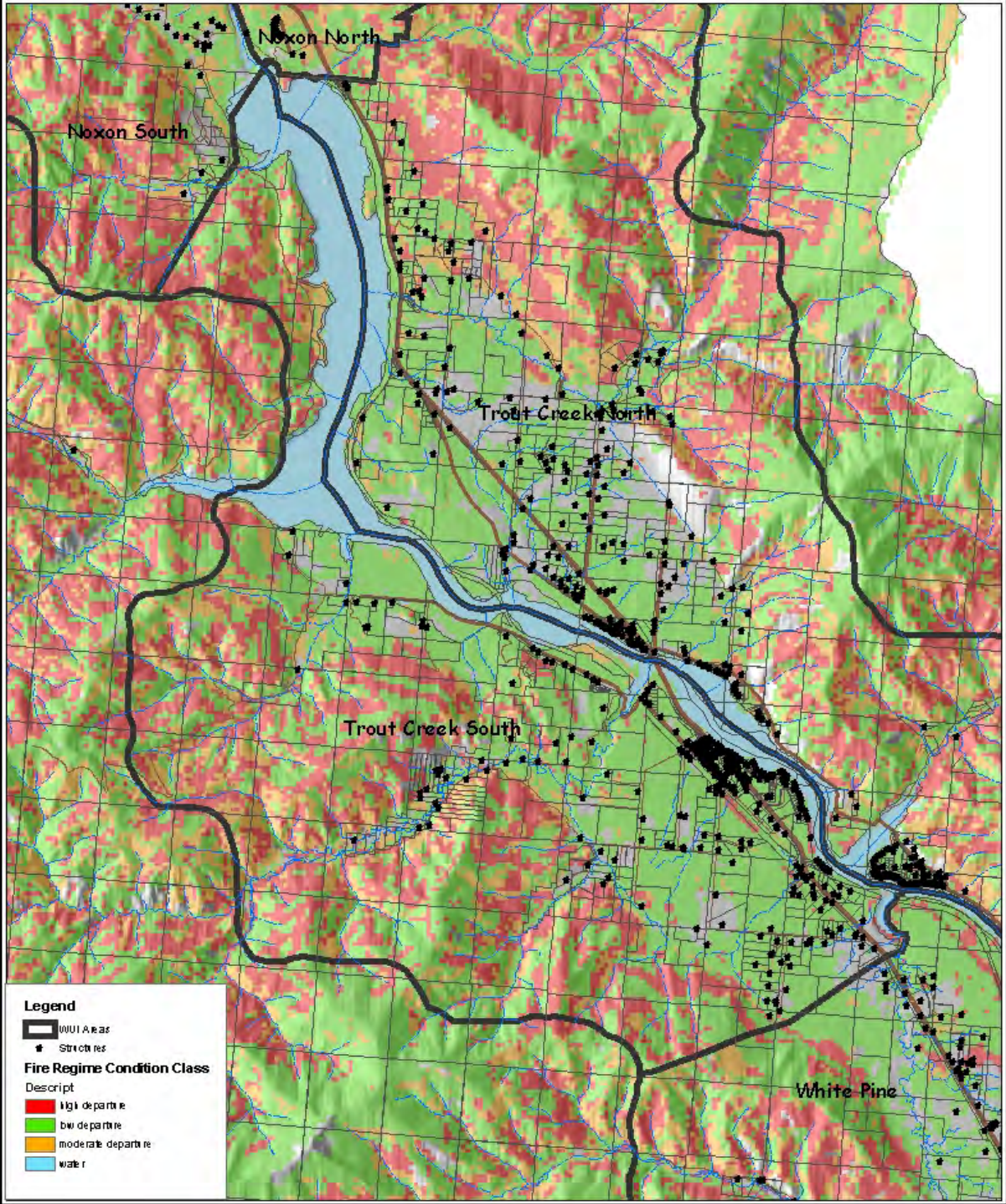
GRAND TOTAL ALL RISK **35**

\$ VALUE AT RISK: ***\$32,929,274**

COMMENTS:



Trout Creek South



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING

1 of 28

AREA NAME: Trout Creek South **TOTAL ACRES:** 33,184
FIRE PROTECTION DISTRICT: Trout Creek RVFD, Kootenai NF **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	278	8
Other structures (Businesses)*	Each	24	9
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	9026	4
High Value Improvements <ul style="list-style-type: none"> • Regional Powerlines – 15.5 miles • • 	Each	2	3
TOTAL VALUE AT RISK			24

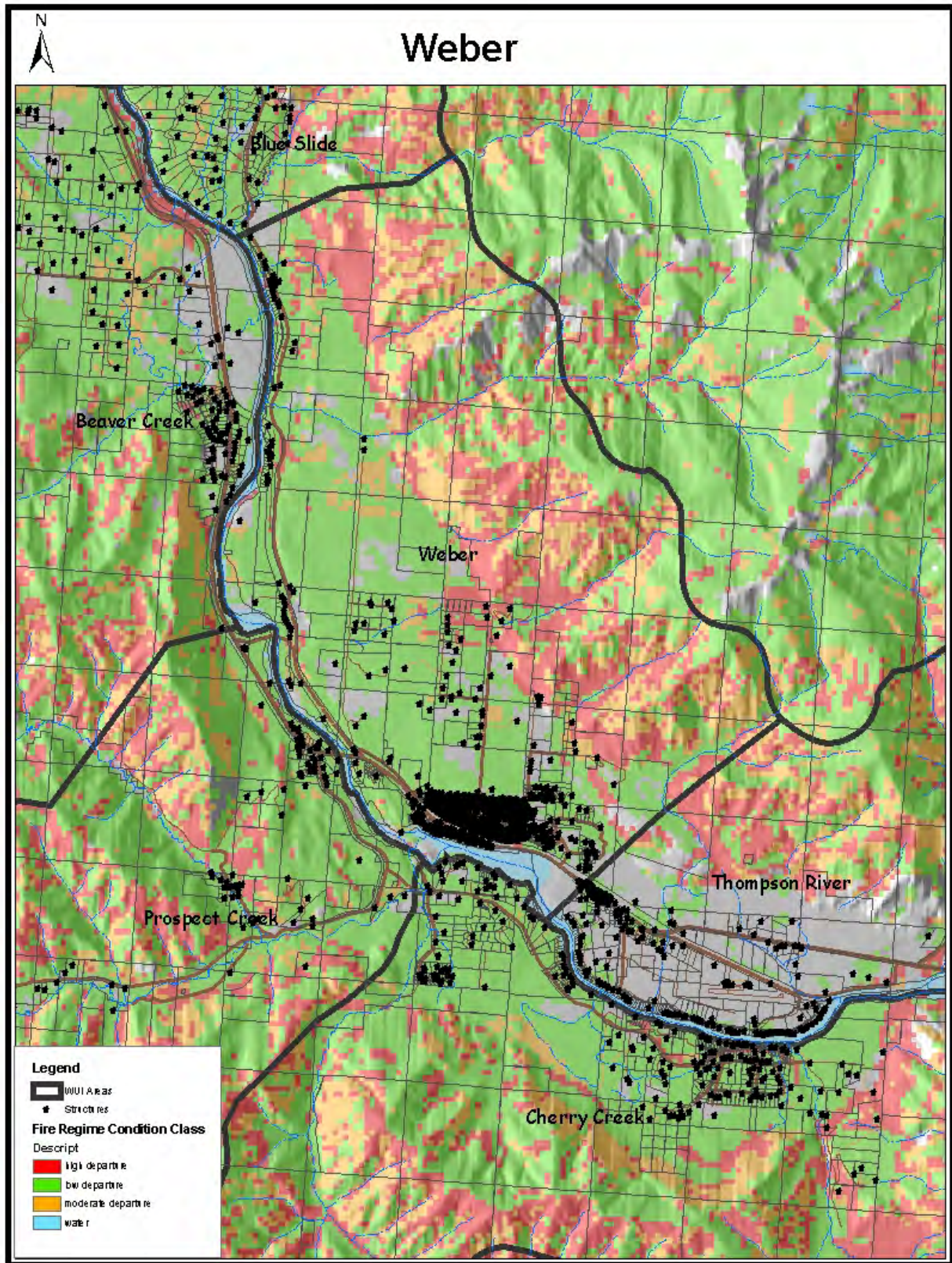
FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Acres - % Acres - % Acres - % Acres - %	3706 – 11% 16437 – 50% 5238 – 16% 7793 – 23%	4
Condition Class Perimeter Adjacent To Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Miles - % Miles - % Miles - % Miles - %	17 – 53% 8 – 24% 2 – 6% 6 – 18%	2
Topography <ul style="list-style-type: none"> • Unsheltered Prevailing Winds • Partially Sheltered To Prevailing Winds • Sheltered From Prevailing Winds 	% % %	30% 55% 15%	5
Access (Ingress/Egress) <ul style="list-style-type: none"> • Difficult • Difficult/Easy Combination • Easy 	% % %	15% 15% 70%	5
TOTAL FIRE RISK			16

GRAND TOTAL ALL RISK **40**

\$ VALUE AT RISK: ***\$35,743,492**

COMMENTS:



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING

17 of 28

AREA NAME: Weber **TOTAL ACRES:** 17,169
FIRE PROTECTION DISTRICT: T. Falls RVFD, Lolo NF **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	107	3
Other structures (Businesses)*	Each	4	2
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	6156	3
High Value Improvements <ul style="list-style-type: none"> • Regional Powerlines – 11.5 miles • • 	Each	2	3
TOTAL VALUE AT RISK			11

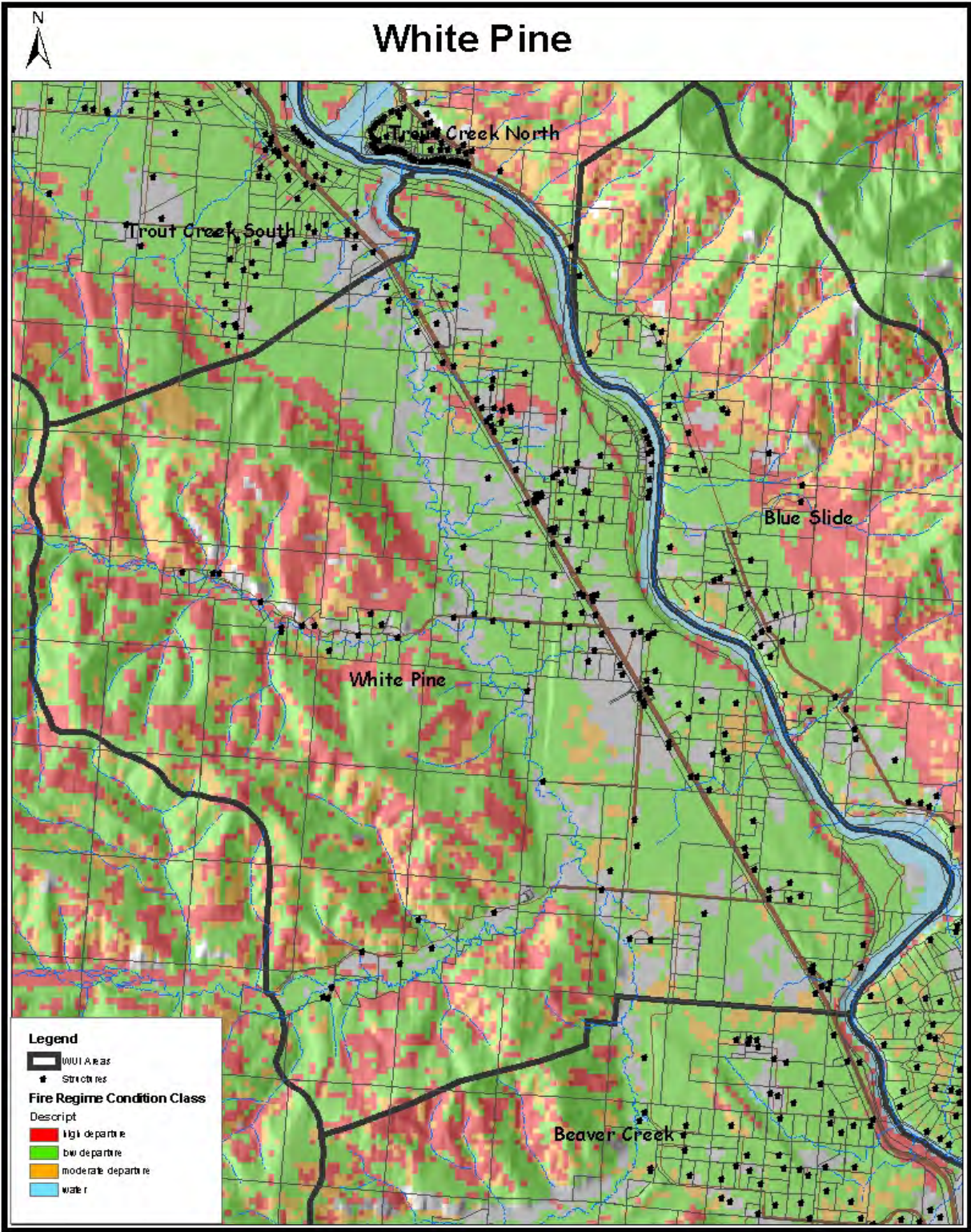
FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Acres - % Acres - % Acres - % Acres - %	1250 – 7% 8566 – 50% 3727 – 22% 3630 – 21%	4
Condition Class Perimeter Adjacent To Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Miles - % Miles - % Miles - % Miles - %	8.8 – 51% 6.5 – 38% 1 – 6% 1 – 6%	1
Topography <ul style="list-style-type: none"> • Unsheltered Prevailing Winds • Partially Sheltered To Prevailing Winds • Sheltered From Prevailing Winds 	% % %	60% 30% 10%	6
Access (Ingress/Egress) <ul style="list-style-type: none"> • Difficult • Difficult/Easy Combination • Easy 	% % %	40% 40% 20%	6
TOTAL FIRE RISK			17

GRAND TOTAL ALL RISK **28**

\$ VALUE AT RISK: ***\$14,438,052**

COMMENTS:



**(ATTACHMENT B4-B)
SANDERS COUNTY WILDLAND/URBAN INTERFACE AREAS
RISK RATING**

OVERALL RATING
20 of 28

AREA NAME: White Pine **TOTAL ACRES:** 26,719
FIRE PROTECTION DISTRICT: Trout Creek RVFD, Kootenai NF **YEAR RATED:** 2004

VALUES AT RISK: Numerical Rating 1=lowest value risk, 10=highest value risk

Value	Unit of Measure	Amount	Rating
Residences*	Each	163	5
Other structures (Businesses)*	Each	2	1
Historical Sites	Each	0	0
Private Commercial Forestland*	Acres	8271	4
High Value Improvements <ul style="list-style-type: none"> • Regional Powerlines – 16 miles • • 	Each	2	3
TOTAL VALUE AT RISK			13

FIRE RISK: Numerical Rating 1=lowest fire risk, 10=highest fire risk

Value	Unit of Measure	Amount	Rating
Condition Class Within Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Acres - % Acres - % Acres - % Acres - %	862 – 3% 15667 – 59% 5312 – 20% 4855 – 18%	4
Condition Class Perimeter Adjacent To Area <ul style="list-style-type: none"> • Condition Class 0 • Condition Class 1 • Condition Class 2 • Condition Class 3 	Miles - % Miles - % Miles - % Miles - %	12 – 56% 6 – 29% 1 – 6% 2 – 9%	1
Topography <ul style="list-style-type: none"> • Unsheltered Prevailing Winds • Partially Sheltered To Prevailing Winds • Sheltered From Prevailing Winds 	% % %	20% 50% 30%	4
Access (Ingress/Egress) <ul style="list-style-type: none"> • Difficult • Difficult/Easy Combination • Easy 	% % %	20% 20% 60%	5

TOTAL FIRE RISK **14**

GRAND TOTAL ALL RISK **27**

\$ VALUE AT RISK: ***\$20,149,782**

COMMENTS:

**(Attachment B-5)
FIRE RISK/HAZARD AREA RATING FORM**

Landowner _____		Fire District _____	
Total Acres to Treat _____			
Values At Risk (<i>Check all that apply. Add up # for total score</i>)			
Principle landowner residence/home present	7		
Multiple landowners within 1/8 th mile	5		
Protect adjacent high value improvements (utilities, etc)	3		
Other structures present such as businesses, barns, second home	3		
Known historic/cultural site present on land	2		
Landowner merchantable timber value at risk	2		
Water quality/SMZ/riparian areas at risk on land	2		
Fire Risk (<i>Choose only one from Fire History Map</i>)			
50 years since area burned	10		
Area burned within last 25 years	7		
Area burned in last 5 years	1		
Access (<i>Choose only one</i>)			
Most of area is difficult to access with high fire risk	10		
Combination of difficult and easy access with high fire risk	7		
Most of area is easy to access with high fire risk	5		
Home Density (<i>Choose only one</i>)			
More than 6 homes within 1 mile	10		
Three to five homes within 1 mile	7		
Less than 3 homes within 1 mile	3		
Previous Fuel Treatment (<i>Choose only one</i>)			
Some of area treated with thinning in past 5 years	10		
Some of area treated with thinning in past 10 years	7		
No previous fuel treatment	0		
Possible Joint Projects (<i>Choose only one</i>)			
Multi-agency/private cross boundary project(s)	10		
Multiple private landowner project	7		
Single landowner project (only landowner in area)	0		
Community Buy-In (<i>Choose only one</i>)			
Area landowners have shown strong interest in program	10		
Area landowners have shown some interest in program	5		
Area landowners have shown no interest/opposed to the program	0		
Willing to meet treatment specifications (<i>Choose only one</i>)			
Wholeheartedly	10		
Somewhat, with reservations	5		
Not at all, skeptical	0		
Distance to adjacent untreated fuels (<i>Choose only one</i>)			
Less than 100 feet	10		
Between 100 to 300 feet	5		
Greater than 300 feet	0		
Low Hazard = <33, Moderate Hazard = 34 – 57, High Hazard = 58 – 81, Extreme Hazard = >81			Total Points

Attachment B-6
PROCEDURE FOR INCLUDING
YOUR PROPERTY IN A RURAL FIRE DISTRICT

1. Determine if your home/property is currently included in a Rural Fire District

a. Find the location of your property on a map of the Rural Fire Districts.
(Maps can be viewed at the Rural Fire District stations or at the Sanders County Courthouse.)

If your property is clearly within the mapped boundaries of a Rural Fire District, the job is finished. You can check by following the subsequent procedure.

OR

b. Check your latest property tax bill.

Under "School District" you'll find a code.

Example:

1C - City of Plains.

1MR - Plains rural fire.

1R - Plains rural with no rural fire.

Except in Hot Springs If your tax bill does not have a code with an M
(This means you have no structural fire protection)

On lands that are outside the boundaries of the Rural Fire Protection Districts:

The Confederated Salish & Kootenai Tribes, Forest Service or the MT Dept of Natural Resources often respond, and are trained and equipped to fight grass and wildland fires, but they are not trained to fight structural fires.

If conditions permit and they are not otherwise committed within their Rural Fire District or on a Mutual Aid response, the appropriate Rural Fire District *may* respond to a fire outside their District but, although rare, *may* leave a fire that is outside their Rural Fire district to respond to a fire that is within their Rural Fire District Area or to Mutual Aid commitments. Homeowners located outside the Rural Fire District may be billed for the costs incurred by the responding Rural Fire Company.

2. If you are in doubt about your rural fire protection situation, check with the Clerk and Recorders' Office in the Sanders County Courthouse. **DO NOT TAKE YOUR RURAL FIRE PROTECTION FOR GRANTED.**

(Attachment B-7)

IF YOU ARE NOT IN A RURAL FIRE DISTRICT AND WANT TO BE IN A RURAL FIRE DISTRICT:

Contact the Chief of your Rural Fire District. Then:

1. Prepare a request of intent for annexation into the local rural Fire District. (This is simply a letter stating your desire to be included within the appropriate Rural Fire District.)
2. Contact neighbors and adjacent landowners. Get names in writing and legal description of properties. They may wish to include in the proposed action.
3. Lands must be contiguous. (Lands must be adjacent and also adjacent to the Rural Fire District boundary).
4. Take this written request to the local District Rural Fire Chief.
5. He or she approves the request or identifies needed changes.
6. The Fire Chief then presents the request to the County Commissioners.
7. The County Commissioners act on the request.

Our Fire Districts are VOLUNTEER fire districts. The volunteer members of our rural fire districts are anxious to provide the maximum level of protection of life and property to residents within their respective Fire Districts. This unselfish purpose is the reason that they have volunteered to serve their community through your local Fire District.

We as landowners, residents and property owners owe them the safest and best opportunity to do their job at minimum risk to their lives and safety.

In working with the rural Fire Chief to have your property included in his/her fire district, they are thinking about your safety as well as that of your neighbors and of the members of his/her Rural Volunteer Fire Company. They have the best interests of our community at heart. Please work with them with understanding and cooperation. You'll be glad you did.

BE FIREWISE!

(Attachment B-8)
CODE FOR SCHOOL DISTRICTS

CODE SCHOOL DISTRICT

1 - City of Plains

1C – Plains City fire.
1MR - Plains, rural fire
1R - Plains , with no rural fire

2 - City of Thompson Falls

2C - Thompson Falls City fire.
2MR - Thompson Falls, rural fire.
2R - Thompson Falls, with no rural fire
2AM2 – White Pine / Thompson Falls rural fire
2AM6 - Whitepine / Trout Creek rural fire

3 – Town of Heron

6-2 – Trout Creek/Thompson Falls

6MR – Trout Creek, rural fire
6M10 – Trout Creek rural fire

8 – Town of Paradise

8M – Plains/Paradise rural fire

9 - Town of Dixon

9M – Dixon rural fire

10 – Town of Noxon

10M – Noxon rural fire

11 – Camas Prairie

14 – City of Hot Springs

14C – Hot Springs City fire
14R – Hot Springs Rural

(There are small portions of the county where county residents are in school districts outside the county **7J – Charlo Elem/Joint w/Lake County** & **8J – Arlee**). These areas have no structural fire protection.

(Attachment B-9)
HAZARDOUS FUEL REDUCTION PROGRAM

Treatment of fuels associated with creating defensible space adjacent to homes and businesses in the county has been primarily funded by two sources.

- Direct grants from RC&D. These funds have not been available to the county because of competition from counties with higher population densities.
- Stevens grants which are tied to forest service projects that are adjacent to the urban interface boundary, and have a prescribed fire component.

Both of these sources funded 75% of the estimated cost of the treatment with 25% being cost shared by the participating land owner. There is a 3 year life span for these grants to be expended. Historically on a county wide basis \$50,000 a year was the maximum amount that could be expected to be obligated. Counties with a higher population density and numerous home owner associations are generally able to out compete Sanders County for this funding. To increase the possibility of the county becoming eligible for Stevens Grant funding a data base mapping the forest service projects tied to wildland urban interface and private assets that are within ½ mile of the project area should be maintained. This data base would be a source for shelf ready projects qualifying for Stevens dollars should they become available.

(Attachment B-10)
Range of Costs per Acre of
HAZARDOUS FUEL TREATMENT PRACTICES

Fuel Management Practice	Range of Cost Per Acre	
	Low	High
Pre-commercial Thinning	\$120	\$300
Pruning	\$50	\$300
Lop and Scatter Slash	\$35	\$70
Handpiling	\$200	\$600
Dozer Piling	\$50	\$100
Handpiled or Dozer Piled Burning	\$20	\$100
Slash Pullback from Residential Trees	\$35	\$70
Chipping	\$300	\$550
Mulching	\$200	\$500
Prescribed Underburning	\$50	\$200
Fireline Construction	\$20	\$100
Holding and Mop-up	\$15	\$200

The difference between the low and high cost for each of these practices depends on many factors such as:

- ❖ Accessibility - The less accessible the area, generally the higher the cost
- ❖ Percent slope - The greater the average slope of the area the higher the cost
- ❖ Density of trees - Generally the greater the density of trees the higher the cost
- ❖ Amount of downed fuel - The greater amount of down fuel on forest floor the higher the cost
- ❖ Size of area to be treated - Generally the larger the area to be treated the less cost per acre
- ❖ Amount of cleanup -The more thorough cleanup that needs to be done the higher the cost
- ❖ Weather conditions - The dryer the weather conditions the higher the costs will be for burning because more protection measures will need to be used (i.e. pumps, engines, extra personnel, etc.)

(Attachment B-11)
DRAFT EXAMPLE
MUTUAL AID AGREEMENT

The Cooperative Fire Management Annual Operating Plan (AOP) is made and entered into by and between the Montana Department of Natural Resources - Northwest Land Office (DNRC), Sander's County Fire Districts (Dixon, Heron, Hotsprings, Noxon, Plains/Paradise, Thompson Falls, and Trout Creek), Hotsprings, Plains, and Thompson Falls City Volunteer Fire Departments, Kootenai National Forest, Lolo National Forest, and the Confederated Salish & Kootenai Tribes under the provisions of the Cooperative Fire Management Agreement executed March 31, 1998. The purpose of the AOP is to document the relationship and define the details of implementing the Cooperative Fire Management Agreement. The plan defines Structure Protection, Structure Suppression, Mutual Response Zone and the Mutual Aid Zone. The AOP is developed, updated and approved annually by May 1st. Billing is discussed in operating procedures. Fire notification, command, support actions, communication and equipment availability are discussed in Mutual Aid In Wildland Fire Protection. Fire protection – Wildland/Residential Interface issues, training and out of area mobilization are also addressed in the document. Copies of the AOP are maintained by each of the above listed parties.

The following exhibits are attached as part of the AOP:

- Protection Zone Map
- Forest Service Equipment
- Sanders County Inventory Guide
- Southwest Montana Zone Equipment Mobilization Board
- Principal Contacts

(Attachment B-12)
ACTIVITY MONITORING

A. Fire Prevention and Suppression Action Items			
	Who Takes the Lead	Timeframe Agreed To	Monitoring Notes
A-1. Communication between the Sanders County Association of Fire Fighters and County Commissioners			
A-2. Volunteer Fire Department needs			
A-3. Monitor and update County Pre-disaster Mitigation Plan			
A-4. Review and Revise the Mutual Aid Agreements.			
A-5. Initiate efforts to develop a Communication Plan for Sanders County			

B. Hazardous Fuel Treatment Action Items			
	Who Takes the Lead	Timeframe Agreed To	Monitoring Notes
B-1. Identify, Maintain, & Update High Risk/Hazard areas for Hazardous Fuel Treatment and revise as needed.			
B-2. Support Hazardous Fuel Treatment Projects Within the Interface.			
B-3. Coordinate hazardous fuel treatment projects between private landowners, state, and federal land managers.			
B-4. Update and encourage use of Fuel Treatment Guidelines for New Subdivisions in Sanders County.			
B-5. Mitigate the Slash Disposal Problem.			
B-6. Implement a year-end Reporting System to show accomplishments.			
B-7. Conduct Home Evaluations for FIREWISE construction techniques.			

C. Restoration of Fire-adapted Ecosystems Action Items			
	Who Takes the Lead	Timeframe Agreed To	Monitoring Notes
C-1. Insect and Disease Assessment (mapping) in the Valley.			
C-2. Develop post-wildland fire disaster mitigation guidelines for private landowners.			
C-3. Help landowners identify and know how noxious weeds affect the ecosystem.			
C-4. Work with private landowners on Hazardous Fuel Reduction projects to incorporate Best Mgmt Practices, Streamside Management Zone Guidelines as well as addressing Forest Health issues.			

D. Community Assistance Action Items			
	Who Takes the Lead	Timeframe Agreed To	Monitoring Notes
D-1. Maintain the Fire Plan website to disseminate information			
D-2. Expand awareness of need for hazardous fuels treatment programs and encourage engagement of landowners, especially in high-risk areas.			
D-3. Cooperatively Staff, Operate, and Maintain the “Living on the Edge” FIRE SMART Wagon with adjoining counties.			
D-4. Work with Realtors, Building Contractors, Insurance, and Landscaping Companies.			
D-5. Produce and disseminate information products such as newsletters and news articles on a regular basis.			
D-6. Continue to Produce, Improve, and Maintain curriculum for students..			
D-7. Engage Sander County Builders in homeowner’s awareness campaign..			
D-8. Communicate better about Fire Plan accomplishments.			
D-9. Continue support of Small Diameter Utilization and Biomass Utilization Opportunities.			
D-10. Monitor and Coordinate local Policies & Planning Efforts.			

APPENDIX C

Reference Materials

The following documents were used or referenced in the writing of this community fire plan. If you would like a copy of one or all of these documents please contact the Northwest Regional RC&D, 905 West 9th Street, Libby, MT, 59923, (406) 293-8885 and they will either be able to provide you with a copy or direct you to a website that has the information.

1. Fire Protection Guidelines for Wildland Residential Interface Development – Montana DNRC & Department of Justice Fire Prevention & Investigation
2. A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment – 10-Year Comprehensive Strategy
3. A Cohesive Strategy – To Protect People and Sustain Resources in Fire-Adapted Ecosystems
4. Healthy Forests – An Initiative for Wildfire Prevention and Stronger Communities
5. A Report to the President In Response to the Wildfires of 2000
6. Kootenai National Forest Fire Management Plan - Appendix K-11 to the Kootenai National Forest Plan (revised yearly).
7. Lolo National Forest Fire Management Plan - Appendix K-11 to the Lolo National Forest Plan (revised yearly).
8. Confederated Salish & Kootenai Tribes Fire Management Plan
7. Preparing a Community Wildfire Protection Plan – A Handbook for Wildland-Urban Interface Communities – March 2004
8. Healthy Forest Restoration Act – 2003

APPENDIX D

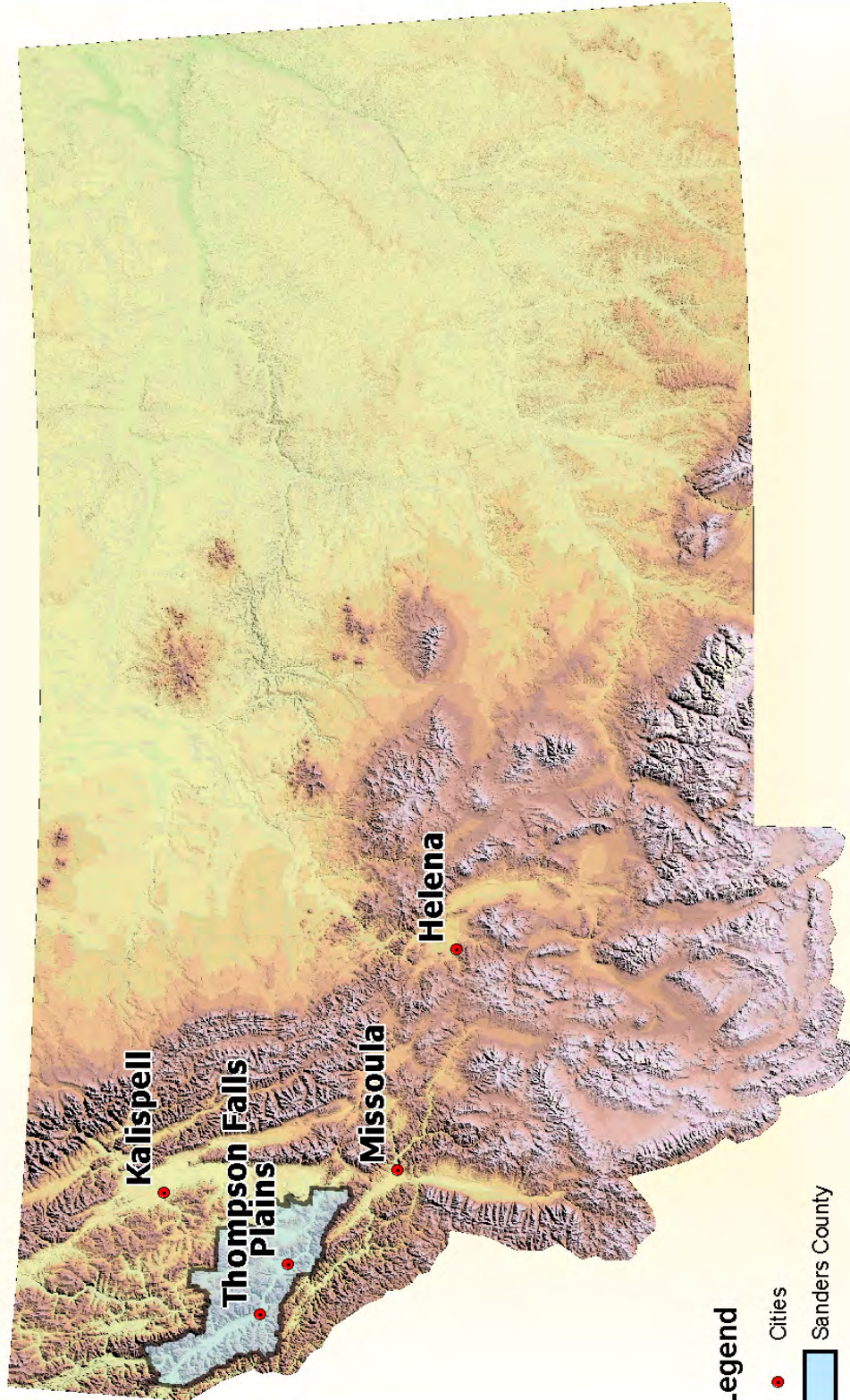
Maps

- #1 - County Vicinity Map**
- #2 - Large Fire History**
- #3 - Fire Starts 1980 – 2010**
- #4 - Population Density & WUI Boundary**
- #5 – Structural Fire Protection Boundaries**
- #6 – Heron Rural Fire District**
- #7 – Noxon Rural Fire District Boundaries**
- #8 – Trout Creek Rural Fire District Boundaries**
- #9 – Thompson Falls Rural Fire District Boundaries**
- #10 – Plains Rural Fire District Boundaries**
- #11 – Hot Springs Rural Fire District Boundaries**
- #12 – Dixon Rural Fire District Boundaries**
- #13 – Wildfire Protection Boundaries**
- #14 – Structural/Wildland District Boundaries**
- #15 – West Zone Fire Regime Condition Class**
- #16 – Mid Zone Fire Regime Condition Class**
- #17 – East Zone Fire Regime Condition Class**
- #18 – Insect and Disease Detection**

Rural Fire Department Resource Location Maps

- **Dixon**
- **Heron**
- **Hot Springs**
- **Noxon**
- **Plains**
- **Thompson Falls**
- **Trout Creek**

MAP #1 SANDERS COUNTY VICINITY



Legend

• Cities

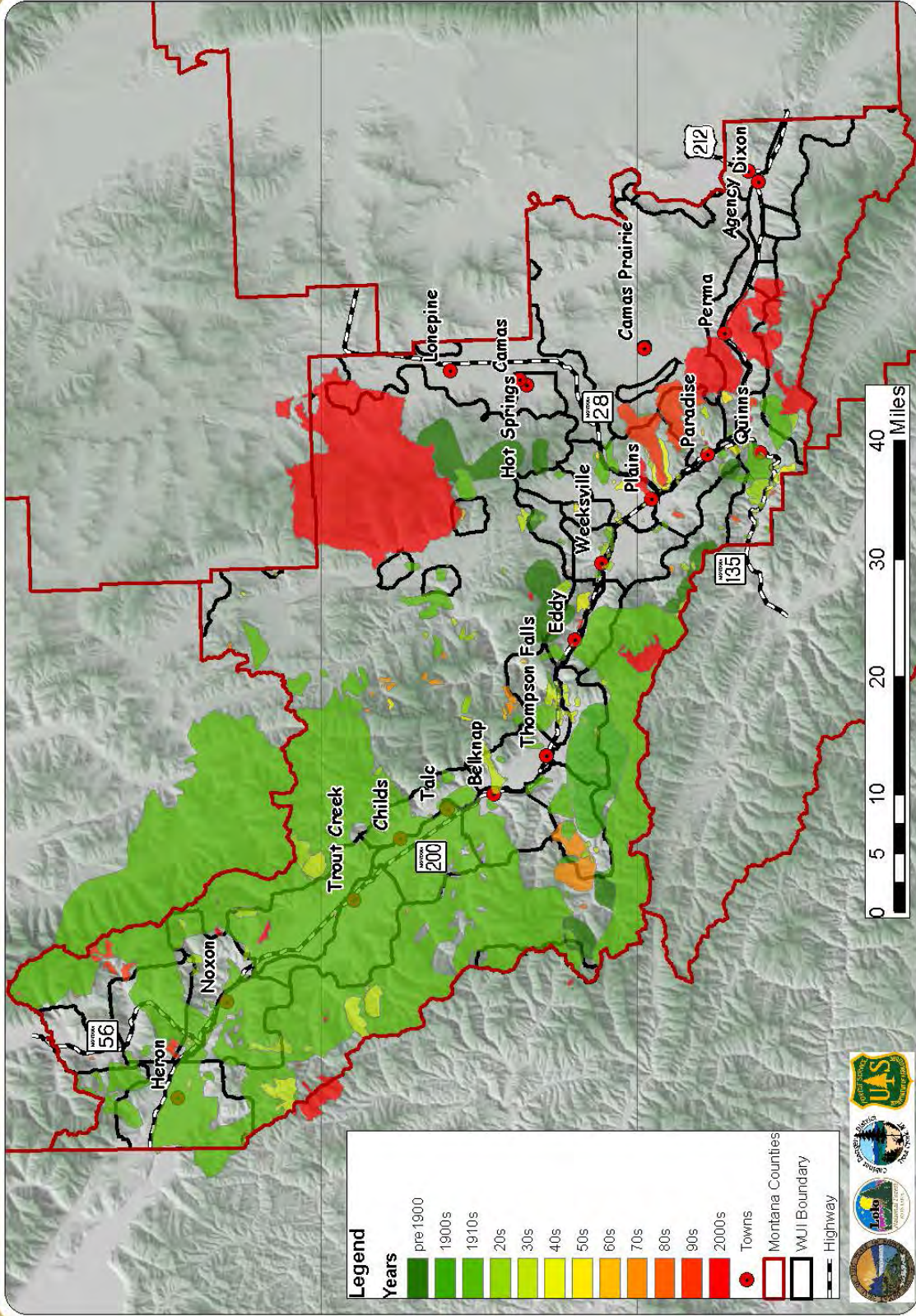
▭ Sanders County



Map Produced April, 2011

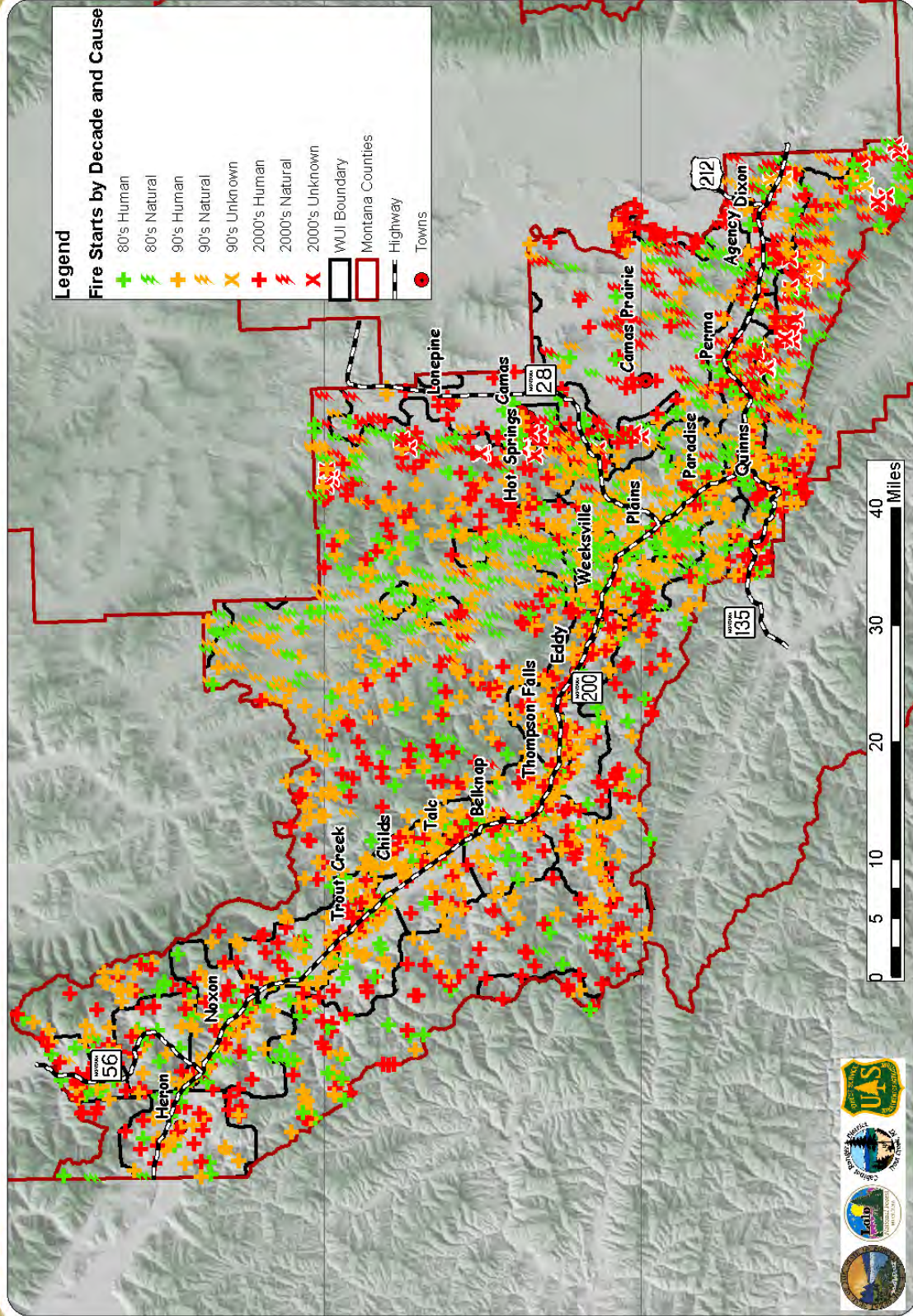


MAP #2 LARGE FIRE HISTORY by DECADE



Map Produced April, 2011

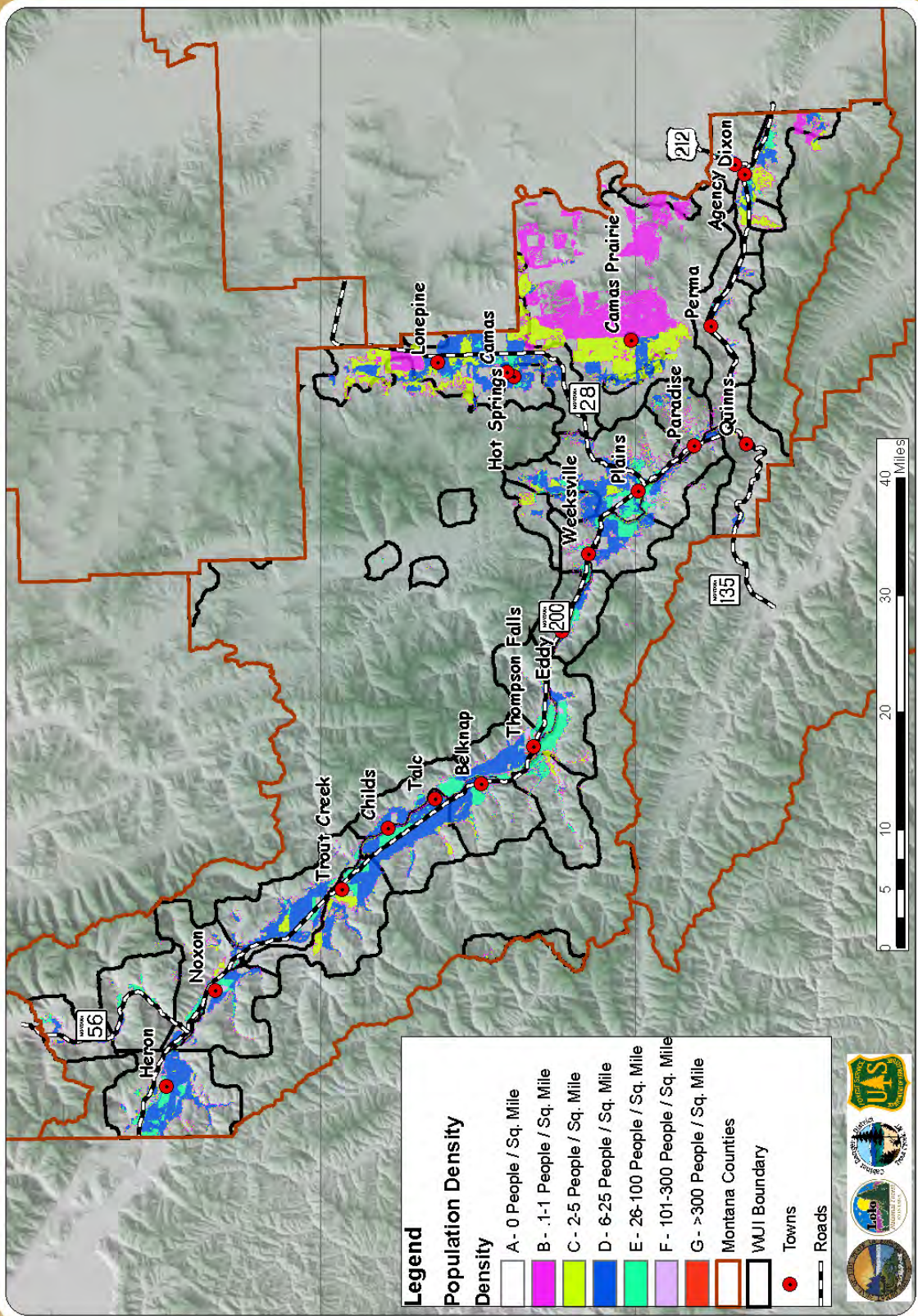
Map #3 FIRE STARTS: 1980-2010



Map Produced April 2011



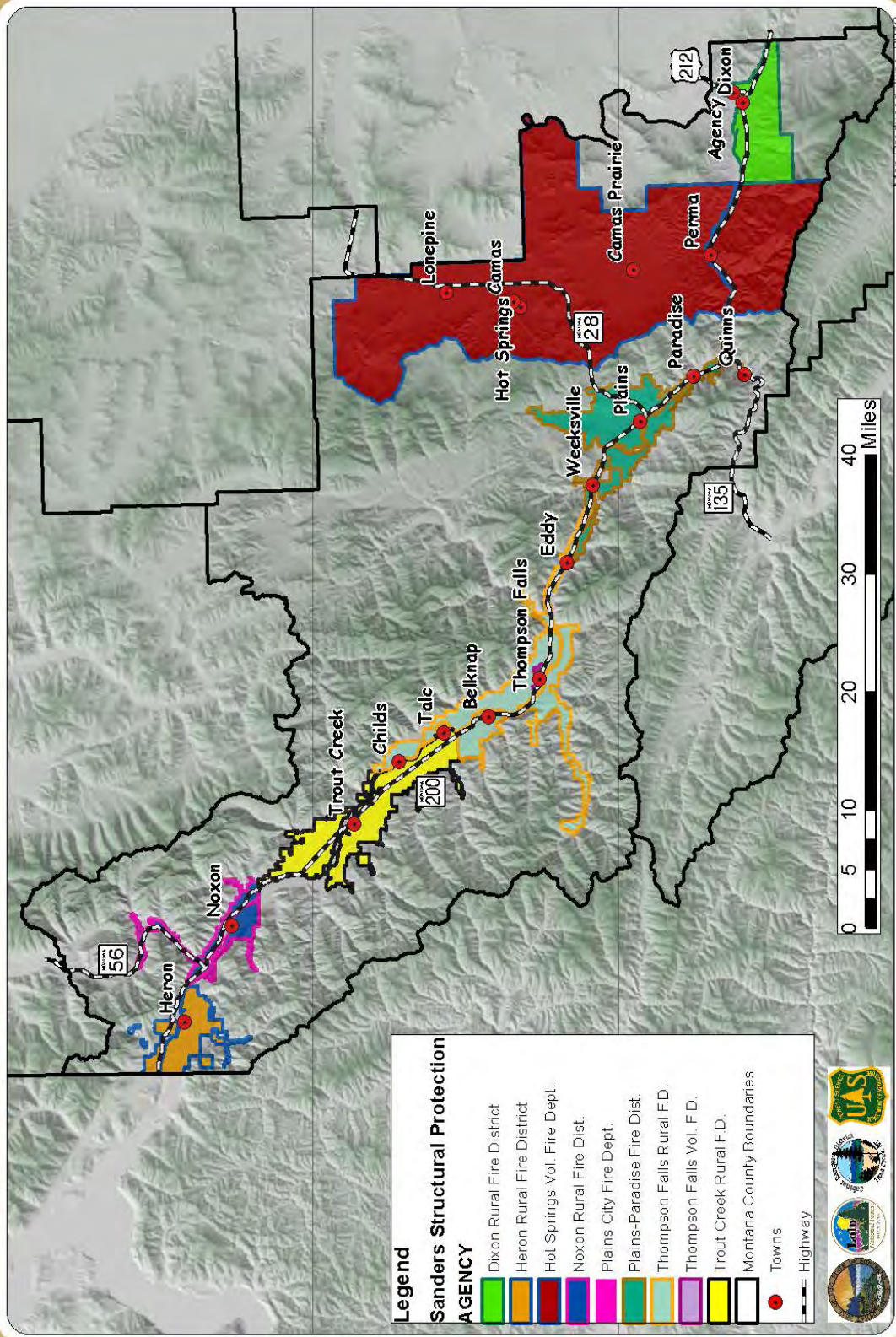
MAP #4 POPULATION DENSITY & WUI BOUNDARY



Map Produced April, 2011

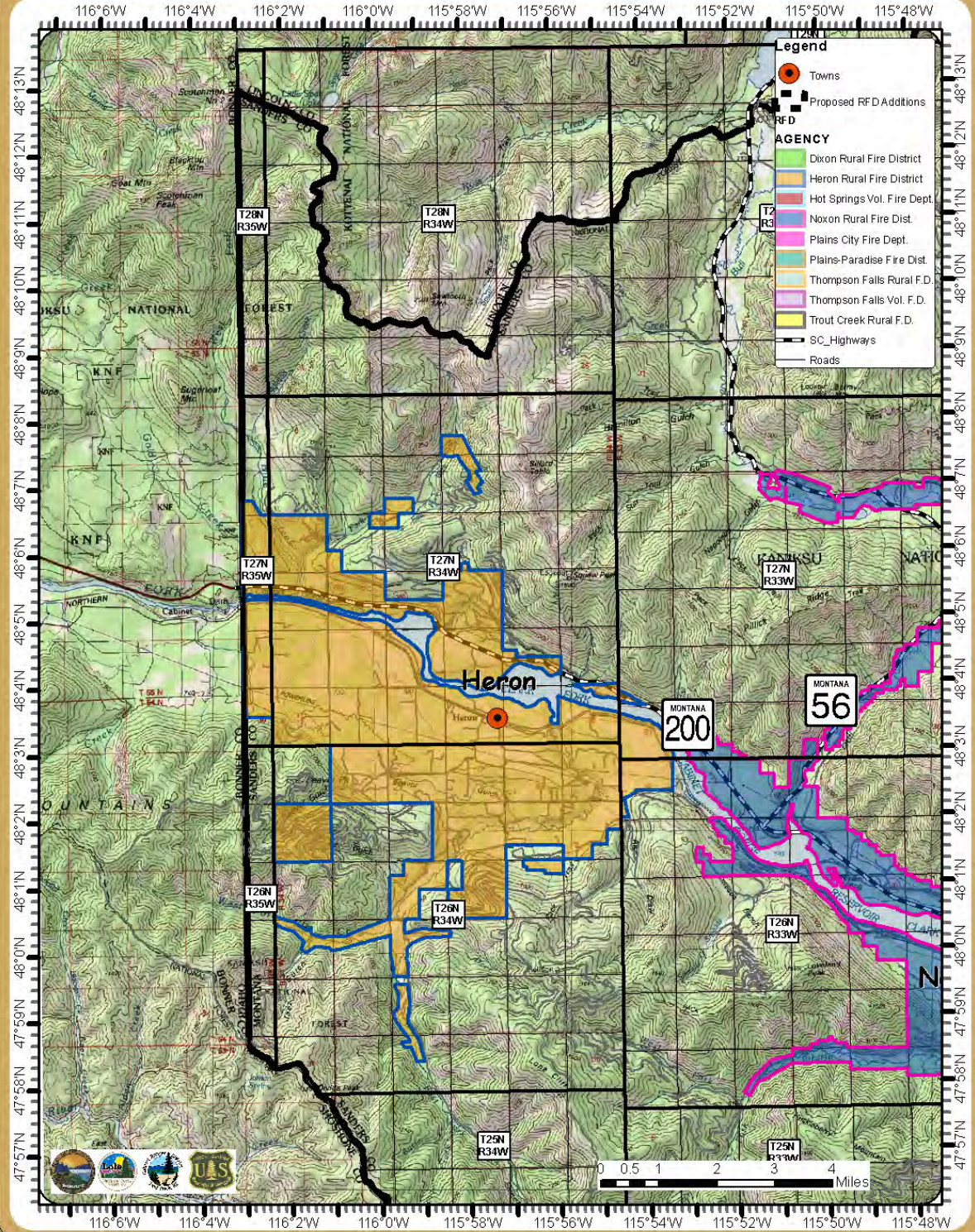


MAP #5 SANDERS COUNTY STRUCTURAL FIRE PROTECTION





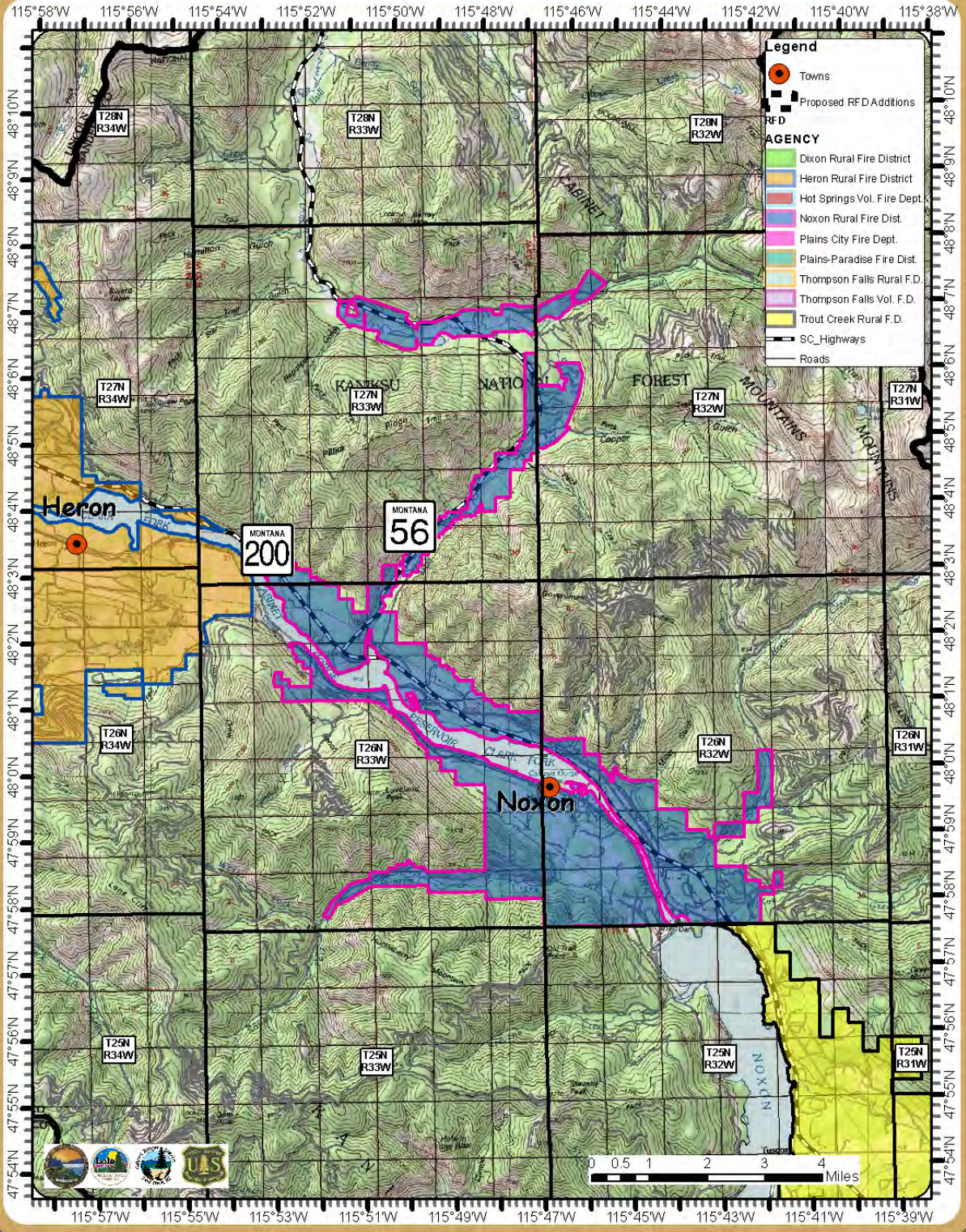
Map #6 Heron Rural Fire District



Map Produced June 2012



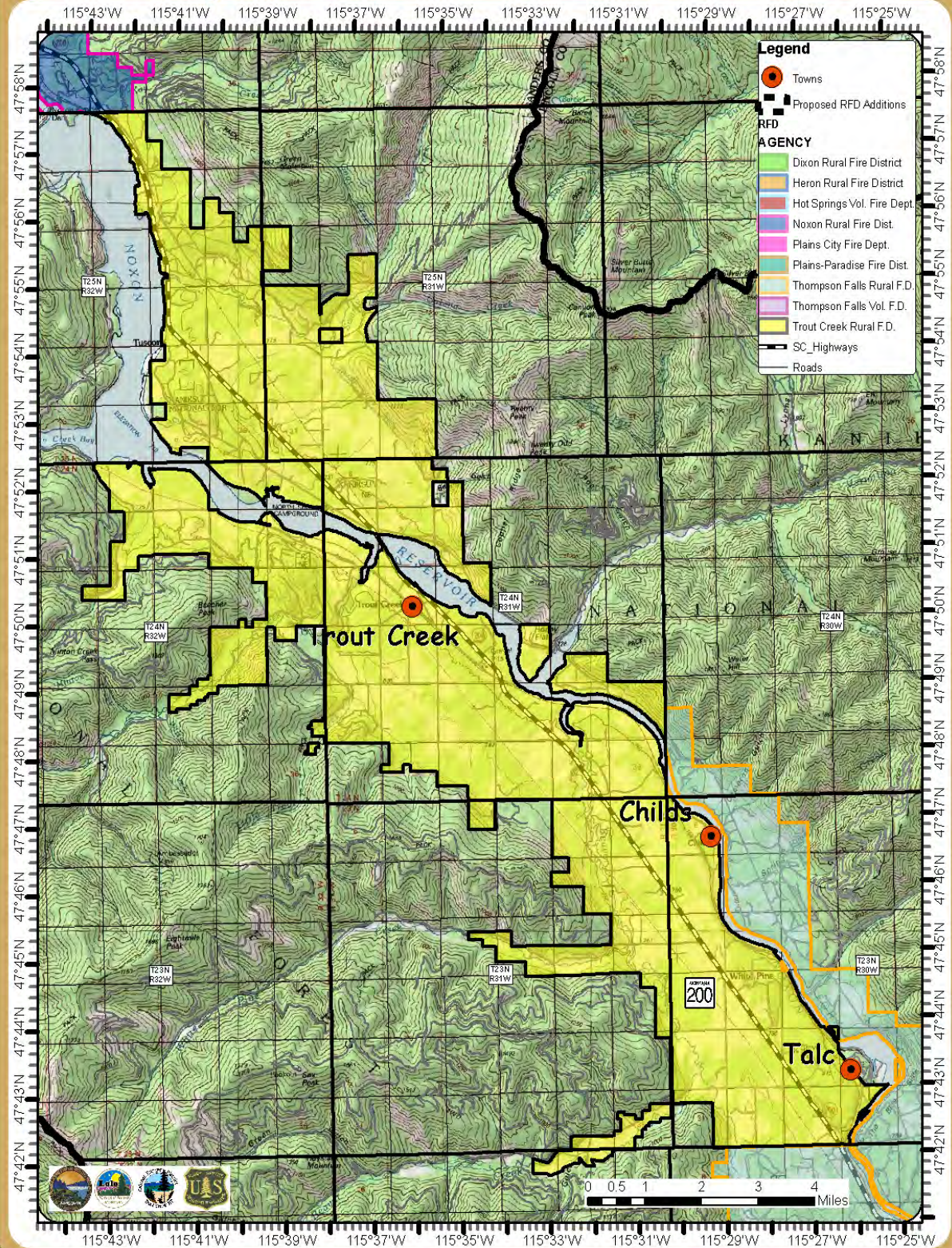
Map #7 Noxon Rural Fire District



Map Produced June 2012



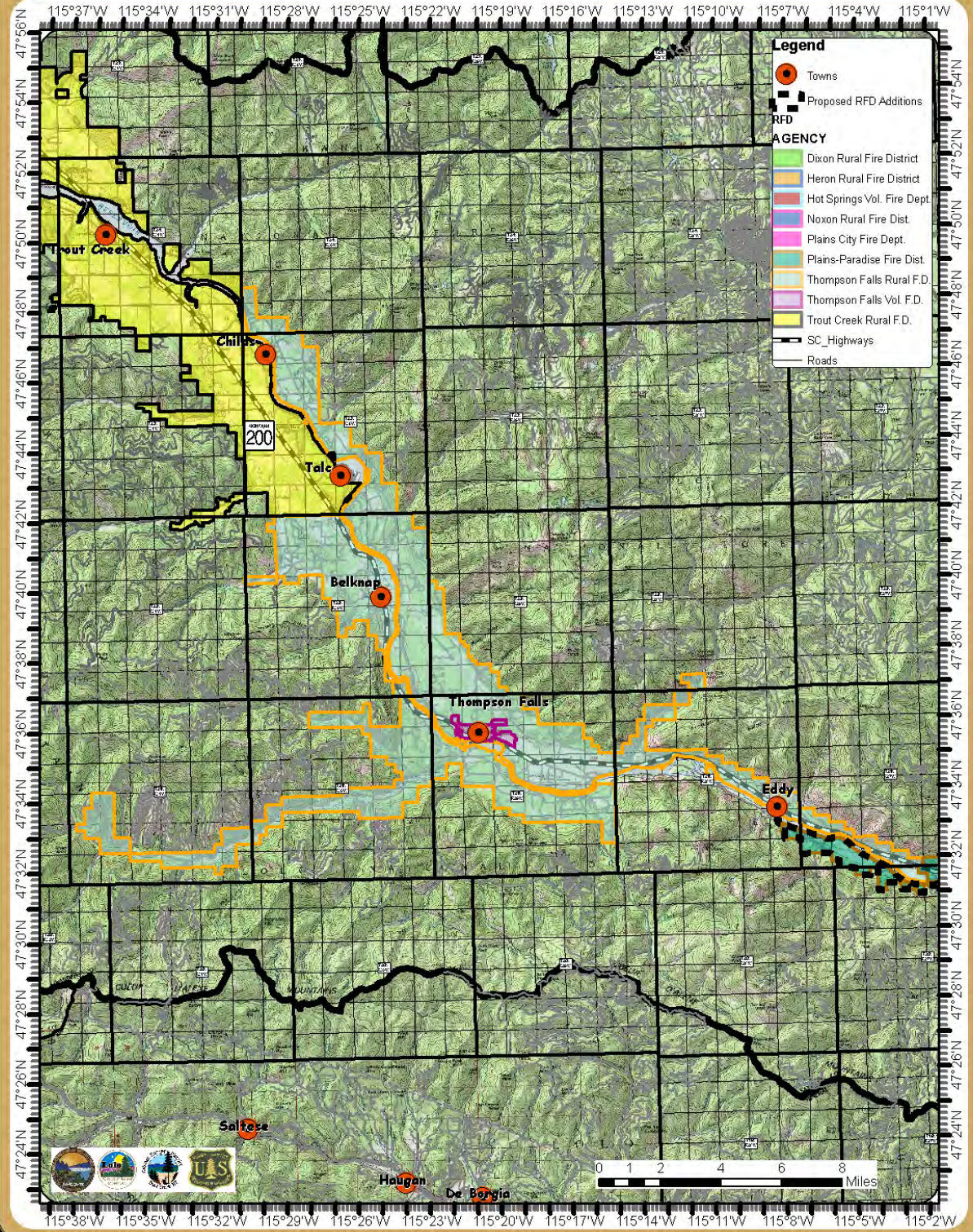
Map #8 Trout Creek Rural Fire District



Map Produced April 2011



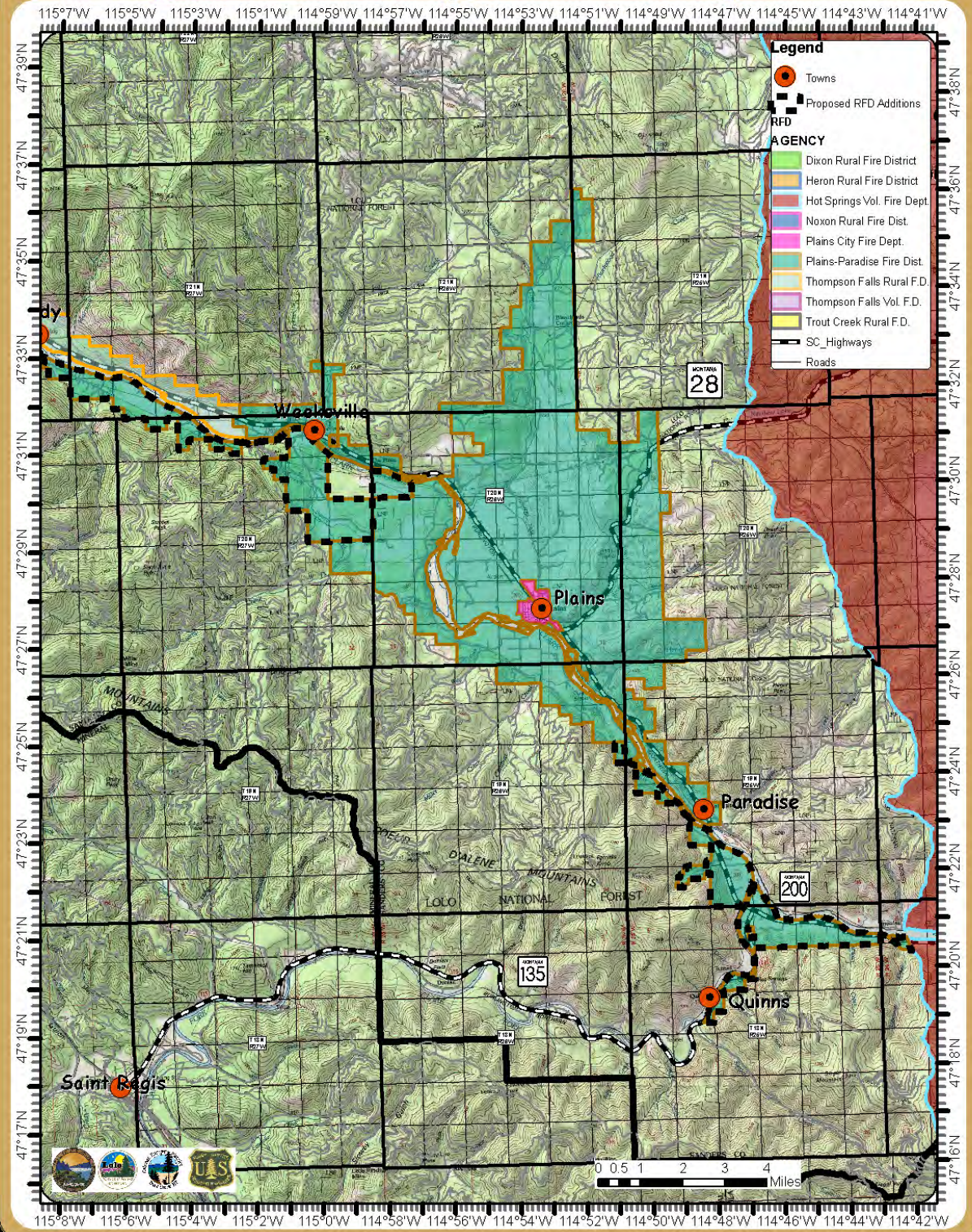
Map #9 Thompson Falls City/Rural Fire Departments



Map Produced April 2011

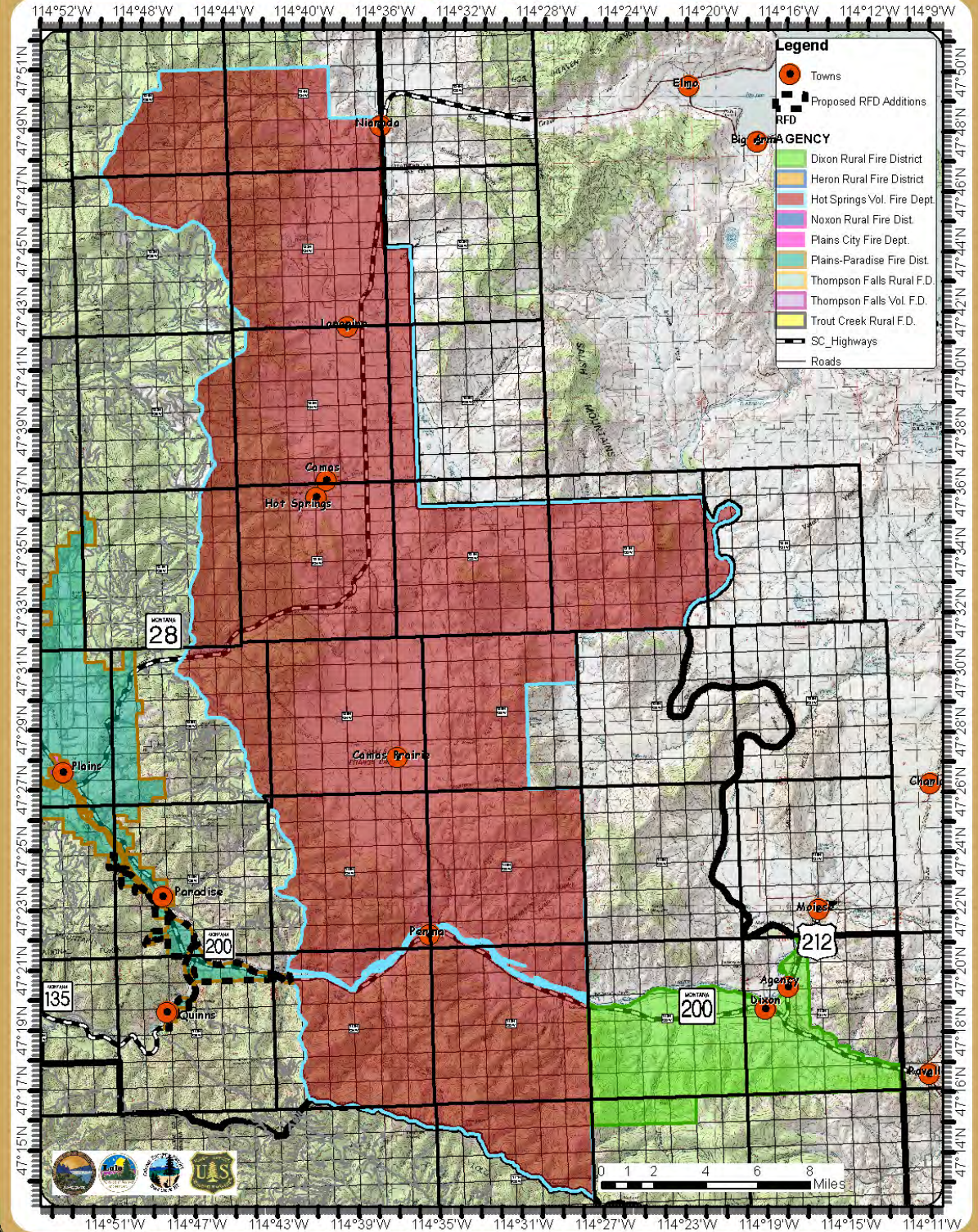


Map #10 Plains City/Rural Fire Departments





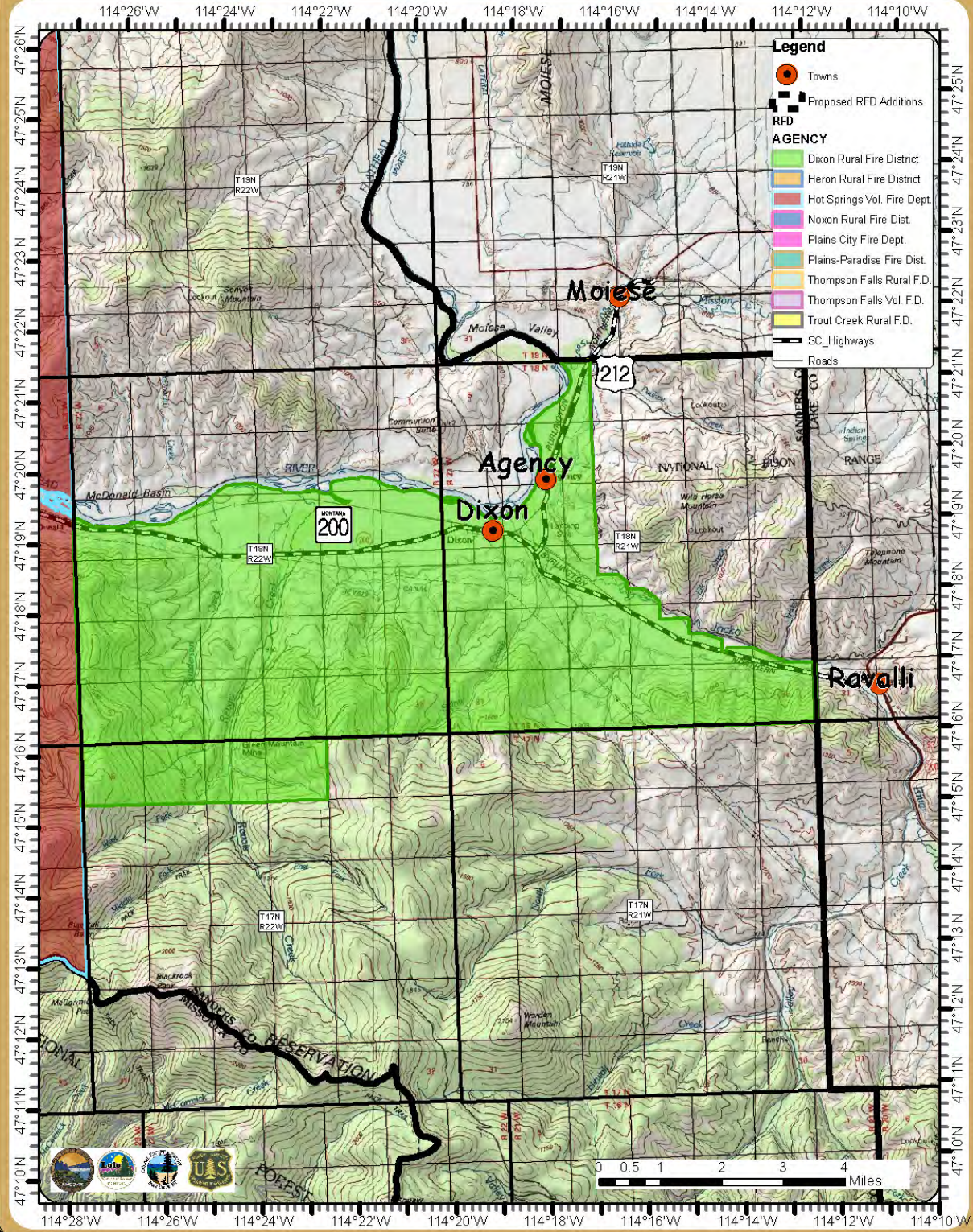
Map #II Hot Springs Rural Fire District



Map Produced April 2011



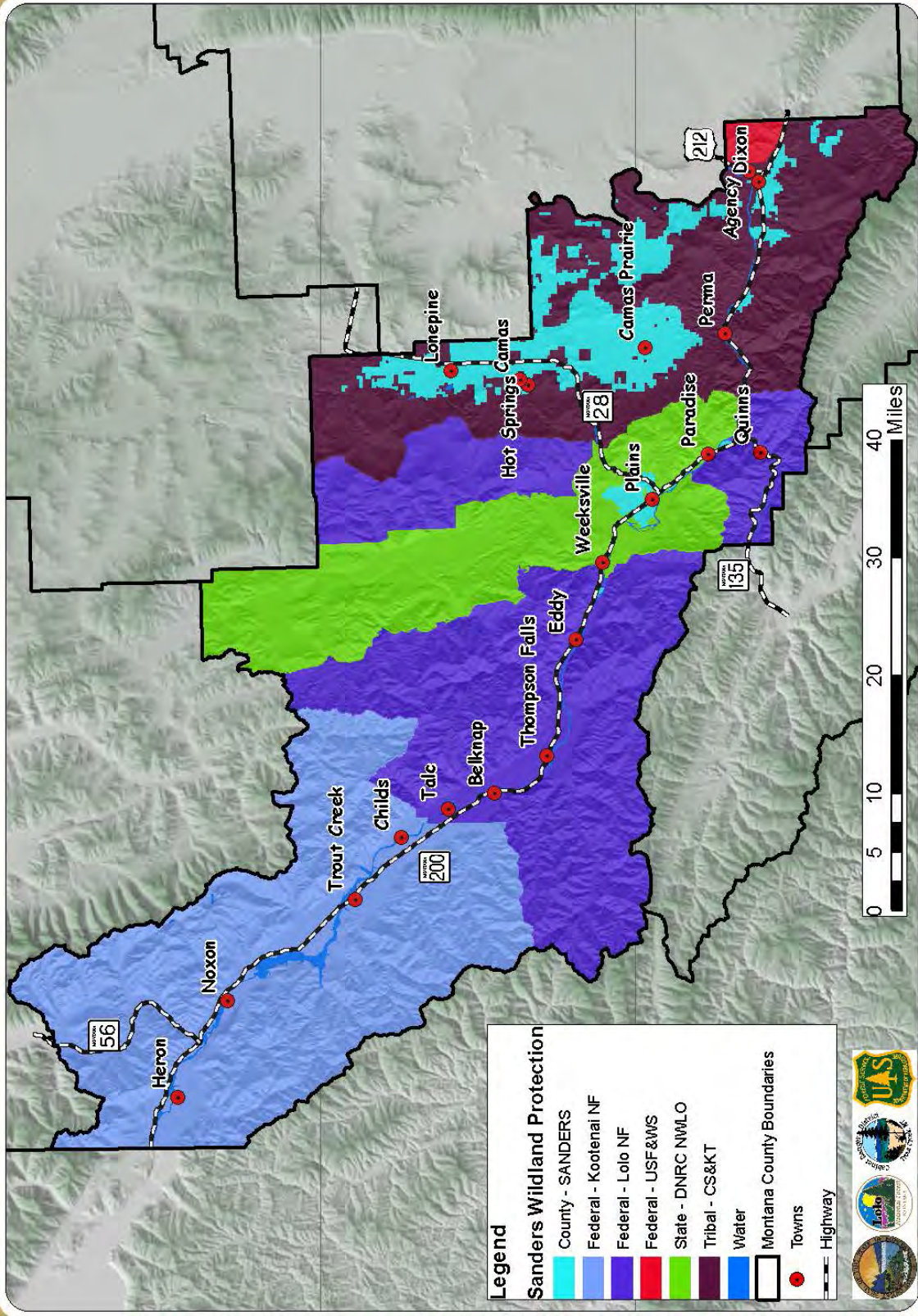
Map #I2 Dixon Rural Fire District



Map Produced April 2011



MAP #13 SANDERS COUNTY WILDLAND FIRE PROTECTION



Legend

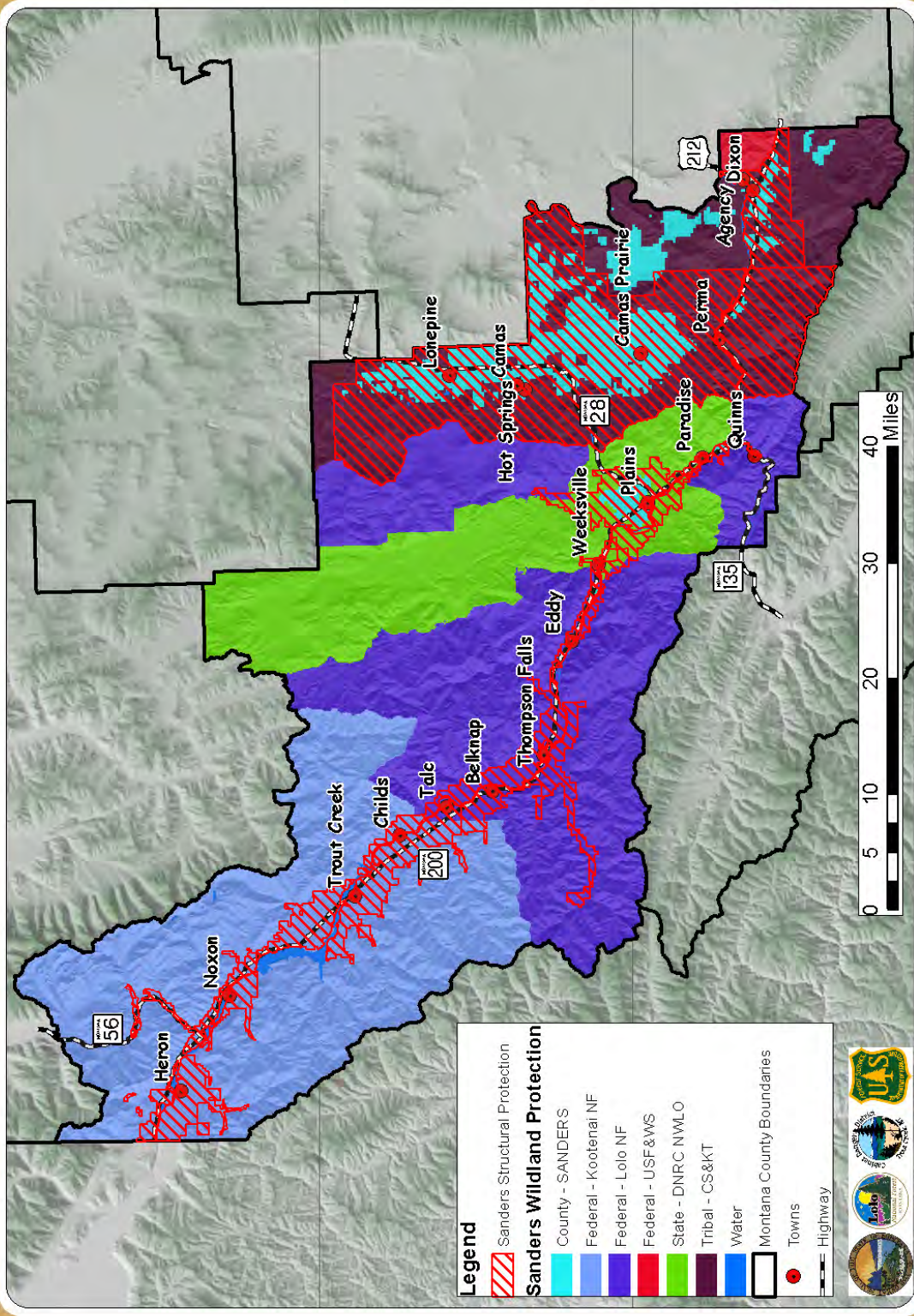
Sanders Wildland Protection

- County - SANDERS
- Federal - Kootenai NF
- Federal - Lolo NF
- Federal - USF&WS
- State - DNRC NMLO
- Tribal - CS&KT
- Water
- Montana County Boundaries
- Towns
- Highway



Map Produced April, 2011

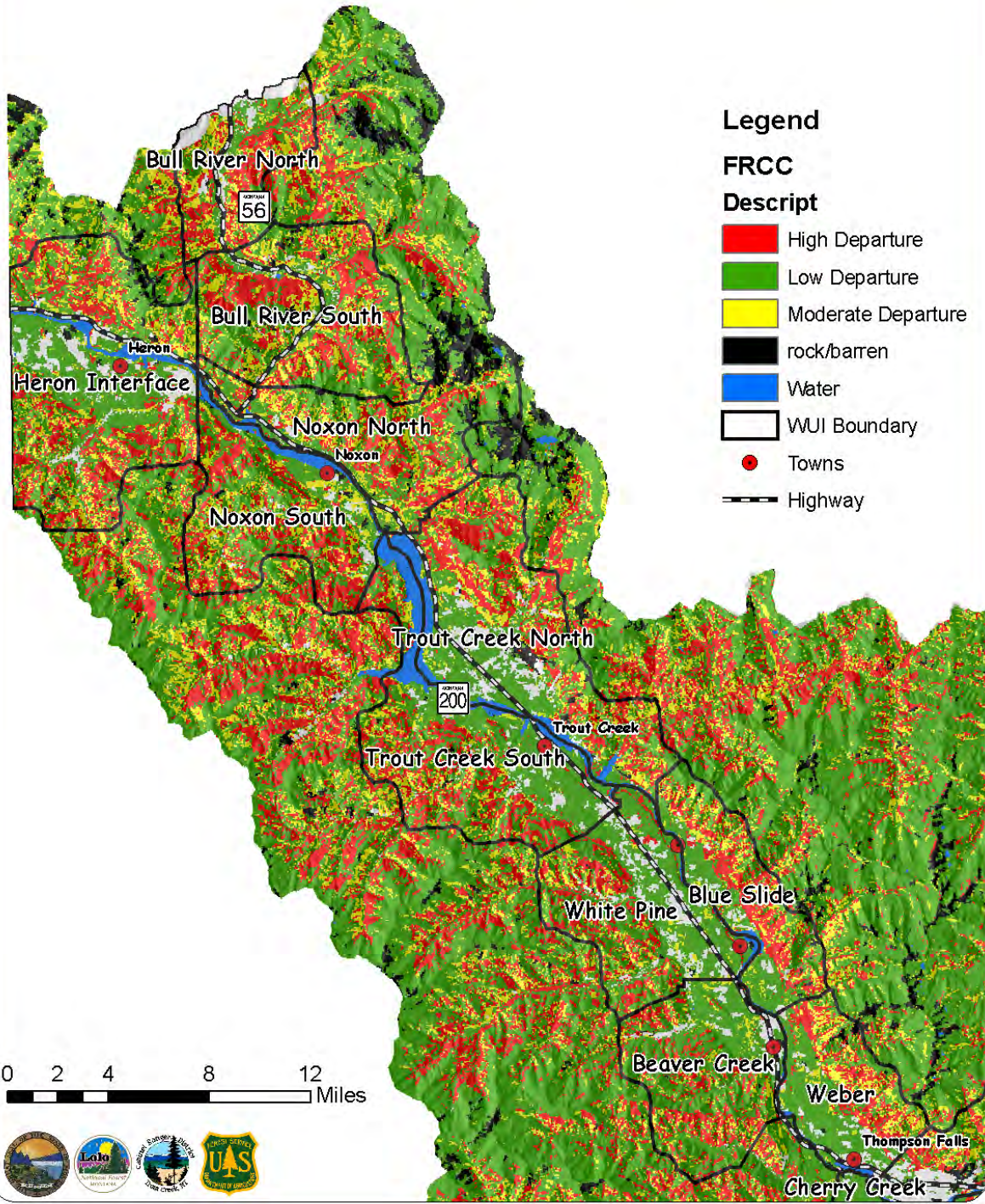
MAP #14 SANDERS COUNTY STRUCTURAL-WILDLAND FIRE PROTECTION



Map Produced June, 2012

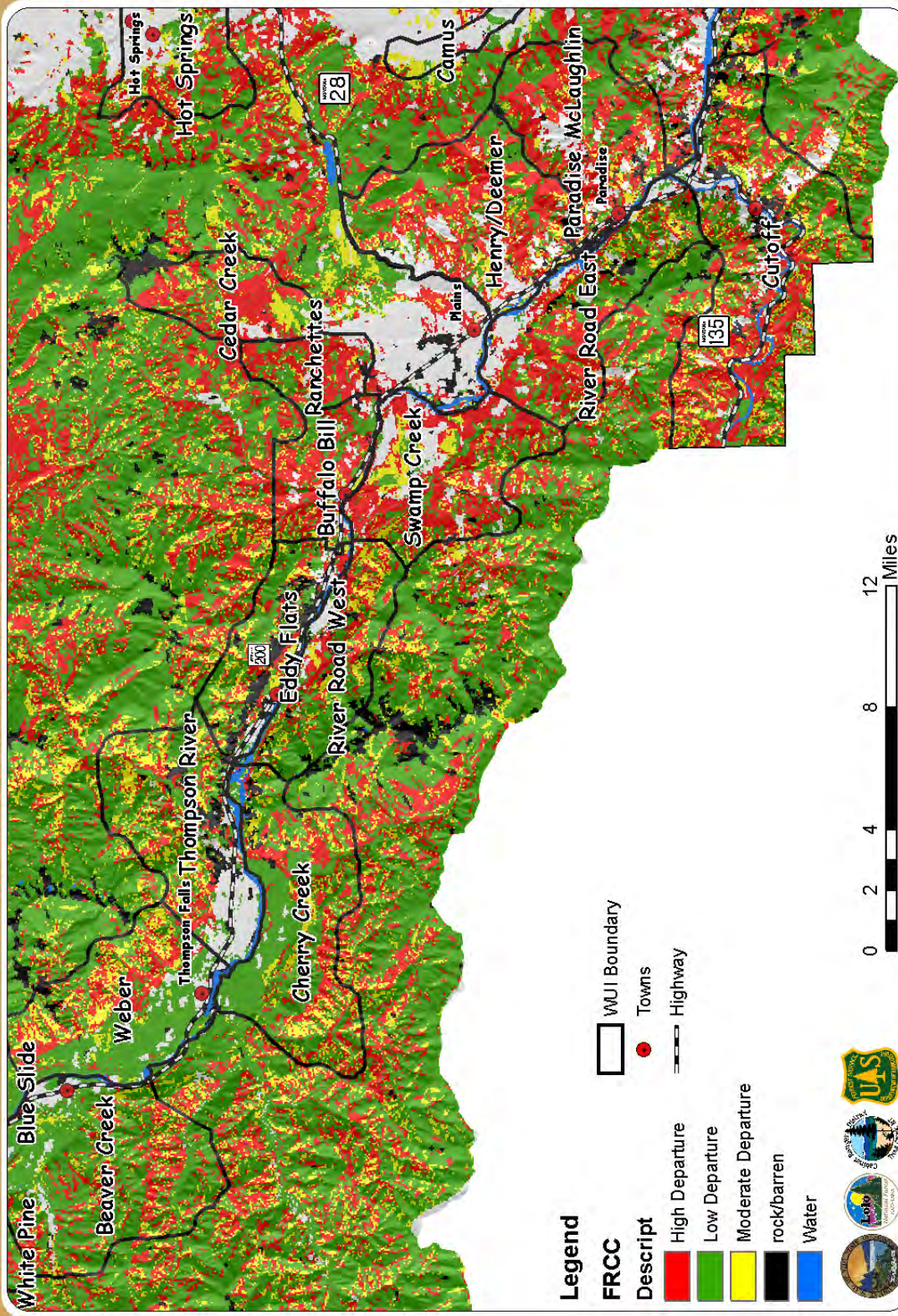


Map #15 WEST ZONE WUI's FIRE REGIME CONDITION CLASS



Map Produced April 2011

Map #I6 MID ZONE WUI's
FIRE REGIME CONDITION CLASS



Legend

FRCC

Describe

- High Departure
- Low Departure
- Moderate Departure
- rock/barren
- Water

WUI Boundary

Towns

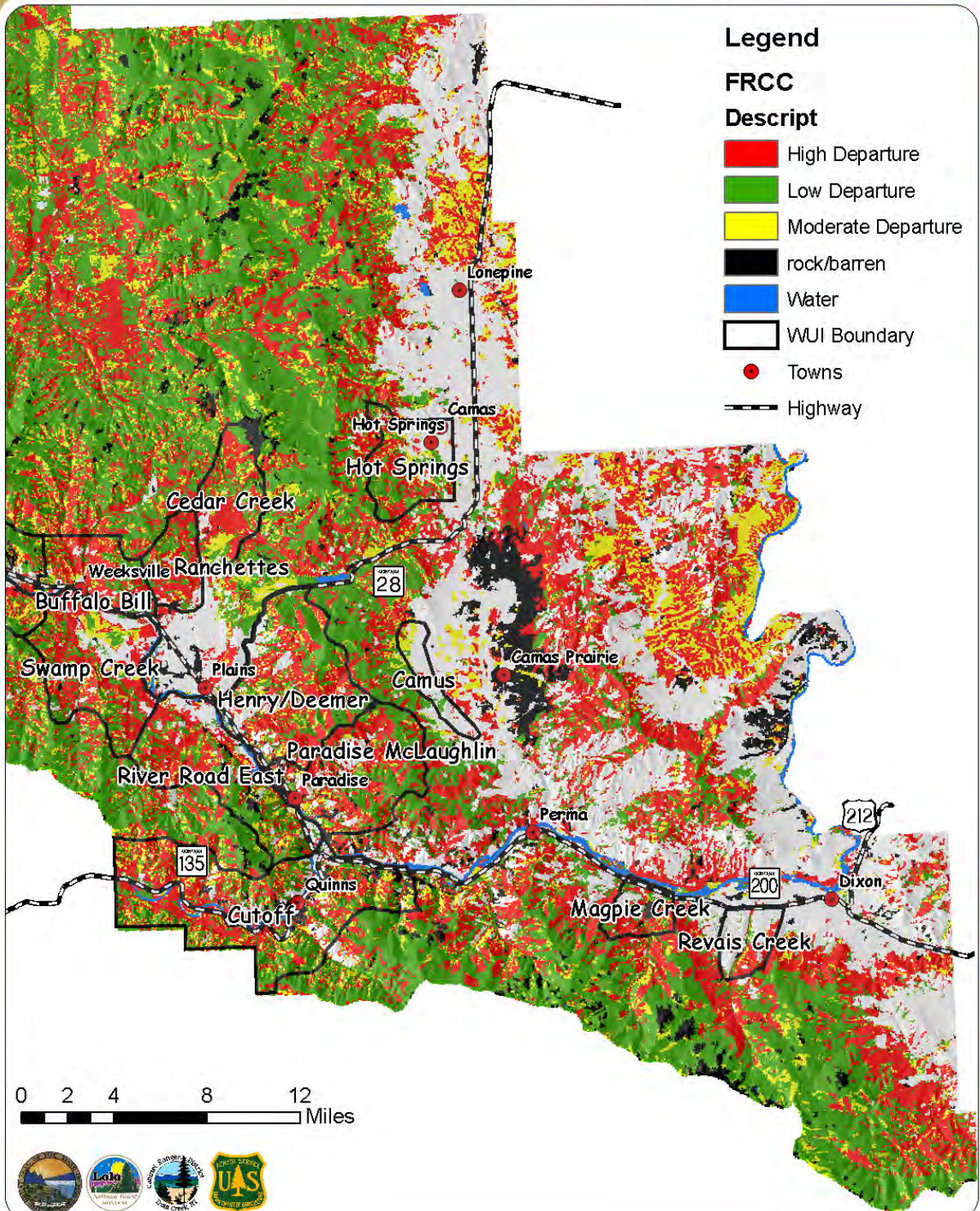
Highway



Map Produced April 2011



Map #17 EAST ZONE WUI's FIRE REGIME CONDITION CLASS

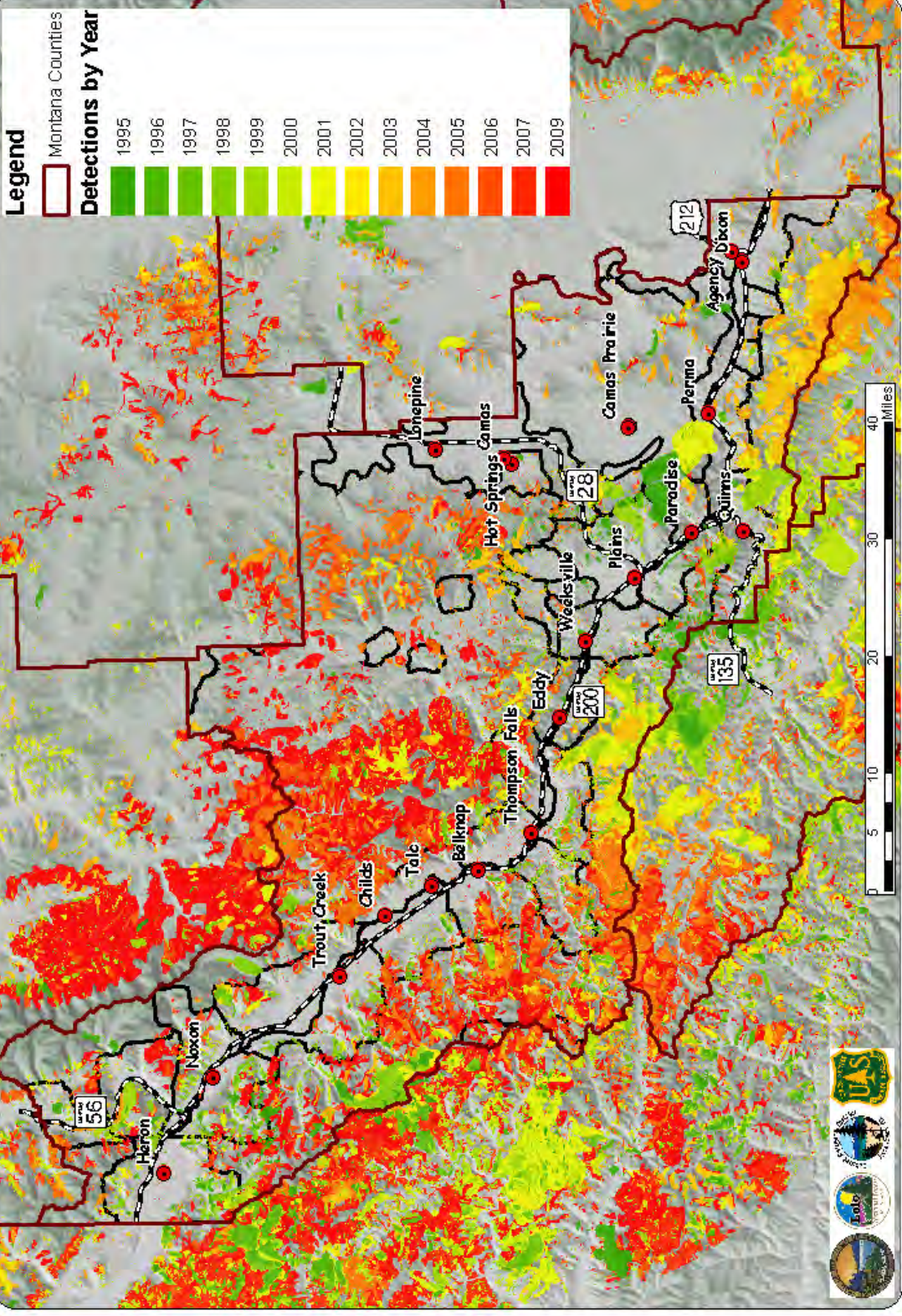


0 2 4 8 12 Miles



Map Produced April 2011

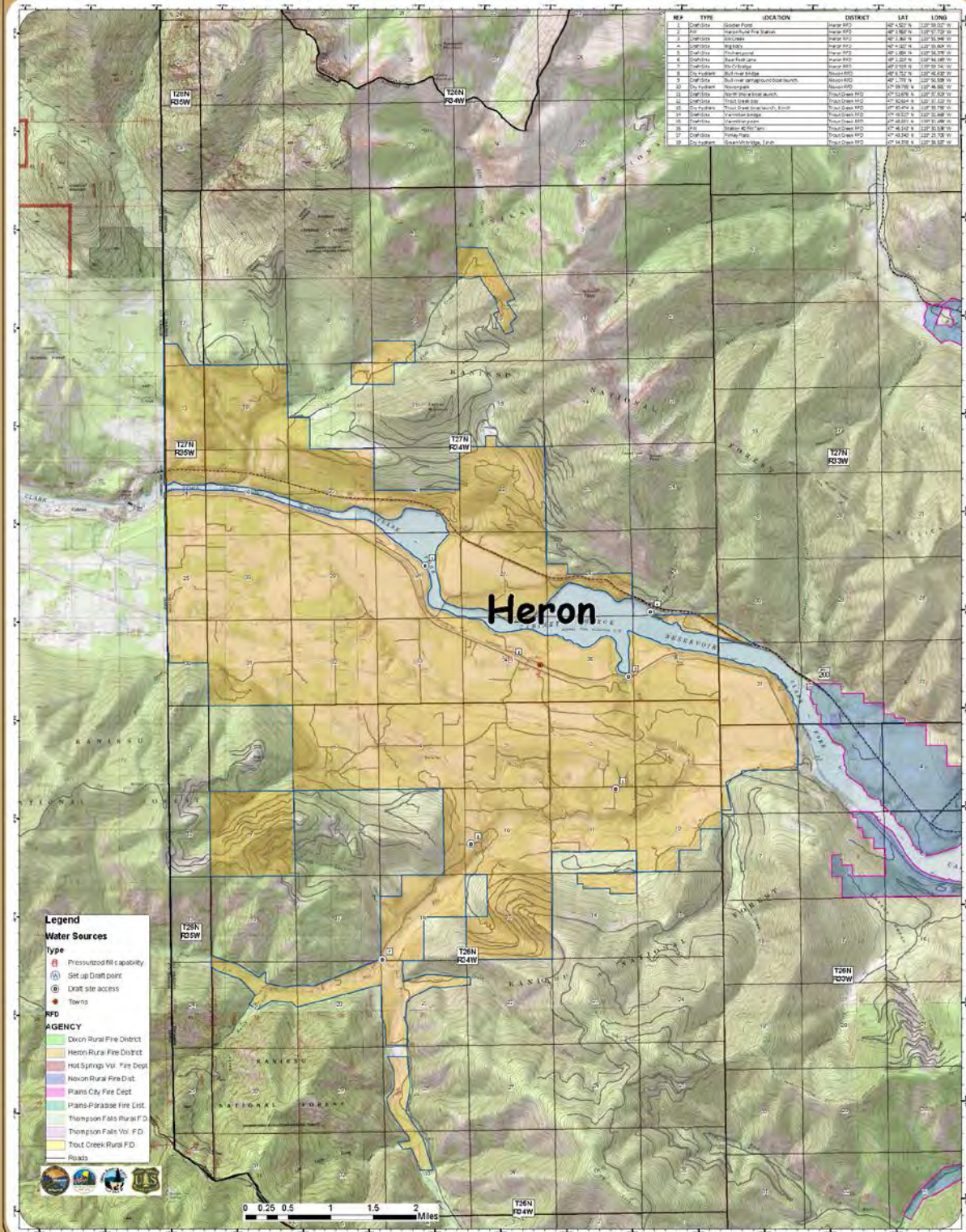
Map #18 INSECT AND DISEASE DETECTION: 1995-2009



Rural Fire District
Resource Maps

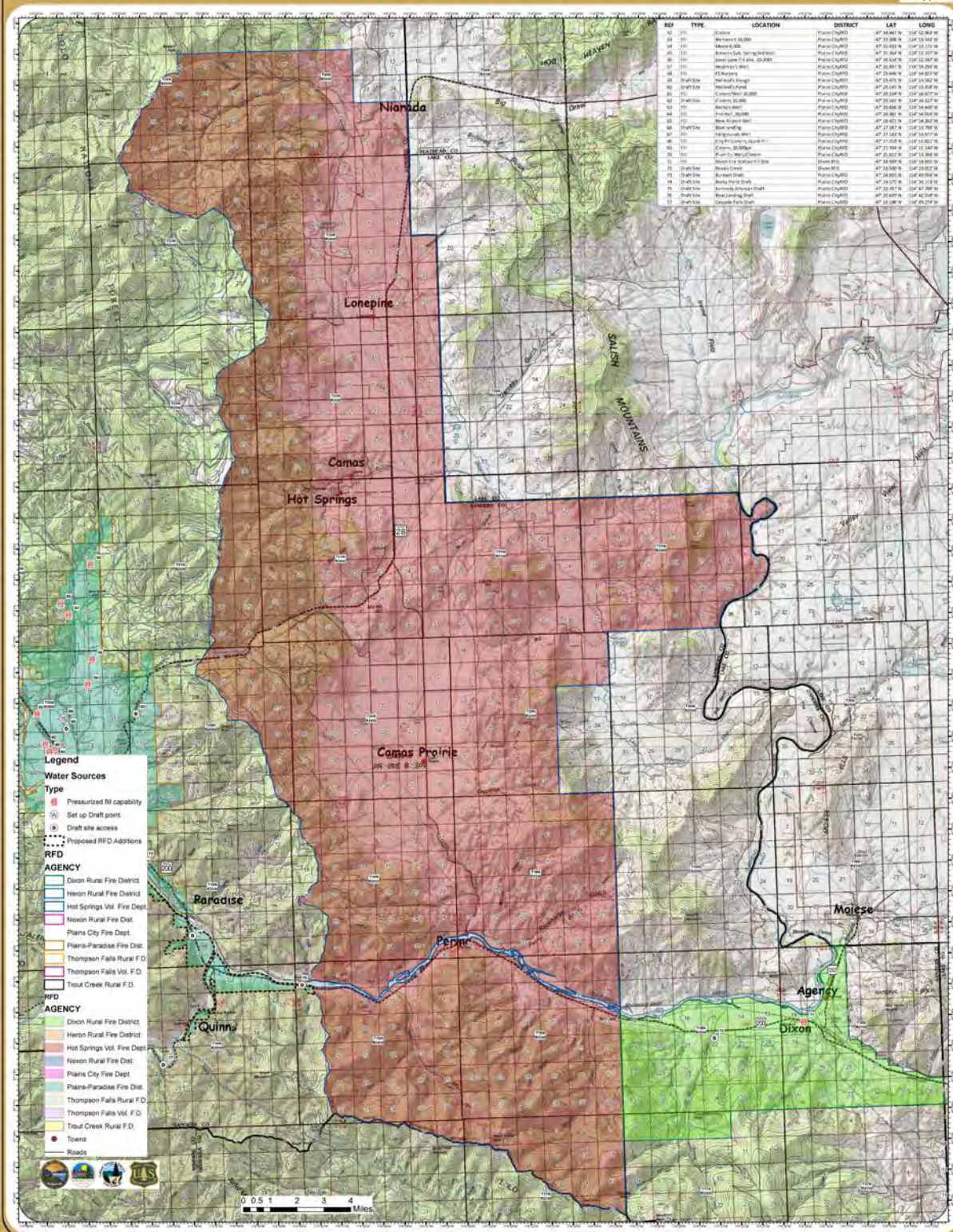


Heron Rural Fire District



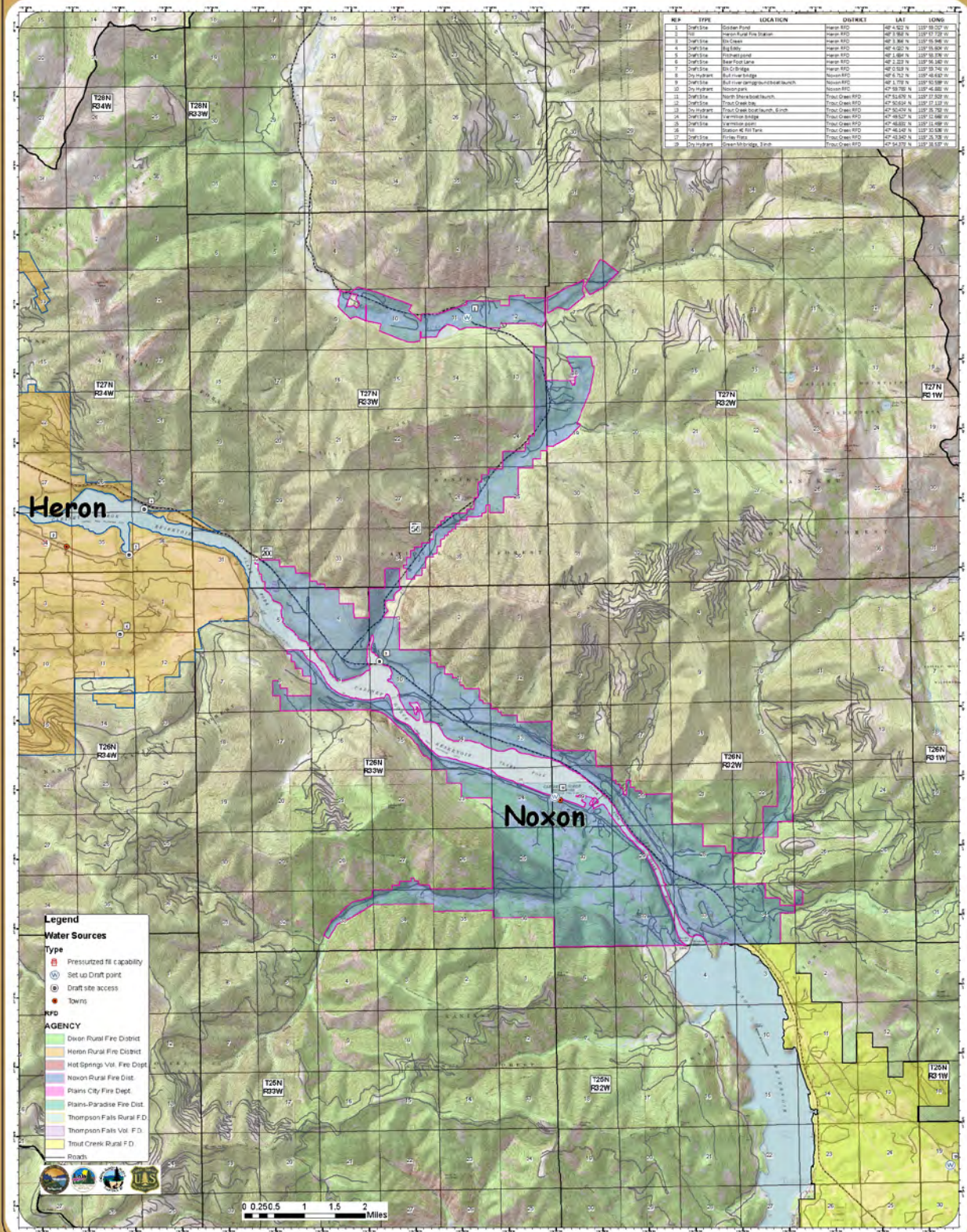


Hot Springs Rural Fire District



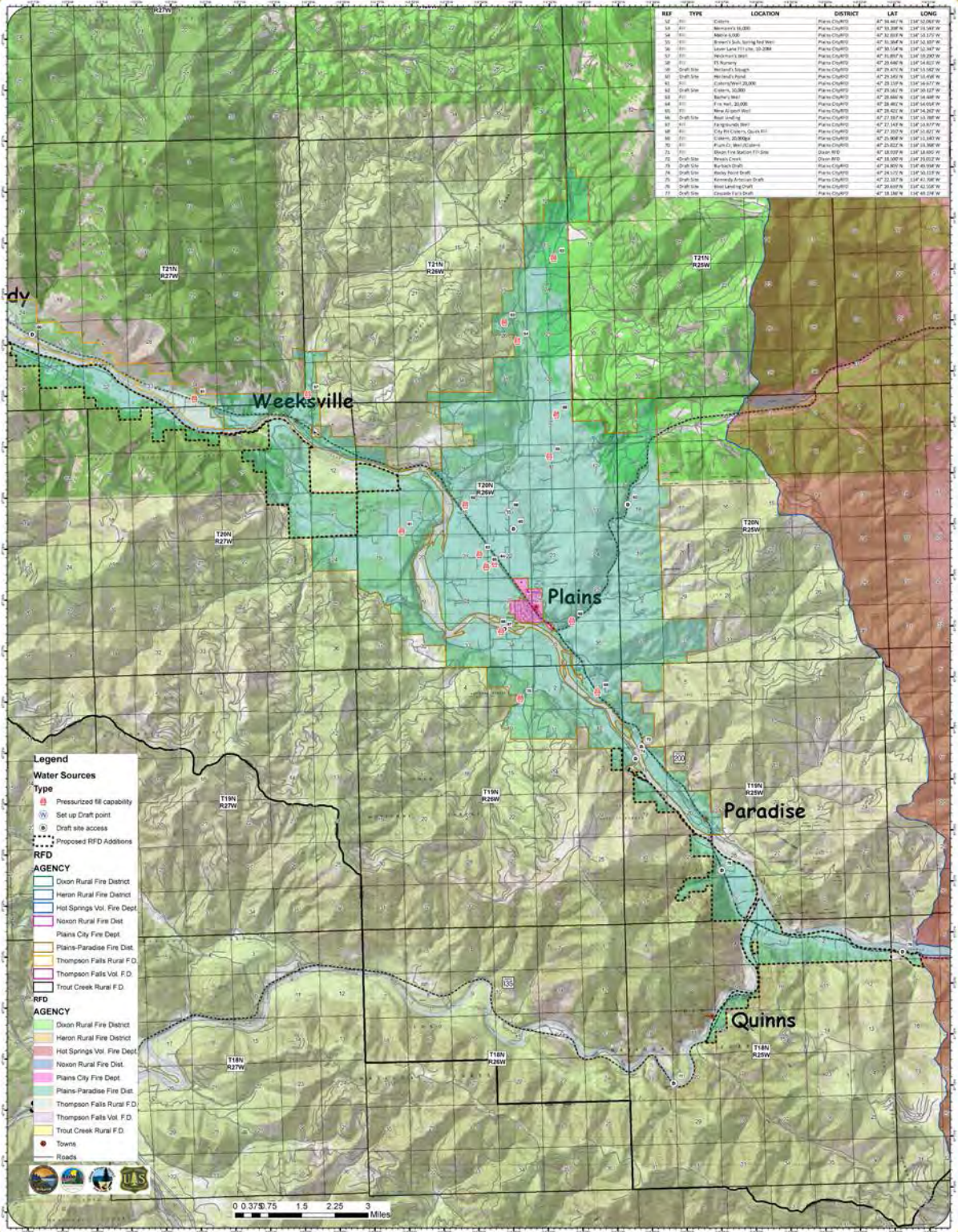


Noxon Rural Fire District





Plains City/Rural Fire Departments





Trout Creek Rural Fire District

