

## **FMU 007 GF/ BLM/ Cascades**

**FMU Identifier:** General Forest/Bureau of Land Management/Cascades

**FMU Number:** 007

**General Risk Category:** High

**Fire Behavior Indicator:** Energy Release Component based on National Fire Danger Rating System (NDFRS<sup>36</sup>) Fuel Model G

**NFDRS Weather Station:** Silver Butte

**Acres:** Total – 200,347, BLM – 81,821

**Ecoregions:** Level III – Cascades; Level IV – 4a Western Cascades Lowlands and Valleys; 4f Southern Cascades

**Predominant Vegetation Type:** Western Cascades Lowlands and Valleys contain Douglas-fir, western hemlock, western red cedar, big leaf maple, red alder, vine maple, salal, rhododendron, Oregon grape, huckleberry, thimbleberry, sword fern, oxalis, hazel and blackberry. Southern Cascades consists of mostly mixed conifer forest. At lower elevations: Douglas fir, ponderosa pine, white fir (grand fir/white fir hybrids), incense cedar and some sugar pine. At higher elevations: Shasta red fir, mountain hemlock, whitebark pine; understory includes snowberry, twinflower, Oregon grape, serviceberry, golden chinquapin and oceanspray.

**Communities at Risk Within or Adjacent to this FMU:** Canyonville, Myrtle Creek, Riddle, Days Creek, Milo, Tiller OR

### ***FMU Characteristics***

The following Special Areas are included in or adjacent to this FMU: North Umpqua River Wild and Scenic River Corridor, Tater Hill ACEC/RNA, North Myrtle ACEC/RNA, and Red Pond ACEC/RNA.

This FMU is comprised of BLM managed lands within the Matrix land use allocation located in the Cascades Ecoregion. The BLM lands are intermixed with privately managed timberlands in a checkerboard ownership pattern. BLM lands also border some Forest Service managed lands. Included in this FMU are lands north of the North Umpqua Highway in the Western Cascades Lowlands and Valleys Ecoregion. To the south the lands in this FMU are within the Southern Cascades Ecoregion. Although north to south variations in vegetation exist within these Ecoregions, they are combined in this FMU because there are more similarities than there are differences.

The Western Cascades Lowlands and Valleys Ecoregion (4a) includes the lower slopes of the Cascades Ecoregion (4). Its mild, wet climate promotes lush western hemlock and Douglas-fir forests. Soils are warmer than in higher elevation ecoregions. The steep valleys contain high gradient rivers and streams. The land cover is predominantly forest. The primary land use is logging and dispersed recreation.

A mosaic of age classes characterizes these lands. Much of the area has been intensively managed for timber production. Even-aged plantations of early and mid-seral

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<sup>36</sup> Refer to Table 12, NFDRS and Fire Behavior Fuel Models Relationships

successional stages of Douglas-fir dominate the landscape on both BLM and privately managed lands. Late-seral (old growth) forests exist primarily on the BLM managed lands. Both the managed plantations and the remaining old growth forest are highly valued resources.

Prescribed fire or mechanical fuels treatments are often used for site preparation after timber harvest on BLM lands. Pre-commercial thinning slash has historically not been treated, creating an increased risk of stand replacement fires until such fuels decompose. Fuels reduction activities designed to reduce risk of stand replacement fire is low priority in this FMU, but may occur around isolated structures or along infrastructure such as main roads. The majority of fuels reduction activities that will occur in this FMU will continue to be related to timber harvest activities.

There are no listed communities at risk within this FMU. There is Wildland Urban Interface (FMU 012) adjacent to this FMU, but the BLM managed lands are generally remote and well upslope of residential areas. Isolated rural structures could be threatened should a large fire occur or burn into FMU 012. Smoke from prescribed fires and wildfires will occasionally impact the nearby communities. Risk to the communities from fire in this FMU is considered very low.

### ***Strategic and Measurable Management Objectives***

#### **Strategic Objectives**

- ✦ Take appropriate suppression response on all wildfires while providing for public and firefighter safety. In most cases, responses will consist of aggressive initial attack to extinguish fires at the smallest size possible.
- ✦ Minimize the direct negative impacts of wildfire suppression on ecosystem management objectives.
- ✦ For wildfires that escape initial attack, complete a Wildland Fire Situation Analysis (WFSA) to develop a suppression strategy and to evaluate the damage induced by suppression activities compared to expected wildfire damage. Suppression tactics will consider:
  - ⊕ Protection of specific attributes of each land use allocation.
  - ⊕ Collaboration and coordination with partners on wildfire suppression activities that will avoid or minimize adverse impacts on federal and non-federal lands.
  - ⊕ Appropriate use of suppression tools such as aircraft, dozers, pumps and other mechanized equipment. Clearly define any restrictions relating to their use.
- ✦ Reduce hazardous fuels utilizing methods such as prescribed burning, mechanical or manual manipulation of forest vegetation and debris, or removal of forest vegetation and debris.
- ✦ Maintain transportation corridors.
- ✦ Reduce the number of human caused fires.

### Measurable Objectives

- Detect 75% of all fires within two hours of origin or prior to reaching 0.5 acres.
- Suppress 94% of all wildland fires at ten acres or less.
- Mop-up all fires of ten acres or less within 72 hours of containment.
- Provide annual fire prevention outreach to schoolchildren (grades 1-5).
- Increase the number of fuels reduction treatment acres along main travel corridors and in areas of activity fuels.

### *Management Constraints Affecting Operational Implementation*<sup>37</sup>

The Roseburg RMP contains guidelines and constraints for fire management activities within all land use allocations (LUA's) for:

- Wildfire Suppression
- Fuels management and hazard reduction activities using prescribed fire

The Roseburg RMP also contains Best Management Practices (BMP's) that are site-specific methods, measures or practices designed to protect water quality or soil productivity. These sections of the Roseburg RMP are included in Appendix G.

**The primary land unit allocation (LUA) in this FMU is Matrix.** Other LUA's include riparian reserves and other special management areas, including the North Umpqua River Wildlife Area ACEC and Wild and Scenic River Corridor, the Tater Hill ACEC/RNA, North Myrtle ACEC/RNA and Red Pond ACEC/RNA.

### Matrix

- Appropriate suppression response will be used. A full range of suppression strategies is available.
- Minimize damage to riparian vegetation during wildfire and prescribed fire activities.
- Fire lines should be constructed outside riparian areas. Machinery such as tractors may be used where approved by a resource advisor.
- Prescribed fire treatments will be designed to prevent reduction in site productivity.
- Detection efforts will be intensified during critical fire periods.

### ACEC/RNA'S

Emphasize fire suppression strategies and tactics that minimize impacts to the values for which the ACEC/RNA was established. The operation of ground based fire suppression equipment off existing roads, or other surface disturbing activity in ACEC/RNA's, is to be avoided.

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<sup>37</sup> *LRMP/ROD management area prescriptions, standards and guidelines*

### **North Umpqua Wild and Scenic River Corridor**

- ✦ Wildfires will be suppressed using appropriate suppression response.
- ✦ Developed recreation sites, structures and improvements are a priority for wild fire suppression.
- ✦ All methods of treatment of activity and natural fuels, which meet stated Visual Quality Objectives, will be allowed.
- ✦ In foreground areas, fire line construction using tractors is prohibited, except through the WFSA process.
- ✦ Fire rehabilitation efforts shall ensure that the character of the natural and diverse landscape is perpetuated.
- ✦ Prescribed fire is allowed and will be further specified in the North Umpqua Wild and Scenic River Management Plan.

### ***Management Constraints Related to Wildland Fire Suppression and Fuels Treatment. Special Area Maps***

Fire suppression is contracted with the Oregon Department of Forestry. Section C.5.5 of the protection contract addresses “Special Fire Management Measures”. The BLM’s “Special Fire Management Area Maps” identify areas where modified suppression tactics are required to protect specific resources values including soils, threatened and endangered (T&E) species and habitat, archaeological sites and recreation facilities. Copies of these maps are provided to the Fire Protection Districts and each BLM Field Office maintains a copy.

### ***Management Constraints Specific to Wildland Fire Use***

Wildland fire use (WFU) is precluded at this time due to complex issues associated with forest management investments, risk to resource values, a checkerboard ownership pattern, and heavy fuel loadings in this mixed severity fire regime.

### ***Historic Fire Occurrence***

The southwest Oregon area experiences moderate fire activity, mainly associated with lightning ignitions during the summer months. Detailed statistics regarding historic fire activity may be found in [Appendix C](#).

### ***Fire Management Situation***

#### **Weather patterns influencing fire behavior and historical weather analysis.**

- ✦ Historic lightning pattern tracks north from the Siskiyou Mountains.
- ✦ Fall east wind events (foehn winds) can result in extreme fire behavior late in the fire season (September – October).

#### **Fire season determination.**

In general, fire season is declared by the Douglas Forest Protective Association (DFPA) in mid-June, and the season runs through late September. This decision is based on local weather conditions and the predicted Energy Release Component (ERC). Season ending weather events normally occur in late September or October.

### **Fuels conditions likely to influence fire behavior.**

Fuel types vary widely across this FMU with changes in elevation, aspect, and due to past and present forest management operations. Extreme fire behavior can occur in any of these fuel types given critical weather conditions and an ignition source.

The fuels that have the greatest influence on fire behavior at the landscape scale are activity fuels created by forest management operations. The greatest risk occurs during the first one to two fire seasons after fuels are created, when slash has cured and red needles are still attached. Each year there will be recently accomplished harvest units dispersed across this FMU that will have higher flammability. Wildfire in these areas will result in higher rates of spread and higher fire intensities.

Although fuels reduction treatments after regeneration harvest have been done on many areas, some areas have been planted. Density management activities such as pre-commercial thinning are being conducted in many areas. Regardless of the checkerboard ownership pattern, activity fuels from regeneration timber harvest, pre-commercial thinning, commercial thinning and other forest management activities produce an increase in surface fuels may result in increased fire behavior until such fuels have time to decay. Forest management operations will periodically continue to produce activity fuels on the matrix lands within this FMU.

Dense live vegetation exists in many of the managed stands in this FMU, even though hazard reduction treatments (most commonly associated with site preparation after timber harvest) were done within the past five to twenty years. The NFFL brush fuel model 5 represents many of these stands. These stands generally require a wind driven fire under conditions of low humidity to sustain a crown fire. The high component of live fuels acts as a heat sink that slows a fire's rate of spread. Stand replacement fires can result from surface fires in such stands due to crown scorch of the young trees and brush.

Old growth stands include numerous fuels characteristics that influence fire behavior. Numerous large snags create overhead hazards to firefighters and are a source of embers that cause relatively long range spotting. High levels of large woody debris, a desirable habitat feature in ecosystem management, can result in high intensity and long duration fire. Multistory canopies create ladder fuels that can carry flames from the surface high into crowns of old growth trees.

Slow burning ground fires with low flame lengths are typical, with occasional flare-ups where heavy fuel concentrations are encountered. An occasional stand of mature shrubs, such as buck brush and slick leaf ceanothus four or more feet tall, intensifies fire behavior and spreads rapidly in the foliage and in the live and dead fine woody material.

### **Fire Regime Alteration**

Unknown at this time.

### **Control problems and dominant topographic features.**

Potential control problems:

- ▶ Moderate to heavy fuel loading in many forested areas.
- ▶ Continuous fuels with few natural barriers or fuel breaks.
- ▶ During extreme weather, fires can become convection driven with potential for long range spotting.

Dominant topographic features:

- ▶ Highly dissected mountains with high gradient streams.
- ▶ Well developed road system provides access within one mile in most cases.
- ▶ Water is relatively abundant along major streams and creeks at lower elevation. Water is less abundant at higher elevations.

### **Firefighter and public safety considerations.**

- ▶ Potential need for traffic control and possible evacuation coordination.
- ▶ Mapped roads may not provide ready access without use of heavy equipment to open.
- ▶ Potential for smoke impacts along I-5 corridor and North Umpqua Highway.

### **Fire prevention and education opportunities.**

- ▶ Fire prevention signing in accordance with protection contract.
- ▶ Operations permits required during fire season.
- ▶ Local news coverage at beginning of and throughout fire season.
- ▶ Actively disseminate fire restriction information and make forest user contacts.
- ▶ Yearly participation in 5<sup>th</sup> and 6<sup>th</sup> grade forestry tour.

### **Values to be protected (TES, Cultural, etc.)**

During suppression action, resource advisors and protection agencies are provided Special Fire Management Area Maps of the District that identify resources requiring special protection.

Best Management Practices located in the Roseburg RMP, Appendix D define site-specific methods, measures or practices to protect water quality or soil productivity. These may also be found in [Appendix G](#).

### **Proposed hazard fuels treatments or prescribed burns.**

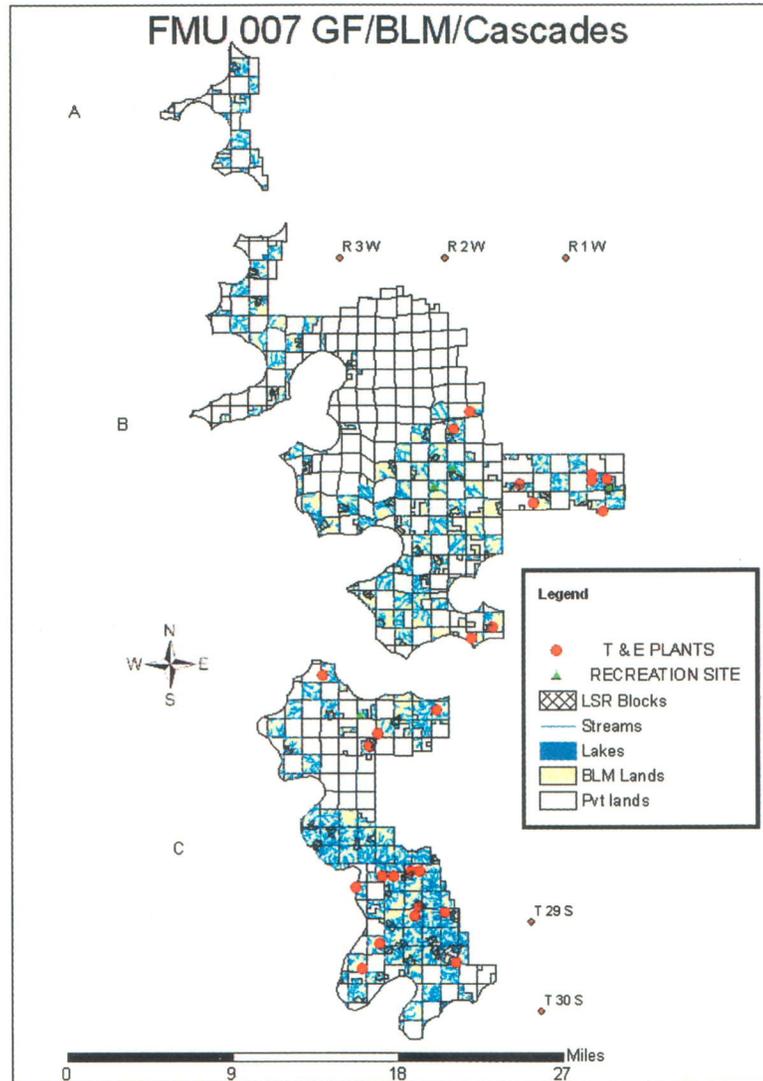
Numerous active timber sales include fuels reduction requirements in their contracts. Work is scheduled as units are logged.

### **Other elements of the fire environment affecting management (smoke management).**

The Oregon Smoke Management Plan restricts burning opportunities. The State of Oregon's closed fire season, and restrictions at National Fire Preparedness Levels IV and V affect prescribed fire opportunities.

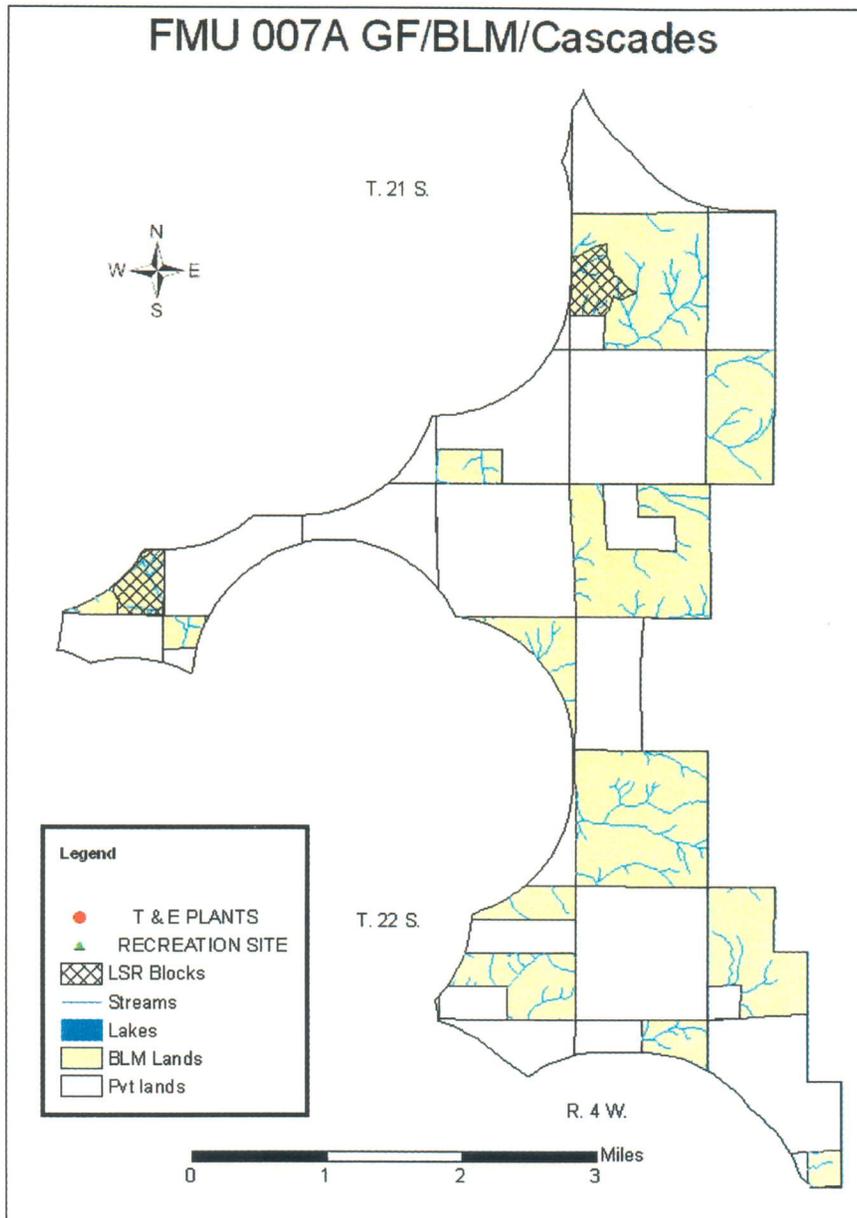
**Other special concern area.**

No other special concerns are noted beyond those contained in the Special Fire Management Area Maps.

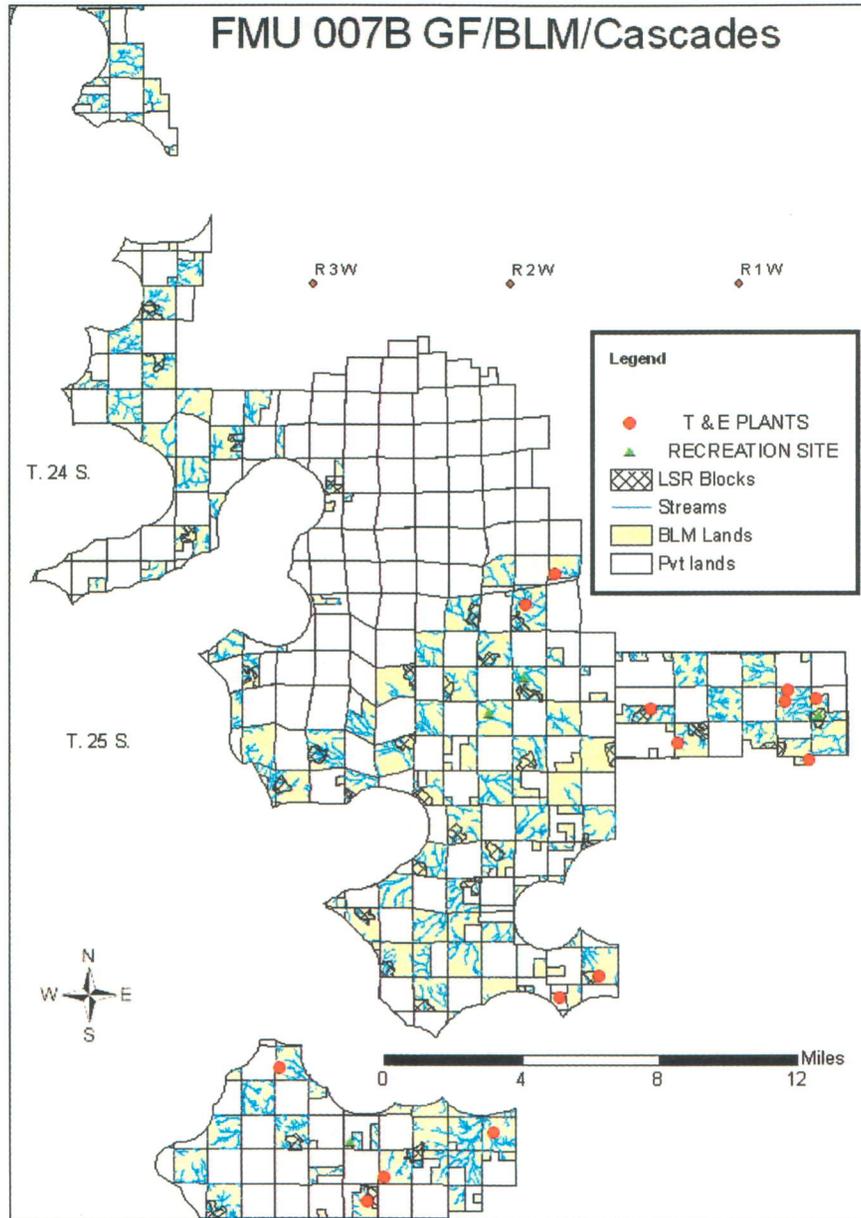


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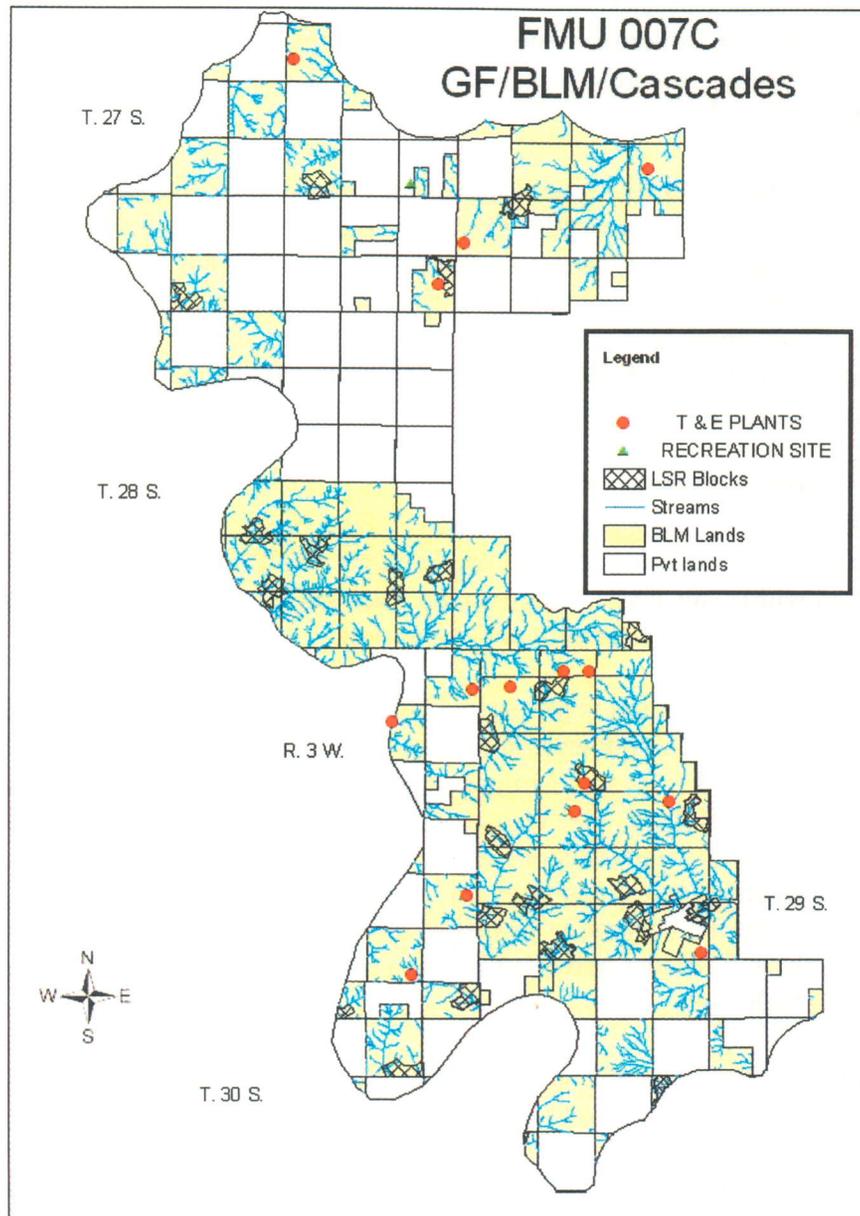
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