2175524

Florissant Fossil Beds National Monument



Fire Management Handbook

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Florissant Fossil Beds National Monument
Fire Management Handbook

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Introduction

Florissant Fossil Beds National Monument has a fire management program that includes fire prevention/education, fire readiness, wildland fire suppression, and may soon include prescribed fire, and fire effects monitoring.

A primary goal of the fire management program at Florissant Fossil Beds National Monument is to introduce the use of prescribed fire, while continuing to maintain, utilize and improve the monument's fire suppression capabilities. In this handbook you will find valuable information for your participation in the fire management program here at Florissant Fossil Beds National Monument. Please contact your supervisor or my office if you have further questions.



Jesse Duhnkrack
Fire Management Officer

Firefighting Code of Safe Practices

- Safety comes first on every fire, every time.
- The 10 standard orders are firm. We don't break them; we don't bend them.
- All firefighters have the right to a safe assignment.
- Every firefighter, every fireline supervisor, every fire manager, and every agency administrator has the responsibility to ensure compliance with established safe firefighting practices.

"Zero Tolerance" of carelessness and unsafe actions. When we see a problem, we will take action to correct it. We will not tolerate violations of our safety practices.

FIRE ORDERS

Fight fire aggressively but provide for safety first.

Initiate all action based on current and expected fire behavior.

Recognize current weather conditions and obtain forecasts.

Ensure that instructions are given and understood.

Obtain current information on fire status.

Remain in communication with crewmembers, your supervisor, and adjoining forces.

Determine safety zones and escape routes.

Establish lookouts in potentially hazardous situations.

Retain control at all times.

Stay alert, keep calm, think clearly, and act decisively.

COMMON DENOMINATORS OF FIRE BEHAVIOR ON TRAGEDY FIRES

MOST INCIDENTS HAPPEN ON SMALLER FIRES OR ON ISOLATED PORTIONS OF LARGE FIRES.

FIRES RESPOND QUICKLY TO SHIFTS IN WIND DIRECTION OR WIND SPEED.

FLARE-UPS GENERALLY OCCUR IN DECEPTIVELY LIGHT FUELS.

FIRES RUN UPHILL SURPRISINGLY FAST IN CHIMNEYS, GULLIES, AND ON STEEP SLOPES.

LCES

- **L --Lookout(s)**
- **C --Communication(s)**
- **E --Escape routes**
- **S --Safety zone(s)**

LCES- A system for Operational Safety. In the wildland fire environment, where four basic safety hazards confront the firefighter-lightning, fire-weakened timber, rolling rocks, and entrapment by running fires--LCES is key to safe procedure for firefighters. LCES stands for "lookout(s)", "communication(s)", "escape routes", and "safety zone(s)"- an interconnection each firefighter must know. Together the elements of LCES for a safety system used by firefighters to protect themselves. This safety procedure is put in place before fighting the fire: Select a lookout or lookouts, set up a communication system, choose escape routes and select safety zone or zones.

In operation, LCES functions sequentially-it's a self-triggering mechanism: Lookouts assess-and reassess-the fire environment and communicate to each firefighter threats to safety; firefighters use escape routes and move to safety zones. Actually, all firefighters should be alert to changes in the fire environment and have the authority to initiate communication.

Key Guidelines. LCES is built on two basic guidelines:

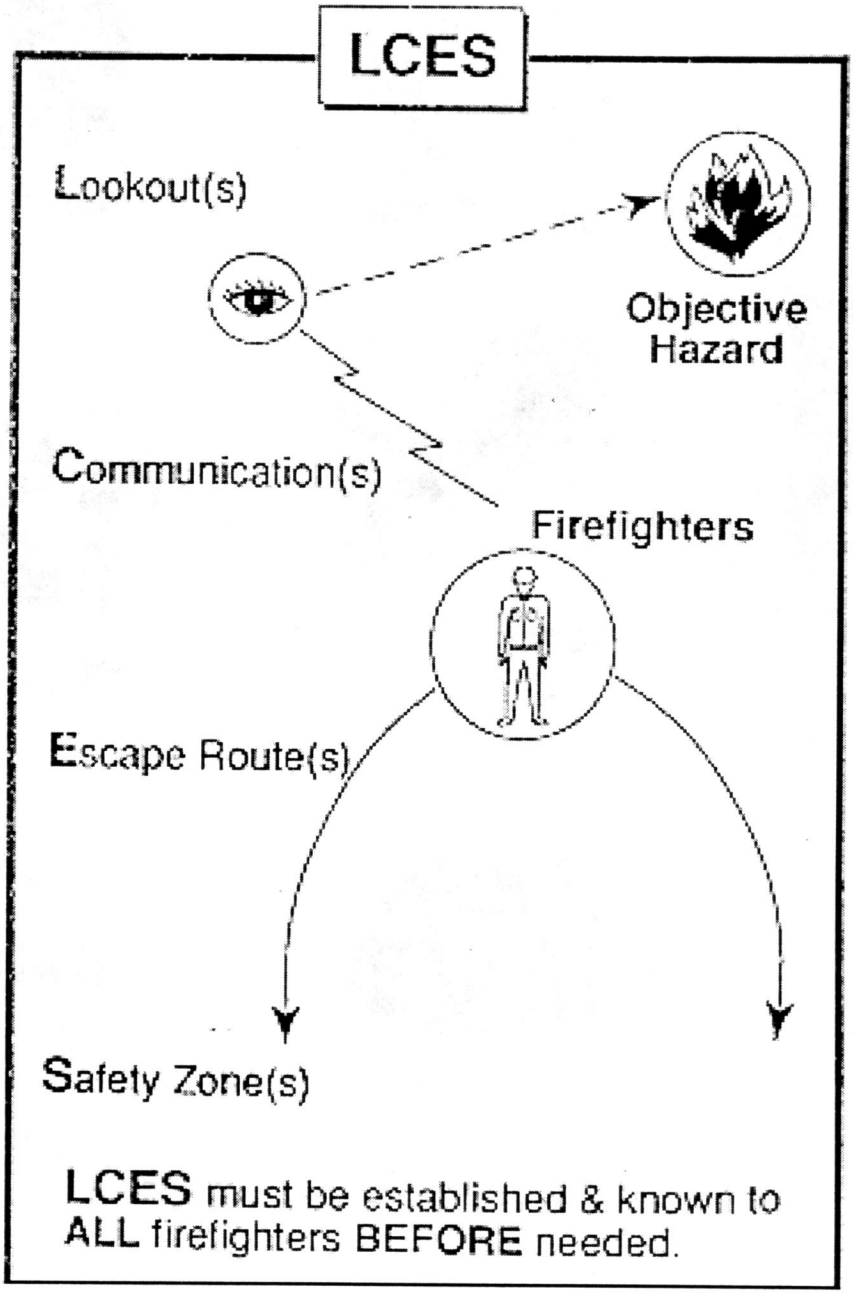
- **Before safety is threatened, each firefighter must be informed how the LCES system will be used.**
- **The LCES system must be continuously reevaluated as fire conditions change.**

How to Make LCES Work

- **Train lookouts to observe the wildland fire environment and to recognize and anticipate fire behavior changes.**
- **Position lookout or lookouts where both the hazard and the firefighters can be seen. (Each situation-the terrain, cover, and fire size-determines the number of lookouts that are needed. As stated before, every firefighter has both the authority and responsibility to warn others of threats to safety.)**
- **Set up communications system-radio, voice, or both-by which the lookout or lookouts warn firefighters promptly and clearly of approaching threat. (Most often the lookout initiates a warning that is subsequently passed down to each firefighter by "word-of-mouth." It is paramount that every firefighter receive the correct message in a timely manner.)**
- **Establish the escape routes (at least two)- the paths the firefighters take from threatened position to area free from danger-and make them known. (In the Battlement Creek 1976 fire, three firefighters lost their lives after retreat along their only escape route was cut off by the advancing fire.)**
- **Reestablish escape routes as their effectiveness decreases. (As firefighters works along the fire perimeter, fatigue and distance increases the time required to reach a safety zone.)**
- **Establish safety zones-locations where the threatened firefighter may find adequate refuge from the danger. (Fireline intensity, air flow, and topographic location determine a safety zone's effectiveness. Shelter deployment sites have sometimes been termed, improperly and unfortunately, "safety zones." Safety zones should be conceptualized and planned as a location where no shelter will be needed. This does not imply that a shelter should not be deployed if needed, only that if there is a deployment, the safety zone location was not truly a safety zone.)**

A Final Word

The LCES system approach to fireline safety is an outgrowth of my analysis of fatalities and near misses for over 20 years of active fireline suppression duties. LCES simply focuses on the essential elements of the standard FIRE ORDERS. Its use should be automatic in fireline operations. All firefighters should know LCES, the Lookout-Communication-Escape routes-Safety zone interconnection.
(By Paul Gleason)



18 Situations that shout WATCH OUT



1. FIRE NOT SCOUTED AND SIZED UP



4. UNFAMILIAR WITH WEATHER AND LOCAL FACTORS INFLUENCING FIRE BEHAVIOR



7. NO COMMUNICATION LINK WITH CREW MEMBERS/SUPERVISOR



2. IN COUNTRY NOT SEEN IN DAYLIGHT



5. UNINFORMED ON STRATEGY, TACTICS AND HAZARDS



8. CONSTRUCTING FIRELINE WITHOUT SAFE ANCHOR POINT



3. SAFETY ZONES AND ESCAPE ROUTES NOT IDENTIFIED



6. INSTRUCTIONS AND ASSIGNMENTS NOT CLEAR



9. BUILDING FIRELINE DOWNHILL WITH FIRE BELOW

18 Situations that shout WATCH OUT (continued)



10.ATTEMPTING FRONTAL ASSAULT ON FIRE



13.ON A HILLSIDE WHERE ROLLING MATERIAL CAN IGNITE FUEL BELOW



16.GETTING FREQUENT SPOT FIRES ACROSS LINE



11.UNBURNED FUEL BETWEEN YOU AND THE FIRE



14.WEATHER IS GETTING HOTTER AND DRIER



17.TERRAIN AND FUELS MAKE ESCAPE TO SAFETY ZONES DIFFICULT



12.CANNOT SEE MAIN FIRE, NOT IN CONTACT WITH ANYONE WHO CAN



15.WIND INCREASES AND/OR CHANGES DIRECTION



18.TAKING A NAP NEAR THE FIRELINE

The Fire Environment in Florissant Fossil Beds National Monument

Fuels

Fuel Description	Fuel Model	Fire Behavior	
		Normal	Extreme
Short grass prairies with grass less than knee high before greenup, or after curing **Meadows**	1	Flame length low to moderate Spread rate moderate	Flame length moderate Spread rate high
Open canopy trees with grass and needle cast in the understory **Ponderosa Pine – Open Canopy**	2	Flame length low to moderate Spread rate moderate	Flame length moderate Spread rate high
Tall grass in riparian zones, more than knee high, when cured **Wet Meadows**	3	Flame length moderate to high Spread rate moderate to high	Flame length high to very high Spread rate high to very high
Stands of fir or spruce / fir with little dead or down material and compact fuel beds **Fir or Spruce/Fir** **Little Dead & Down**	8	Flame length low Spread rate low	Crown fire especially with wind and/or drought spotting likely
Closed canopy stands of ponderosa pine with little dead and down material or Aspen with dry leaf understory **Ponderosa Pine or Aspen** **Closed Canopy**	9	Flame length low to moderate Spread rate low to moderate	Crown fire especially with wind and/or drought spotting likely
Stands of conifers with large amounts of dead and down material **Ponderosa, Fir or Spruce/Fir** **Heavy Dead & Down**	10	Flame length moderate Spread rate moderate	Crown fire even with light winds and/or drought Spotting likely
Areas with very high levels of dead and down fuels due to bug kill, wind throw or old fires **Insect Damage / Windthrown Stand**	11 or 12	Flame length moderate Spread rate low to moderate	Flame length moderate to high Spread rates moderate with spotting possible

Weather

Fire weather data is contained in Appendix A at the end of this document.

Topography

The terrain in Florissant Fossil Beds National Monument is rolling with all aspects present and terrain varying from flat to very steep with some chimneys and chutes.

Size Up Guide

For safe and effective suppression of unwanted fires, a good size up is important. The basic information that dispatch needs (and the rest of the park would like to know) fall into the following categories.

What do you have: This is the, what, where (and maybe how) information.

What do you need: Are any other resources needed now for this fire.

What are you going to do: What is you current plan of action.

A sample size up guide is shown below, other information can be added as appropriate but this is probably a good start.

Size Up Guide

Reporting Location and Reporting Party:
Location of Fire:
Fire Use Zone / Ownership:
Access / Distance from Road:
Size of Fire:
Smoke Color and Column Behavior:
Flame Length:
Rate of Spread:
Fire Behavior Description:
Expected Fire Behavior:
Fuels and Adjacent Fuels:
Wind Speed and Direction:
Current and Expected Weather:
% Slope and Position on Slope:
Aspect and Shading:
Topography and Terrain Features:
Hazards:
Cause:
Values at Risk:
Estimated Duration of Suppression:
Resources needed:
Plan of Action:

FIREFIGHTING BOOTS

National Wildland Fire Coordinating Group (NWCG) standards require 8" high leather boots, with lugged soles (Vibram or similar) be worn during all fireline assignments. Proper fitting boots are essential to job performance in wildland and prescribed fire. For these reasons, we recommend all employees take the extra time to ensure boots fit properly and are well maintained. We recommend that you purchase the best possible boots that you can afford.

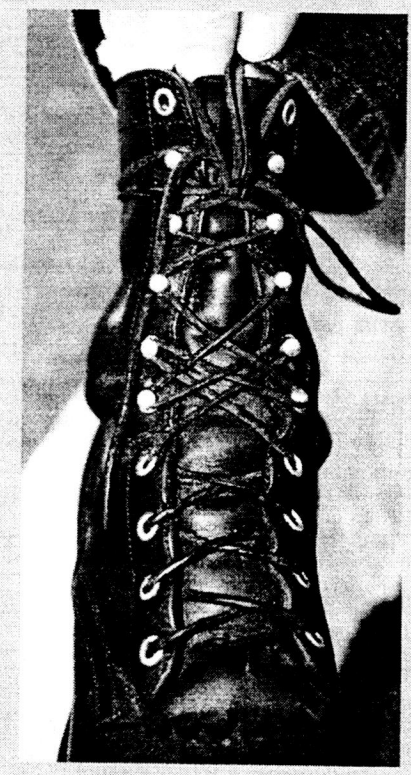
Boot Tips:

Nick's Tips for Breaking in Your Boots

MOST IMPORTANT: Make sure the people you buy your boots from know how to fit you with the proper size. A boot needs to fit snugly all the way around the foot, like a firm handshake, because after break-in the boot will gain about a quarter inch side to side. A boot that starts out snug ends up fitting perfectly. A boot that starts out too cozy and too perfect will end up a little sloppy and require extra socks or aftermarket liners to snug up the fit.

Break-in takes roughly 80 hours of wearing. It can take another week for your feet to adjust to the transition. The trick is to keep the exterior of the boot wet. Keep a spray bottle around, filled with a 50/50 mixture of rubbing alcohol and hot water, and spray the boots every time you feel them getting tight or stiff. Keep them wet and then friction-rub them with your hand as if you were polishing them, which allows the alcohol to penetrate.

DOES IT WORK TO FILL THE BOOT WITH WATER TO SPEED UP BREAK-IN? It works great, but it's detrimental to the long-term health of the boot. The nails holding the bottom of the boot together begin to rust, and this will weaken the structure of the boot.



Get through the 80-100 hours with the alcohol and the water break-in technique, then grease your boots. Nick's recommends Obenauf's LP Leather Preservative. It has no pine tars, petroleum or animal fat in it. Obernauf's is so pure it keeps the boot from becoming crusty, mildewed or foul-odored. It's beneficial to treat the inside of the boot as well as the outside.

KEEP THE BOOT SNUGLY LACED: It's important that the boot be laced tightly over the instep and around the ankle, which allows the leather behind the ankle bones to seat around and on the top of your ankles. Snug is good; snugger is better.

To prevent the infamous bite on top of your instep, lace your boots this way: From the last eyelet, criss-cross to the second hook, then criss-cross back down to the first hook and finally criss-cross up to the third hook and so on up [See photo].

AVOID CORROSION: Your sweat will slowly corrode the inner part of the boot. The best thing is to mix a heaping tablespoon of baking soda into about 20 ounces of water. Pour it into each boot and slosh it all around as much as possible. This will neutralize the sweat's acid and salts.

Fire Boot Sources:

{$100 - $200 fire boots}

- Red Wing Shoe Store
  3645 S College St, Fort Collins, CO, 970-223-5660

- Red Wing Shoe Store
  2707 Arapahoe Ave, Boulder, CO, 303-442-8723

{$100 - $300 fire boots}

- Nick's Custom Boots
  N 3805 Market, Spokane, WA 99207, 800-824-2685

- Drews Boots
  733 Main St, Klamath Falls, OR 97601, 800-722-0393
  http://www.drewsboots.com/ (sell Whites, Nicks, and Hathorns)

- Whites Shoe Shop
  4002 E Ferry, Spokane, WA 99202, 800-541-3786
  Whites@eznet.com

- Glenwood Shoe Service
  714 Grand Ave (Route 82), Glenwood Springs, CO 81601, 970-945-8969
  Open Mon-Sat 9-5 (sell Whites & Hathorns)

FIRE TRAINING

Fire training is important to maintain and increase fire skills. The annual refresher is mandatory for all current red carded employees. Failure to attend this refresher will result in a current red card **NOT** being issued. The Fire Safety Refreshers include topics related to fire behavior, fire shelter deployment, Fire Management policy/standards, and fatality case studies.

The annual Colorado Wildfire Academy offers a variety of classes from basic wildfire suppression to advanced Incident Management Team courses. The CO Academy takes place in a different city each year. There is a nominal registration fee that includes breakfast, lunch, and all course materials. Camping is provided at no charge.

Information on fire training courses can be found at the following locations:

- The Fire Management Office
- The Fort Collins Interagency Wildfire Dispatch Center website at http://www.fs.fed.us/arnf/fire.html
  This website has links to the 1) Multi-Agency Fire Training Schedule, 2) National Advanced Resource Technology Center (NARTC) Catalog, 3) R2 Fire Training Catalog, 4) Colorado Wildfire Academy Schedule, 5) Northern Front Range Training.
- The Pueblo Interagency Dispatch Center website at http://www.fs.fed.us/r2/psicc/dispa/
  This website has many of the same training links as the Fort Collins Dispatch site. However, the Pueblo Dispatch web page is updated more frequently.
- The cc:Mail NPS' "Learning Place" Bulletin Board, under "Fire and Aviation Management Career Field." This site contains the Multi-Agency Fire Training Schedule which is a list of wildland fire and aviation training course taught throughout the United States.

FIRE QUALIFICATIONS
(Red Cards)

Red Cards are issued based on Incident Command System (ICS) qualifications and physical fitness requirements. Training attendance and task book completion are the main components needed to qualify for most ICS positions.

WILDLAND FIRE QUALIFICATIONS SYSTEM

The Wildland Fire Qualifications System is a "performance based" qualifications system. In this system, the primary criteria for qualification is individual performance as observed by an evaluator using approved standards. This system differs from previous wildland fire qualifications systems which have been "training based".

The components of the wildland fire qualifications system are as follows:

1. *Position Task Books (PTB):* contain all critical tasks which are required to perform the job. PTB's have been designed in a format which will allow documentation of a trainee's ability to perform each task. Successful completion of all tasks required of the position, as determined by an evaluator, will be the basis for recommending certification.

   IMPORTANT NOTE: Training requirements include completion of all **required training** courses prior to obtaining a PTB. Use of the **suggested training** courses or job aids is recommended to prepare the employee to perform in the position. (**A task book will only be issued upon successful completion of all required training courses)**

2. *Training Courses and Job Aids:* provide the specific skills and knowledge required to perform tasks as prescribed in the PTB. This provides a direct link between training and job performance.

3. *Agency Certification:* issued in the form of an incident qualification card (Red Card) certifying that the individual is qualified to perform in a specified position.

The ROMO Fire Office is responsible for selecting trainees, proper use of task books, and certification of trainees (Fire Management Officer). The individual is responsible for showing proof of qualifications, completing training courses and completing a position task book.

The maximum time allowed for maintaining currency is three (3) years for air operations positions and five (5) years for all other positions. Serving in a position for which the individual is qualified will maintain the currency of a prerequisite position, providing that the individual was previously qualified in that position. In addition, one may maintain currency in a position when serving in a lower specified position. For example, the currency requirement for a Crew Boss (Single Resource) is to have functioned in a satisfactory manner in the last five years as a Crew Boss or as a Single Resource Boss (Dozer, Engine, Felling, Firing, Tractor/Plow) or as an Advanced Firefighter/Squad Boss.

Below is an example of an ICS position as listed in the NWCG 310-1 Wildland Fire Qualification Subsystem Guide:

CREW BOSS (SINGLE RESOURCE) (CRWB)

Required Training	Intermediate Fire Behavior (S-290)
Suggested Training	Basic ICS (I-200) Crew Boss (S-230) Firing Methods and Procedures (S-234) Fire Business Management Principles (S-260) Basic Air Operations (S-270)
Experience	Satisfactory performance as an Advanced Firefighter/Squad Boss AND Satisfactory position performance as a Crew Boss (Single Resource) on a wildfire incident
Physical Fitness	Arduous
Other Assignments That Will Maintain Currency	Single Resource Boss (Dozer, Engine, Felling, Firing, Tractor/Plow) Advanced Firefighter/Squad Boss

For additional listings of ICS Skill Position Qualifications please refer to the 310-1 publication which is located in the ROMO Fire Management Office. The fire management officer or fire program assistant can provide further assistance.

123-45-6789 Bear, Smokey T DOB: FITNESS:45(Jun-1998) MED EXAM:Jul-1991 SEA/OVRHD DEDEV UNIT:CORMP

***** NO EMPLOYEE TEAM ASSIGNMENTS

***** NO EMPLOYEE FUTURE JOBS

***** EMPLOYEE RED CARD QUALIFIED JOBS:

WF-FALA/ON CARD	FALLER CLASS A
WF-FFT2/ON CARD	FIREFIGHTER TYPE 2

***** EMPLOYEE RED CARD TRAINEE JOBS:

WF-FFT1/ON CARD	ADVANCED FIREFIGHTER/SQUAD BOSS
WF-HECM/ON CARD	HELICOPTER CREWMEMBER

***** EMPLOYEE TRAINING HISTORY:

COURSE CODE	COURSE DESCRIPTION	COURSE DATE	LAST UPDATER
S130	FIREFIGHTER	Jun-1991	NPSIQPCONV
S190	BASIC FIRE BEHAVIOR	Jun-1991	NPSIQPCONV
S212	POWER SAWS	Jul-1995	ROMO
S217	INTERAG. HELICOPTER TRNG GUIDE	Jun-1998	ROMO
SA290	"LOOK UP, LOOK DOWN, LOOK AROUND"	May-1997	ROMO
SA290	"LOOK UP, LOOK DOWN, LOOK AROUND"	Jun-1998	ROMO

***** ISSUED, NOT COMPLETED TASK BOOKS:

TASK BOOK CODE	TASK BOOK DESCRIPTION	ISSUED DATE	EXPIRATION DATE
TBFFT1	FIREFIGHTER TYPE 1, TASKBOOK	01-Oct-1996	01-Oct-2001
TBFFT2	FIREFIGHTER TYPE 2, TASKBOOK	24-Aug-1996	24-Aug-2001
TBHECM	HELICOPTER CREWMEMBER, TASKBOOK	10-Jul-1998	10-Jul-2003

***** NO COMPLETED TASK BOOK HISTORY

***** EMPLOYEE QUALIFIED JOBS:

ACTIVITY -JOB	LAST PERFORMED	CURRENCY DATE	TIMES PERFORMED	JOB DESCRIPTION	QUALIFICATION STATUS
WF-FALA	NONE	NONE	0	FALLER CLASS A	OVERRIDE/QUALIFIED
WF-FFT2	Aug-1992	Aug-1992	1	FIREFIGHTER TYPE 2	OVERRIDE/QUALIFIED
RX-FFT2	NONE	Aug-1992	0	FIREFIGHTER (RX ACTIVITY)	FULLY QUALIFIED

***** EMPLOYEE TRAINEE JOBS:

ACTIVITY -JOB	LAST PERFORMED	CURRENCY DATE	TIMES PERFORMED	JOB DESCRIPTION	QUALIFICATION STATUS
WF-FFT1	NONE	NONE	0	ADVANCED FIREFIGHTER/SQUAD BOSS	TRAINEE
WF-HECM	NONE	NONE	0	HELICOPTER CREWMEMBER	TRAINEE
RX-FFT1	NONE	NONE	0	ADVANCED FIREFIGHTER/SQUAD BOSS	TRAINEE
RX-HECM	NONE	NONE	0	HELICOPTER CREWMEMBER	TRAINEE

***** EMPLOYEE OVERRIDE JOBS:

ACTIVITY -JOB	LAST PERFORMED	CURRENCY DATE	TIMES PERFORMED	JOB DESCRIPTION	QUALIFICATION STATUS
WF-FALA	NONE	NONE	0	FALLER CLASS A	OVERRIDE/QUALIFIED
WF-FFT2	Aug-1992	Aug-1992	1	FIREFIGHTER TYPE 2	OVERRIDE/QUALIFIED

***** EMPLOYEE QUALIFIED EXPERIENCE:

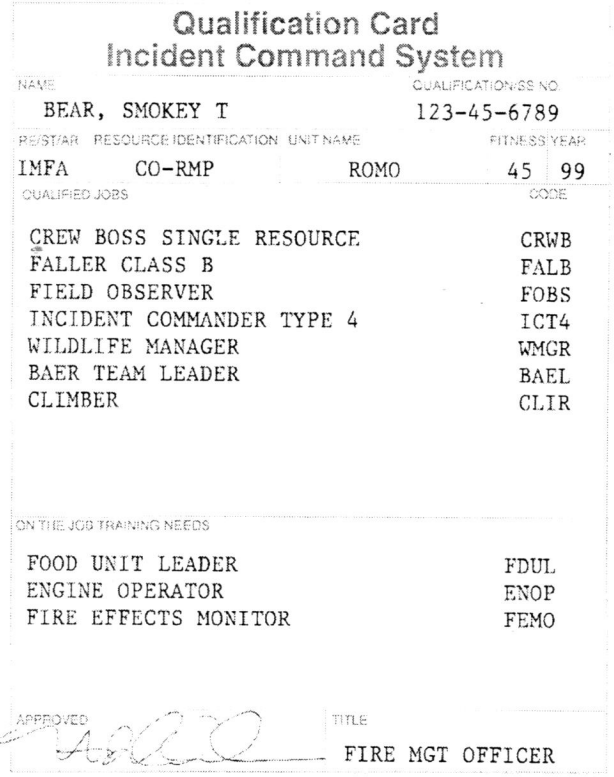
ACTIVITY AND JOB DESCRIPTION	EVENT DATE	OP	TYP	FUEL/ ENVIRO	LOCATION/ SIZE	ST	EVENT NAME	QUALS STATUS
WF-FFT2 FIREFIGHTER TYPE 2	Aug-1992	21	1	Timber	5000+	ID	FOOTHILL	OVRVER/QUAL

***** NO EMPLOYEE UNQUALIFIED EXPERIENCE

***** NO EMPLOYEE LFO EXPERIENCE

***** NO INSTRUCTOR HISTORY

EXAMPLE RED CARD



Qualification Card
Incident Command System

NAME: BEAR, SMOKEY T
QUALIFICATION SS NO.: 123-45-6789

REGISTAR RESOURCE IDENTIFICATION	UNIT NAME	FITNESS	YEAR
IMFA CO-RMP	ROMO	45	99

QUALIFIED JOBS	CODE
CREW BOSS SINGLE RESOURCE	CRWB
FALLER CLASS B	FALB
FIELD OBSERVER	FOBS
INCIDENT COMMANDER TYPE 4	ICT4
WILDLIFE MANAGER	WMGR
BAER TEAM LEADER	BAEL
CLIMBER	CLIR

ON THE JOB TRAINING NEEDS	
FOOD UNIT LEADER	FDUL
ENGINE OPERATOR	ENOP
FIRE EFFECTS MONITOR	FEMO

APPROVED: [signature] TITLE: FIRE MGT OFFICER

EXPERIENCE RECORD

DATE YR/MO	INCIDENT NAME/NUMBER	MGMT DX	SIT CODE	OP AREA	S TYPE	FUEL TYPE	SITE CLASS
98 08	HUNTER J001	1	FFT1	1S	WY	3	G

CERTIFYING MANAGER: SIGNATURE

DOI ENTRY: BY: DATE:

NFES 1528 PMS 310-3 (1994)

COMPUTER (SACS) QUALIFICATION SYSTEM

All ICS qualifications for Department of Interior employees are maintained in the SACS (Shared Applications Computer System) computer system. (The Forest Service uses the NIFQS computer system for quals). The SACS system tracks and directs employees' wildland fire management development (training, experience, taskbooks, skills, and physical fitness) to ensure accurate and timely compliance with NWCG qualifications and certification standards. The SACS system also has the capability to accommodate the All Risk concept for other operations, such as law enforcement, search and rescue, and structural fire.

A form is provided to ROMO employees for documenting all wildland fire and "all risk" experience and training. **It is the employee's responsibility to complete this form annually and turn it into the Fire Management Office to ensure your records are updated in SACS.** A copy of the form is provided in the Handbook.

The SACS computer program provides an "Employee Master File Listing" printout for each employee. This printout provides detailed information on the employee's Red Card qualifications including qualified jobs, trainee jobs, training history, task book history, and experience. A sample of this printout is provided on the previous page.
(Please contact the Fire Program Assistant regarding questions/concerns related to fire qualifications and red cards)

EMPLOYEE WILDLAND AND PRESCRIBED FIRE EXPERIENCE

JOB CODE	ACTIVITY CODE (WF or RX)	INCIDENT DATE (YY/MM)	STATE CODE	OPERATIONAL PERIODS (Shifts)	MGMT TYPE or COMPLEXITY LEVEL (see below)	FUEL TYPE (see below)	FIRE SIZE (see below)	INCIDENT NAME
F F T 2	W F	9 5 0 6	A K	1 9	2	3	G	(EXAMPLE)

COMPLEXITY LEVEL:
(Burn Boss knows complexity level of incident)
LEVEL 1 LEVEL 3
LEVEL 2 LEVEL 4

ICS MANAGEMENT TYPES:
TYPE 1 - NAT'L TYPE 1 TEAM ASSIGNED
TYPE 2 - REGIONAL TYPE 2 TEAM ASSIGNED
TYPE 3 - LOCAL EXTENDED ATTACK WITH MULTIPLE RESOURCES
TYPE 4 - INITIAL ATTACK - USUALLY FEW OR A SINGLE RESOURCE

FUEL TYPE:
(Select primary carrier)
1 - GRASS 3 - TIMBER
2 - SHRUB 4 - SLASH

FIRE SIZES (in acres):
A - 0-0.2 D - 100-299
B - 0.3-9 E - 300-999
C - 10-99 F - 1000-5000
G - >5000

SPECIAL INCIDENT EXPERIENCE (Use above chart with the following modifications): Activity Code = SI Fuel Type = leave blank
Fire Size = Event Type: A = SPECIAL EVENT, B = SEARCH & RESCUE, C = HURRICANE/TORNADO, D = EARTHQUAKE, E = FLOOD, F = LAW ENFORCEMENT, G = OTHER

INSTRUCTOR EXPERIENCE

COURSE CODE	DATE (YY/MM)	INSTRUCTOR LEVEL LEAD=L UNIT=U	TIMES TAUGHT
	/		
	/		
	/		
	/		

SOCIAL SECURITY NUMBER: ___ ___ ___ - ___ ___ - ___ ___ ___ ___   NAME: ______________________

TRAINING COURSES COMPLETED (must attach certificate)

COURSE CODE	DATE (YY/MM) COMPLETED	COURSE CODE	DATE (YY/MM) COMPLETED
Example: S 1 9 0	9 5 / 0 2		

INSTRUCTOR EXPERIENCE ENTRY

COURSE CODE	DATE YY/MM	INSTRUCTOR LEVEL: L=LEAD/U=UNIT	TIMES TAUGHT	COURSE CODE	DATE YY/MM	INSTRUCTOR LEVEL: L=LEAD/U=UNIT	TIMES TAUGHT
Example: S130	93/07	U	02				

MNEMONICS DATA TABLE

FUNCTION	MNEMONIC	TITLE	FUNCTION	MNEMONIC	TITLE
OPERATIONS	AAML	AGENCY AVIATION MIL. LIAISON	LOGISTICS	EMTB	EMER. MED. TECH. BASIC
OPERATIONS	ABRO	AIRCRAFT BASE RADIO OPERATOR	LOGISTICS	EMTI	EMER. MED. TECH. INTERMEDIATE
OPERATIONS	ACAC	AREA COMMAND AVIATION COORD.	LOGISTICS	EMTP	EMER. MED. TECH. PARAMEDIC
FINANCE	ACCT	ACCOUNTING TECHNICIAN	OPERATIONS	ENGB	ENGINE BOSS
COMMAND	ACDR	AREA COMMANDER	OPERATIONS	ENOP	ENGINE OPERATOR
LOGISTICS	ACLC	ASST. AREA COMMANDER, LOGISTICS	TECH SPEC	ENSP	ENVIRONMENTAL SPECIALIST
COOR/SUP	ACMR	ASSISTANT CACHE MANAGER	LOGISTICS	EQPI	EQUIPMENT INSPECTOR
PLANNING	ACPC	ASST. AREA COMMANDER, PLANNING	LOGISTICS	EQPM	EQUIPMENT MANAGER
FINANCE	ADOA	ADO TEAM LEADER CLASS A	FINANCE	EQTR	EQUIPMENT TIME RECORDER
FINANCE	ADOB	ADO TEAM LEADER CLASS B	LOGISTICS	FACL	FACILITIES UNIT LEADER
FINANCE	ADOM	ADO TEAM MEMBER	OPERATIONS	FALA	FALLER CLASS A
COOR/SUPP	AERO	AERIAL OBSERVER	OPERATIONS	FALB	FALLER CLASS B
OPERATIONS	AFUL	AVIATION FUEL SPECIALIST	OPERATIONS	FALC	FALLER CLASS C
OPERATIONS	AFUS	AERIAL FUSEE OPERATOR	PLANNING	FBAN	FIRE BEHAVIOR ANALYST
OPERATIONS	AOBD	AIR OPS BRANCH DIRECTOR	COOR/SUPP	FCMG	FIRE CACHE MANAGER
FINANCE	APTA	ADMIN. PAYMENT TEAM LEADER	LOGISTICS	FDUL	FOOD UNIT LEADER
FINANCE	APTM	ADMIN. PAYMENT TEAM MEMBER	OPERATIONS	FELB	FELLING BOSS
TECH SPEC	ARCH	ARCHEOLOGIST	PLANNING	FEMO	FIRE EFFECTS MONITOR
COMMAND	AREP	AGENCY REPRESENTATIVE	OPERATIONS	FFT1	ADVANCED FF/SQUAD BOSS
OPERATIONS	ASGS	AIR SUPPORT GROUP SUPERVISSOR	OPERATIONS	FFT2	FIREFIGHTER
COOR/SUPP	ATBM	AIRTANKER BASE MANAGER	PLANNING	FINV	FIRE INVESTIGATOR
OPERATIONS	ATCO	AIRTANKER FAV COORDINATOR	OPERATIONS	FIRB	FIRING BOSS
OPERATIONS	ATGS	AIR TACTICAL GROUP SUPERVISSOR	OPERATIONS	FLEA	FIRELINE EXPLOSIVE ADVISOR
OPERATIONS	AVIN	AVIATION INSPECTOR	OPERATIONS	FLEB	FIRELINE EXPLOSIVE BLASTER
TECH SPEC	BAEL	BAER TEAM LEADER	OPERATIONS	FLEC	FIRELINE EXPLOSIVE CREW
LOGISTICS	BCMG	BASE/CAMP MANAGER	PLANNING	FLIR	FLIR OPERATOR
TECH SPEC	BIOL	BIOLOGIST	TECH SPEC	FMNT	FACILITIES MAINT. SPEC.
OPERATIONS	BNML	BATTALION MILITARY LIAISON	PLANNING	FOBS	FIELD OBSERVER
FINANCE	BUYL	BUYING TEAM LEADER	TECH SPEC	FORS	FORESTER
FINANCE	BUYM	BUYING TEAM MEMBER	TECH SPEC	FOTO	PHOTOGRAPHER
LOCAL HIRE	CAMP	CAMP HELP	FINANCE	FSC1	FINANCE/ADMIN S.C. T 1
LOCAL HIRE	CANH	CANINE HANDLER	FINANCE	FSC2	FINANCE/ADMIN S.C. T 2
COOR/SUPP	CASC	SUPPLY CLERK	LOCAL HIRE	FUEL	FUELING SPECIALIST
COOR/SUPP	CAST	SUPERVISORY SUPPLY CLERK	COMMAND	FUMA	FIRE USE MANAGER
TECH SPEC	CCOO	COMPUTER COORDINATOR	OPERATIONS	FWBM	FIXED WING BASE MANAGER
TECH SPEC	CDER	COMPUTER DATA ENTRY REC.	OPERATIONS	FWPT	FIXED WING PARKING TENDER
COOR/SUPP	CDSP	CACHE DEMOB SPECIALIST	TECH SPEC	GEOL	GEOLOGIST
TECH SPEC	CLIR	CLIMBER	LOCAL HIRE	GMEC	GENERAL MECHANIC
FINANCE	CLMS	CLAIMS SPECIALIST	LOGISTICS	GSUL	GROUND SUPPORT UNIT LEADER
FINANCE	CMSY	COMMISSARY MANAGER	OPERATIONS	HEB1	HELIBASE MANAGER TYPE 1
FINANCE	CMTL	COMPTROLLER	OPERATIONS	HEB2	HELIBASE MANAGER TYPE 2
COOR/SUPP	COMC	COMMUNICATIONS COORDINATOR	OPERATIONS	HECM	HELICOPTER CREW MEMBER
LOGISTICS	COML	COMMUNICATIONS UNIT LEADER	OPERATIONS	HEIN	HELICOPTER INSPECTOR
FINANCE	COMP	COMP/CLAIMS UNIT LEADER	OPERATIONS	HELR	HELO LONGLINE/REMOTE HOOK
LOGISTICS	COMT	INCIDENT COMM TECHNICIAN	OPERATIONS	HEMG	HELICOPTER MANAGER
FINANCE	CONO	CONTRACTING OFFICER	OPERATIONS	HERS	HELICOPTER RAPPEL SPOTTER
LOCAL HIRE	COOK	COOK	OPERATIONS	HESM	HELISPOT MANAGER
COOR/SUPP	CORD	COORDINATOR, EX. DISP.	OPERATIONS	HESP	HELICOPTER OPS. SPECIALIST
FINANCE	COST	COST UNIT LEADER	OPERATIONS	HLCO	HELICOPTER COORDINATOR
LOGISTICS	COTR	CONTRACTING OFF TECHNICAL REP	OPERATIONS	HRAP	HELICOPTER RAPPELER
OPERATIONS	CREP	CREW REPRESENTATIVE	PLANNING	HRSP	HUMAN RESOURCE SPECIALIST
OPERATIONS	CRWB	CREW BOSS	OPERATIONS	HTMG	HELITORCH MANAGER
FINANCE	CS1M	CONTRACT SPEC. 1 MILLION	OPERATIONS	HTMM	HELITORCH MIXMASTER
FINANCE	CS25	CONTRACT SPEC. 25 THOUSAND	OPERATIONS	HTPT	HELITORCH PARKING TENDER
FINANCE	CS50	CONTRACT SPEC. 50 THOUSAND	TECH SPEC	HYDR	HYDROLOGIST
TECH SPEC	CTSP	COMPUTER TECHNICAL SPEC.	COOR/SUPP	IADP	INITIAL ATTACK DISPATCHER
OPERATIONS	DECK	DECK COORDINATOR	COMMAND	IARR	INTERAGENCY RESOURCE REP.
OPERATIONS	DIVS	DIVISION/GROUP SUPERVISOR	FINANCE	IBA1	INCIDENT BUSINESS ADVISOR T1
PLANNING	DMOB	DEMOBILIZATION UNIT LEADER	FINANCE	IBA2	INCIDENT BUSINESS ADVISOR T2
PLANNING	DOCL	DOCUMENTATION UNIT LEADER	FINANCE	IBA3	INCIDENT BUSINESS ADVISOR T3
TECH SPEC	DOSP	NEPA DOCUMENTATION SPEC.	COMMAND	ICT1	INCIDENT COMMANDER T1
OPERATIONS	DOZ1	DOZER OPERATOR (I.A.)	COMMAND	ICT2	INCIDENT COMMANDER T2
OPERATIONS	DOZB	DOZER BOSS	COMMAND	ICT3	INCIDENT COMMANDER T3
COMMAND	DPIC	INCIDENT COMMANDER, DEPUTY	COMMAND	ICT4	INCIDENT COMMANDER T4
PLANNING	DPRO	DISPLAY PROCESSOR	COMMAND	ICT5	INCIDENT COMMANDER T5
LOCAL HIRE	DRIV	DRIVER/OPERATOR	PLANNING	IMET	INCIDENT METEOROLOGIST
COOR/SUPP	EDRC	DISPATCH RECORDER, EX. DISP.	LOGISTICS	IMSA	INCIDENT MEDICAL ASSISTANT
COOR/SUPP	EDSD	SUPPORT DISPATCHER, EX. DISP.	LOGISTICS	IMSM	INCIDENT MEDICAL MANAGER
COOR/SUPP	EDSP	SUPERVISORY DISP., EX. DISP.	LOGISTICS	IMST	INCIDENT MEDICAL TECHNICIAN

MNEMONICS DATA TABLE (cont.)

FUNCTION	MNEMONIC	TITLE	FUNCTION	MNEMONIC	TITLE
LOGISTICS	INCM	INCIDENT COMMUNICTNS CNTR MGR	OPERATIONS	RAVT	RADIO AVIONICS TECHNICIAN
TECH SPEC	INCS	INDIAN CULTURAL SPEC.	TECH SPEC	RAWS	RAWS TECHNICIAN
FINANCE	INJR	COMP FOR INJURY SPECIALIST	LOGISTICS	RCDM	RECEIVING & DIST. MGR.
COMMAND	IOF1	INFORMATION OFFICER TYPE 1	PLANNING	RESC	RESOURCE CLERK
COMMAND	IOF2	INFORMATION OFFICER TYPE 2	PLANNING	RESL	RESOURCE UNIT LEADER
COMMAND	IOF3	INFORMATION OFFICER TYPE 3	COMMAND	RXB1	PRESCRIBED FIRE BURN BOSS T 1
PLANNING	IRDL	INFRARED DOWNLINK OPERATOR	COMMAND	RXB2	PRESCRIBED FIRE BURN BOSS T 2
PLANNING	IRFS	INFRARED FIELD SPECIALIST	PLANNING	RXFA	PRESCRIBED FIRE BEHVR ANLYST
PLANNING	IRIN	INFRARED INTERPRETER	COMMAND	RXM1	PRESCRIBED FIRE MANAGER T 1
COOR/SUPP	IRRC	INFRARED REGIONAL COORDINATOR	COMMAND	RXM2	PRESCRIBED FIRE MANAGER T 2
TECH SPEC	LEAS	LAW ENFORCE. ANALYST SPEC.	PLANNING	SCKN	STATUS CHECK-IN RECORDER
TECH SPEC	LEIS	LAW ENFORCE. INVEST. SPEC.	TECH SPEC	SCUB	SCUBA DIVER
OPERATIONS	LOAD	LOADMASTER (BY SPECIALTY)	OPERATIONS	SEMG	SEAT MANAGER
COMMAND	LOFR	LIAISON OFFICER	LOGISTICS	SEC1	SECURITY SPEC. LEVEL 1 (w/ GUN)
LOGISTICS	LSC1	LOGISTICS S.C. T1	LOGISTICS	SEC2	SECURITY SPEC. LEVEL 2
LOGISTICS	LSC2	LOGISTICS S.C. T2	LOGISTICS	SECM	SECURITY MANAGER
OPERATIONS	LSCT	LINE SCOUT	PLANNING	SITL	SITUATIONS UNIT LEADER
OPERATIONS	MAFC	MAFFS CLERK	LOCAL HIRE	SMEC	SMALL ENGINE MECHANIC
OPERATIONS	MAFF	MAFFS LIAISON OFFICER	OPERATIONS	SMKJ	SMOKE JUMPER
OPERATIONS	MAOC	MILITARY AIR OPS. COOR.	COMMAND	SOF1	SAFETY OFFICER TYPE 1
OPERATIONS	MCAD	MILITARY CREW ADVISOR	COMMAND	SOF2	SAFETY OFFICER TYPE 2
COOR/SUPP	MCCO	MAC GROUP COORDINATOR	COMMAND	SOF3	SAFETY OFFICER TYPE 3
COOR/SUPP	MCIF	MAC GROUP INFORMATION OFF.	LOGISTICS	SPUL	SUPPLY UNIT LEADER
LOGISTICS	MEDL	MEDICAL UNIT LEADER	OPERATIONS	STAM	STAGING AREA MANAGER
OPERATIONS	MHEC	MILITARY HELO. CREWMEMBER	OPERATIONS	STCR	STRIKE TEAM LEADER, CREW
OPERATIONS	MHEM	MILITARY HELO. MANAGER	OPERATIONS	STDZ	STRIKE TEAM LEADER, DOZER
OPERATIONS	MHMS	MILITARY HELO. MANAGER SUPV.	OPERATIONS	STEN	STRIKE TEAM LEADER, ENGINE
COOR/SUPP	MXMS	MIXMASTER	OPERATIONS	STLM	STRIKE TEAM LDR. MILITARY
OPERATIONS	OPBD	OPERATIONS BRANCH DIRECTOR	OPERATIONS	STPL	STRIKE TM. LDR. TRAC. PLOW
LOGISTICS	ORDM	ORDERING MANAGER	TECH SPEC	STPS	STRUCTURAL PROTECT. SPEC.
PLANNING	ORPA	ORTHOPHOTO ANALYST	LOGISTICS	SUBD	SUPPORT BRANCH DIRECTOR
OPERATIONS	OSC1	OPERATIONS S.C. T1	LOGISTICS	SVBD	SERVICE BRANCH DIRECTOR
OPERATIONS	OSC2	OPERATIONS S.C. T2	LOGISTICS	TESP	TOOL & EQUIPMENT SPEC.
FINANCE	PA05	PURCHASING AG. 5 THOUSAND	OPERATIONS	TFLD	TASK FORCE LEADER
FINANCE	PA10	PURCHASING AG. 10 THOUSAND	TECH SPEC	THSP	TECHNICAL SPECIALIST
FINANCE	PA25	PURCHASING AG. 25 THOUSAND	FINANCE	TIME	TIME UNIT LEADER
FINANCE	PA50	PURCHASING AG. 50 THOUSAND	PLANNING	TNSP	TRAINING SPECIALIST
LOCAL HIRE	PACK	PACKER	OPERATIONS	TOLC	TAKE OFF & LAND COORDINATOR
PLANNING	PBOP	PROBEYE OPERATOR	OPERATIONS	TPL1	TRACTOR PLOW OPERATOR I.A.
OPERATIONS	PCSP	PARACARGO SPECIALIST	OPERATIONS	TRPB	TRACTOR PLOW BOSS
OPERATIONS	PILO	PILOT (BY SPECIALTY)	OPERATIONS	TRPS	TRACTOR PLOW OPER. W/SUPV.
OPERATIONS	PLDO	PLASTIC SPHERE DISP.OPERATOR	OPERATIONS	TTOP	TERRA TORCH OPERATOR
LOCAL HIRE	PMEC	PUMP MECHANIC	TECH SPEC	VESP	VEGETATION SPECIALIST
TECH SPEC	PREV	PREVENTION TECHNICIAN	TECH SPEC	VIDO	VIDEO CAMERA OPERATOR
FINANCE	PROC	PROCUREMENT UNIT LEADER	COOR/SUPP	WHHR	MATERIALS HANDLER
PLANNING	PSC1	PLANNING S.C. T1	COOR/SUPP	WHLR	MATERIALS HANDLER LDR.
PLANNING	PSC2	PLANNING S.C. T2	OPERATIONS	WHSP	WATER HANDLING SPECIALIST
OPERATIONS	PTIN	PILOT INSPECTOR	PLANNING	WOBS	WEATHER OBSERVER
FINANCE	PTRC	PERSONNEL TIME RECORDER	LOCAL HIRE	WTOP	WATER TENDER OPERATOR
LOCAL HIRE	PUMP	PUMP OPERATOR	PLANNING	XEDO	XEDAR OPERATOR
LOGISTICS	RADO	RADIO OPERATOR			
OPERATIONS	RAMP	RAMP MANAGER			

THE PACK TEST

The Work Capacity Test Series (WCT's) are now the sole physical fitness screen for wildland fire management activities. The WCT's are; Pack Test for Arduous, Field Test for Moderate and the Walk Test for Light. They evaluate three aspects of fitness; aerobic fitness, muscular strength and muscular endurance needed to perform the duties of the various fire positions. Each Work Capacity Test has unique criteria but common to each is walking a specified distance within a specified time. The 3 tests are pass/fail so individual times are not important - only that the prescribed distance is covered in the specified time.

The Pack test is a 3 mile hike with a 45 pound pack over level terrain. Field studies show that performance on the pack test is significantly related to performance in other firefighting tasks, including line construction with hand tools. Because of its length, the Pack Test is an excellent indicator of sustained work capacity.

The Test Course: The test course site for east side ROMO employees will be the Estes Lake trail. The course begins at the Estes Lake Marina with the turn around point (1 1/2 miles) at the Estes Visitor Center. The total distance is 3 miles on a relatively level and smooth walking surface.

The Pack: A pack is an integral part of the Pack and Field tests. No pack is used for the Walk Test.

Pack Test - The pack must weigh 45 pounds plus or minus 1/2 pound.
Field Test - The pack must weigh 25 pounds plus or minus 1/2 pound.

Employees are encouraged to use their personal packs. Fire packs will be provided to those who do not have their own pack. Sand bags will be available for use in the packs for the 45 pound weight requirement. All packs will be weighed prior to the test.

Forms: Several forms are required to be completed by the employee prior to taking the pack test. 1) The PAR Q and YOU health screening questionnaire and 2) the Work Capacity Test Record.

Personnel: Several personnel will administer the pack test including a test administrator, first aid specialist, and course monitor.

Clothing & Footware: Clothing worn should be comfortable. Footware must provide good support for the feet and ankles. **Ankle-high** footware is required.

HOW TO TRAIN FOR THE PACK TEST

Begin training at least 4 to 6 weeks before you take the test. Train by hiking or power walking, using the ankle-height footwear you will use in the test.

- Hike a 3-mile flat course without a pack. When you can cover the course in less than 45 minutes
- Add a pack with about 25 pounds to your training hikes
- Increase the pack weight until you can hike 3 miles in 45 minutes with a 45-pound pack
- Also hike hills (with a pack) to build leg strength and endurance and jog the flat course (without a pack) to build aerobic fitness; do overdistance for stamina; cross train with mountain biking and weights to build endurance and strength.

INDIVIDUAL REQUIREMENTS FOR WILDLAND FIRE ASSIGNMENTS

Fire fighting is both mentally and physically rigorous. The experience can also be rewarding and adventurous. Wildland fire handcrew assignments can help to develop well-rounded career, provide interagency opportunities, add new duties to your resume or 171, and exercise team building skills under trying conditions. If you choose to accept a crew dispatch, it is important that you read, understand, and follow this information for your own well-being and because you will be representing you home unit as well as the Department of Interior.

Before you are eligible for a wildland fire assignment, you must have received and passed the basic wildland fire training classes, S-130 and S-190, and the required physical fitness testing.

You must have a **current Red Card** with you. The card will be checked during mobilization and if you do not have it, or it is not current, you will be returned to your home unit.

You must have a **picture ID** with you. Even if you drive to a fire you may leave from there to fly to another fire. To fly on a commercial airline you **MUST** have a picture ID with you or you will not be allowed to fly.

Individuals interested in assignments must have a full understanding of what is required and realistic expectations covering wildland assignments. Physical and mental preparedness, and a positive attitude are essential. While on the callout list all of your personal gear should be ready so that you can be available on very short notice.

Being properly prepared for wildland fire assignments is the responsibility of the individual firefighter. You will become a member of a twenty person team and each member of the team relies on the others to be physically and mentally prepared. If you are not prepared, you may jeopardize the safety and success of the entire crew, and you should not be on wildland fire assignments.

There is a zero tolerance for the following:

- Illegal drug/alcohol use or possession while on fire assignments
  (Off duty alcohol use is at the discretion of the crew boss or incident commander)
- Harassment of any kind
  If you are not willing or able to work well with crewmembers of different genders, ethnic backgrounds, ages, religions,... then your services are not welcome.

Violation of zero tolerance policies may result in the immediate dismissal of you and/or your entire crew from the fire.

The crew boss is the team leader and is responsible for the safety and well being of the crew. The crew boss is the supervisor of the crew and you are responsible to that supervisor for your actions.

Be prepared for a **time commitment of 21 days**; however many assignments may be less, depending on fire activity. Some assignments may require 22 or 23 days allowing for travel and demobilization of personnel to their home units. You must be prepared to stay for the duration of the assignment. You will remain as a team until you are officially released to your home unit.

You need to be properly outfitted before you can work on wildfires. You will be issued approximately $400 worth of gear – **TAKE GOOD CARE OF IT**.
Your initial attack equipment and Red Pack combined have a weight limit of 55 pounds. Your gear will be weighed and you are required to meet the weight limit. Items are not to be tied to the outside of your red bag.

INITIAL ATTACK EQUIPMENT
(Weight 20 pounds):
Nomex pants
Nomex shirt
Lug sole boots w/minimum 8" lace-up leather uppers (no steel toes)
Leather fire gloves
Class B hard hat with chin strap
Nomex protective shroud
Fire shelter in protective plastic case
Fire shelter case
I.A. pack
Headlamp w/good batteries
4 canteens with cases
10" mill-bastard flat file with sheath
Eye protection (goggles or glasses w/safety lenses)
Backfiring fusees (can not be carried on airplane en route to fire assignment)
Food (enough for long first shift)
Individual first aid kit with latex gloves
Ear protection
Smoke protection goggles
Space blanket or plastic sheet (for overnight use)
Poncho or rain jacket
Sun glasses
Toilet paper
Sunscreen
Mosquito repellent
Aspirin
Any required prescription medication (enough for at least 21 days)
Flagging
Compass
Belt Weather Kit (for squad bosses)
Radio and extra batteries/clamshell (if available)

OPTIONAL
Wrist watch (recommended)
Pocket knife

BE SURE YOUR RED PACK HAS A NAME TAG ON IT WITH THE FOLLOWING INFORMATION:

Name
Park
Park address
Telephone number
RETURN POSTAGE GUARANTEED

GEAR AND EQUIPMENT FOR RED PACK
(weight 35 pounds):
Drivers License (must have picture ID to fly on commercial airline)
Toilet kit and towel
Plastic bags
Tennis shoes
Wool hat & gloves
Boot laces (extra)
Sleeping bag & pad
Extra prescription glasses
Extra work gloves
Extra headlamp batteries
Extra nomex pants
Extra nomex shirt
Socks (enough for 21 days)
Bandannas
Underwear (enough for 21 days), T-shirts (enough for 21 days)
Chapstick
Boot grease, Foot powder
Vitamins
Approx. $50 to $100 cash
A good book to read while you are waiting
NOTE: DO NOT take camp stoves (you cannot fly commercially with these)

ACCOMODATIONS "ON THE LINE" AND IN FIRE CAMP
Your crew may experience a variety of job assignments, mop-up, handline construction, firing operations, structure defense, shuttling water, rolling hose, or even breaking down camp. Whichever the task, anticipate and expect long hours, constantly changing operational periods, hard work, little rest and **ongoing** change in regard to plans and objectives. These assignments may place you in hazardous situations. The fire experience will include: crew members using tools, machines, dozers & engines, aircraft, poison oak, bees/snakes and other stinging things, steep terrain, high altitude, electrical storms and hot/dry climates.

You may be working long shifts. Your first shift can exceed 16 hours. Normally your shift will be 12 or more hours. Night shifts are not uncommon. You will normally not have any days off during your assignment.

If you are assigned to a large fire you will be living in a fire camp. Fire camps will range from small and simple to large and complex. They will provide you with food and possibly showers. Small fire accommodations may be more primitive, MREs for several days, bathroom is the woods, no showers,...

You will be sleeping on the ground. Nights can be cold so you should be prepared for all possible weather conditions. It is possible that you will be moved from one fire to another. At the end of your fire assignment the crew will be demobilized. The demobilization process is often slow and requires patience. It is important that you accept these working and living conditions and carry out your assignment with a positive attitude.

NOTE: You can take your own tent, sleeping bag and or other personal equipment, BUT, if they are lost or destroyed on a fire you will probably not be reimbursed for your loss.

Fire Business

Rest and Recuperation (R&R)

Employees are entitled to one full day (24 hours) of rest in every 14-day assignment or two full days (24 hours each) in every 21-day assignment out of park. The employee's supervisor will authorize all R&R days upon return to the Park. Upon return from the incident R&R must occur on the calendar day/days immediately following the return travel. R&R shall be authorized only if it occurs on the individual's regularly scheduled workday, and only for those hours (i.e. 8,9, or 10) regularly scheduled. Pay entitlement for R&R cannot be authorized on the individual's regular day off.

For normal in-park wildland fire operations, including initial attack, prescribed fire, and readiness activities, employees are not entitled to R & R, and are requested to limit continuous work days to 13 or less. The stipulations of the R & R Policy, as defined in the Interagency Incident Management Handbook, apply only to days worked once in mobilization (out-of-park) status. Regularly scheduled workdays prior to mobilization do not count towards the 14 or 21 day period.

Hazard Pay (GS) and Environmental Differential Pay (WG)

An employee will be entitled to hazard/environmental pay during firefighting and flying operations.

1. Firefighting - participating as a member of a firefighting crew in fighting forest and range fires on the fireline before the fire is controlled. (The Incident Commander will determine when the fire is controlled)

   Any member of the fire suppression organization assigned to the incident is eligible for hazard pay when exposed to defined fireline hazards while carrying out their assigned duties. Incidental exposure such as the delivery of personnel and tools by truck drivers would not qualify for hazard pay.

2. Flying - participating in limited control flights, such as those undertaken under unusual and adverse conditions (for example, extreme weather, maximum load, limited visibility, extreme turbulence, low level flights, or landing at an unimproved site in rough terrain) which threaten or severely limit control of the aircraft.

3. Groundwork Beneath Hovering Helicopter - participating in ground operations to attach or detach an external load to or from a helicopter hovering just overhead.

Hazard Pay for GS employees: There are no minimum time requirements for length of exposure to a hazardous duty. Any amount of actual exposure during a calendar day qualifies the individual for the pay differential for all compensable hours performed that day. (For example, if the individual performs one hour of hazardous duty during a 12 hour shift they will be paid for 12 hours of hazard pay)

Hazard pay differential is in addition to any other premium pay or allowances and there is no maximum limitations for the number of hours earned. Hazard pay is an additional 25 percent of the base hourly wage.

Environmental Differential for WG employees: There are two categories for compensation for WG employees.

A. *Fighting wildfires on the fireline* - the individual is paid the differential for all hours in pay status on the calendar day on which exposed to the hazard (same as a GS employee). Environmental differential is determined by multiplying 25 percent by the hourly wage rate for a WG-10, Step 2.
B. *Aircraft Operations* - based on actual exposure in which the employee is paid a minimum of 1 hour's differential for the exposure. Intermittent exposures during a 1-hour period do not qualify an individual for more than 1 hour's differential pay for that hour. For exposure beyond 1 hour, the individual is paid in increments of one-quarter hour for each 15 minutes and portion thereof in excess of 15 minutes.
    1) Participating in low level flights in small aircraft, including helicopters. Environmental differential is determined by multiplying 100 percent by the hourly wage for a WG-10, Step 2.
    2) Participating in operations to attach or detach external load to or from helicopter hovering just overhead. Environmental differential is determined by multiplying 15 percent by the hourly wage for a WG-10, Step 2.

<u>Emergency Firefighter Time Report (OF-288)</u>

Emergency Firefighter Time Reports (OF-288) forms are prepared for all regular government employees during an incident. (May be called "red dog" or "FTR") The OF-288 tracks all hours on an incident including regular, overtime, and hazard/environmental hours. The hazard hours are coded with an "H" and environmental hours with an "E". Travel time to and from the incident is also tracked on the OF-288 and is coded with a "T".

Block 22 on the OF-288 is for Commissary purchases. An employee may elect to have these cost deducted from their payroll. In this case the charges will be documented in block 22. Commissary purchases may also be paid for with cash or personal credit card if applicable.

The most important block (25) on the OF-288 is the employee signature. It is important that the employee sign in order to receive prompt payment.

* * * *

For additional information regarding the above mention items please refer to the Interagency Incident Business Management Handbook. Handbooks are available from the ROMO Fire Management Office. The fire management staff is also available to answer any questions regarding fire business management issues.

WILDERNESS PRESERVATION AND MINIMUM IMPACT TACTICS

A significant portion of Rocky Mountain National Park has been included with "Recommended Wilderness Boundaries" (NPS, 1998). Within these areas, as well as other NPS lands not recommended for wilderness, fire management activities will be implemented in methods that minimize impacts to cultural and natural resources, including wilderness values. Within recommended wilderness areas, the park will apply the "minimum requirement" concept procedures "minimum tool", and "primitive tool" as defined in NPS Reference Manual #41, in accordance with NPS Director's Orders #41.

Fire management actions, including prescribed fire, wildland fire use, and wildland fire suppression, will conform to the basic purposes of wilderness. This plan, in combination with the park Wilderness Management Plan, identifies the appropriate management response to all wildland fires within the park.

Prescribed fires planned for implementation within recommended wilderness areas are intended to restore the natural role of fire to various park ecosystems, and to reestablish a mosaic of fire history within the landscape, as identified in the park mission and goals statement. These projects will be implemented using the minimum requirement concept. Application of the minimum requirement concept and minimum/primitive tool procedures will be conducted as specified in the Wilderness Act (1964), NPS Management Policies (1988), and NPS Reference Manual #41.

All wildland fires within recommended wilderness boundaries, whether suppression actions or fire use actions, will be effectively managed considering resource values while providing for public and fire personnel safety using the full range of strategic and tactical options. Wildland fire management response will include the application of minimum impact techniques and, if a suppression action, utilize minimum requirement suppression techniques. All fires, whether wildland or prescribed, will be rehabilitated

- Stumps flush cut
- Firelines filled and camouflaged
- Water bars installed as necessary
- Campsites cleaned and restored to natural conditions
- Effects of fire management activities restored to natural conditions

WILDERNESS PRESERVATION AND MINIMUM IMPACT TACTICS (CONTINUED)

Strategies and tactics will be selected commensurate with potential fire behavior and values to be protected, and minimize long-term environmental impacts. The following minimum requirement and minimum tool activities will be used in the park:

- Firefighter and public safety is the first priority in all fire management activities. Particular caution will be given to snags, rolling debris, vehicle travel, and potential fire behavior, with constant application of LCES (lookouts, communications, escape routes and safety zones), the Ten Standard Fire Orders, and Watchout Situations.

- Wildland and prescribed fire containment and control operations will select tactics commensurate with potential fire behavior and values to be protected, in order to minimize environmental impact

- Motorized equipment (chainsaws and portable pumps) may be used in the management of wildland fire, in accordance with Departmental policy. The incident commander must determine methods to minimize use of this equipment, as well as methods to reduce, mitigate, and rehabilitate environmental impacts from the equipment.

- A qualified Resource Advisor (Technical Specialist) will be assigned to wildland fires managed by an extended attack Incident Management Team, as determined by the Chief of Resources Management and Research.

- The Incident Commander will approve the need for any constructed firelines, helispots, staging areas, or similar features.

- In light fuels, Incident Commanders will consider:

- Cold-trailing
- Wet-lining
- Allow fire to burn to natural barriers
- Burn-out from natural barriers
- Minimize line width and depth necessary to check fire spread

- In medium and heavy fuels, Incident Commander will consider:

- Allow fire to burn to natural barriers
- Burn-out from natural barriers
- Minimize line width and depth necessary to check fire spread
- Minimize bucking of downed logs; build line around logs
- Limb only enough to prevent torching or additional fire spread
- Minimize cutting of standing live trees, burned trees, and snags

FIRE EFFECTS MONITORING:

NPS-18, Wildland Fire Management Guidelines (1990) directs parks with prescribed fire programs to monitor those fires to ensure that fire behavior is assessed and resource management objectives are met.

The National Park Service has been monitoring fire effects for more than a decade at some level or another. Some parks have done very little, while others have extensive programs. Three years ago the Park Service created a nationally funded policy for monitoring. The National Monitoring Handbook (FMH) was designed to insure conformance with NPS-18.

The main goals of this program are to:

- Verify that burn objectives are met.
- Document immediate postfire effects of prescribed fires.
- Follow trends in plant communities where fire effects are known.
- Facilitate the sharing of fire-related information.

If prescribed fire is to be used in Florissant Fossil Beds National Monument, prior to igniting the prescribed burn units, the fire effects crew installs FMH plots. The crew collects a myriad of data such as: fuel loading, grass and forb species present, brush information, as well as tree data which includes mapping and measuring trees and recording species and crown position. During the burn, fire intensity is monitored and within two months of burning, data is again collected from the plots. The FMH plots are monitored one year, two years, five years, 10 and 20 years following burning to determine fire effects.

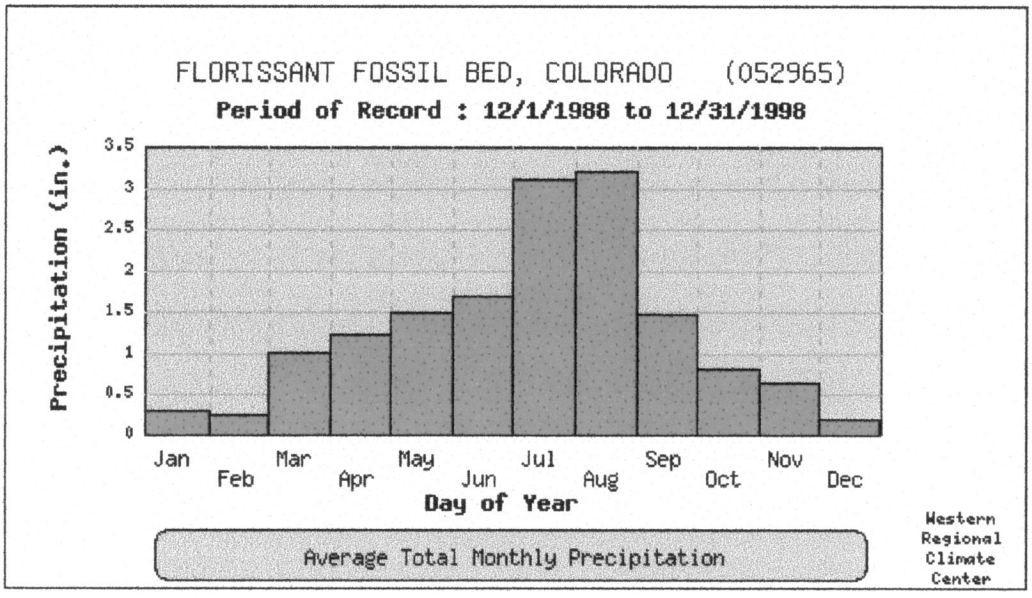
FLORISSANT FOSSIL BED, COLORADO (052965)

Period of Record Monthly Climate Summary

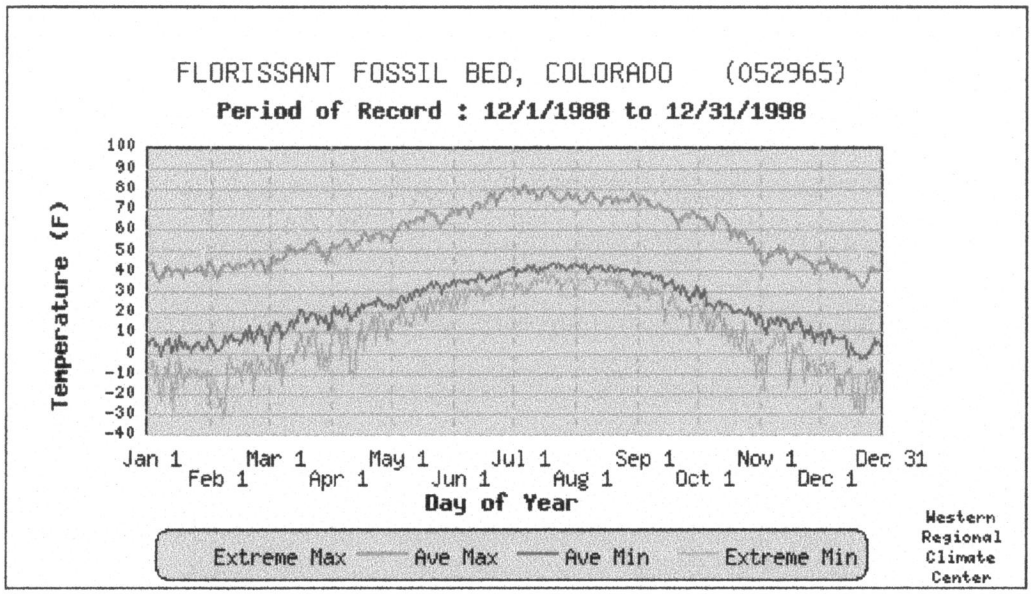
Period of Record : 12/1/1988 to 12/31/1998

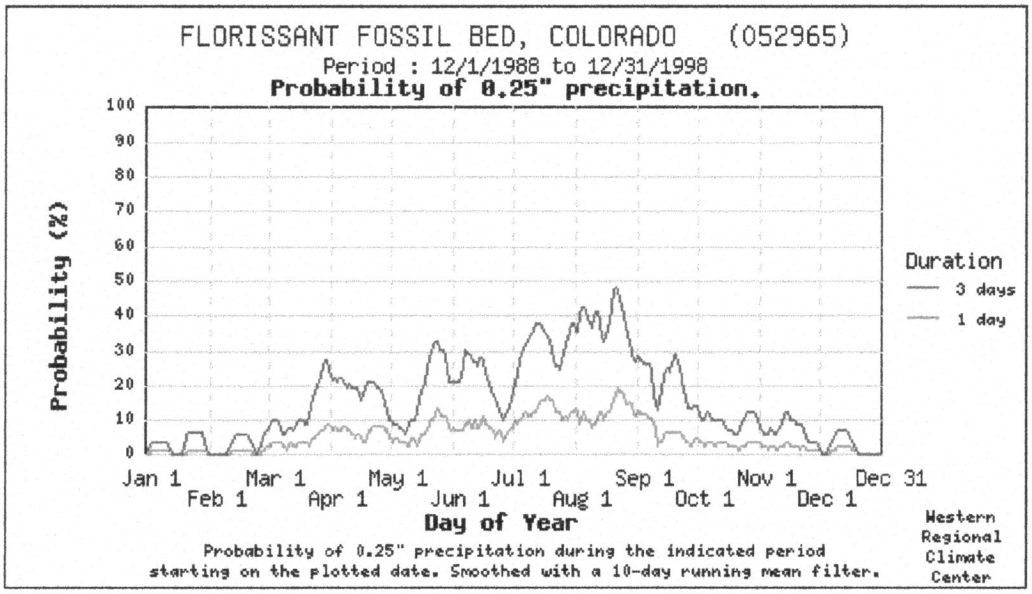
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	39.5	41.7	48.5	54.5	64.2	73.0	77.1	74.8	69.5	59.7	45.7	38.9	57.3
Average Min. Temperature (F)	3.5	6.2	14.6	21.7	29.2	36.1	40.8	40.3	33.4	22.2	12.9	3.8	22.1
Average Total Precipitation (in.)	0.30	0.24	1.01	1.23	1.48	1.70	3.11	3.20	1.48	0.81	0.63	0.21	15.40
Average Total SnowFall (in.)	6.3	4.8	13.2	12.9	1.1	0.1	0.0	0.0	0.6	4.6	8.4	4.9	56.7
Average Snow Depth (in.)	4	3	2	0	0	0	0	0	0	0	1	4	1

Western Regional Climate Center, mailto:wrcc@dri.edu






FLORISSANT FOSSIL BED, COLORADO (052965)
Period of Record : 12/1/1988 to 12/31/1998
Temperature (F)
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Jun 1
Jul 1
Aug 1
Sep 1
Oct 1
Nov 1
Dec 1
Dec 31
Day of Year
Extreme Max
Ave Max
Ave Min
Extreme Min
Western Regional Climate Center


FLORISSANT FOSSIL BED, COLORADO (052965)
Period : 12/1/1988 to 12/31/1998
Probability of 0.25" precipitation.
Probability (%)
100
90
80
70
60
50
40
30
20
10
0
Jan 1
Feb 1
Mar 1
Apr 1
May 1
Jun 1
Jul 1
Aug 1
Sep 1
Oct 1
Nov 1
Dec 1
Dec 31
Day of Year
Duration
3 days
1 day
Probability of 0.25" precipitation during the indicated period starting on the plotted date. Smoothed with a 10-day running mean filter.
Western Regional Climate Center

RUN DATE/TIME	INSTANCE
03-JUN-99 11:06 AM	KCP2

WLSTINV1-Weather Station Inventory for 53002

Station: 053002 Name: LAKE GEORGE NESDIS: 3240C3D8

Type: 4 (RAWS S NFDRS) Create/Mod Date: 02-Jun-1999 Obs Time/Z: 12/MST
Assoc Man: _____ Prev Stn: _____ Fcst Zone: 208

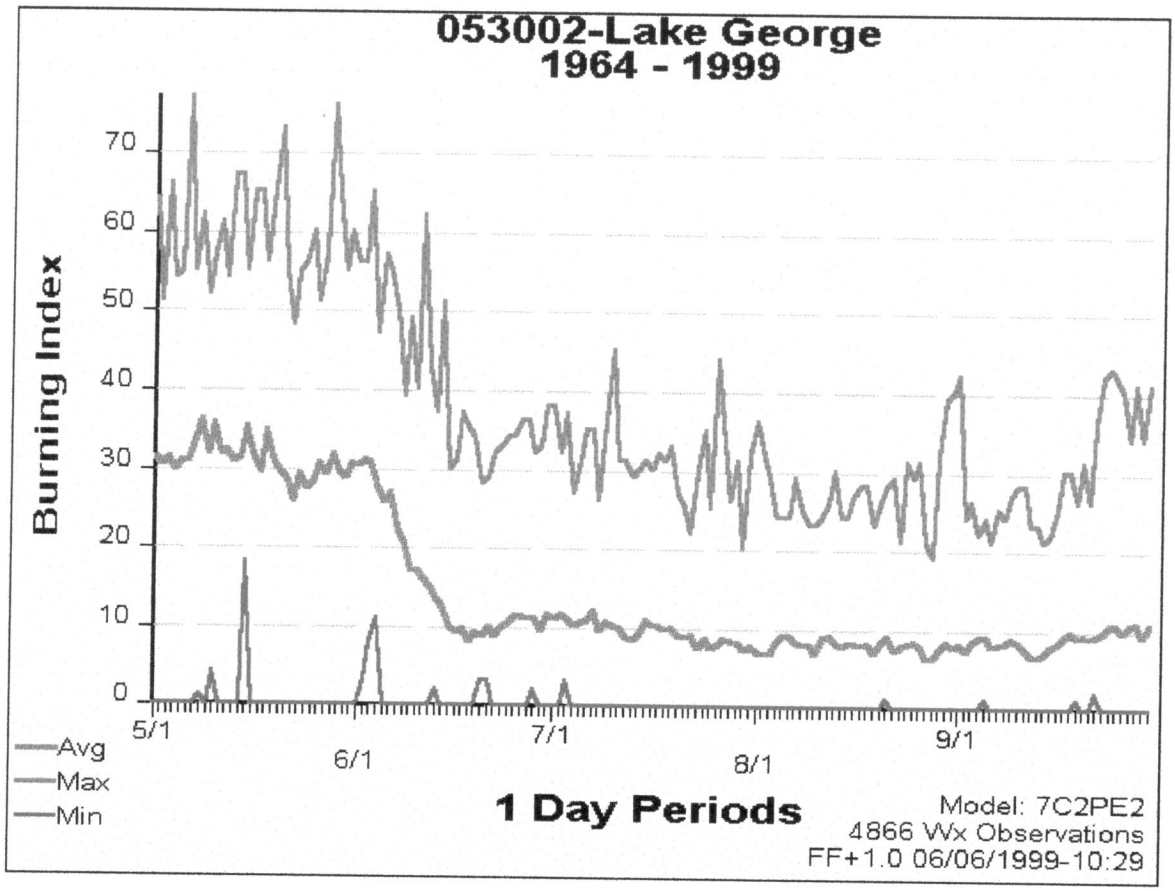
State: 08-CO County: 093-Park Lat/Lon: 38 58 38, 105 21 19
Obs Agy: 1 (USDA FS) Unit: PSF Mnemonic: LKGRG FS Reg: 2

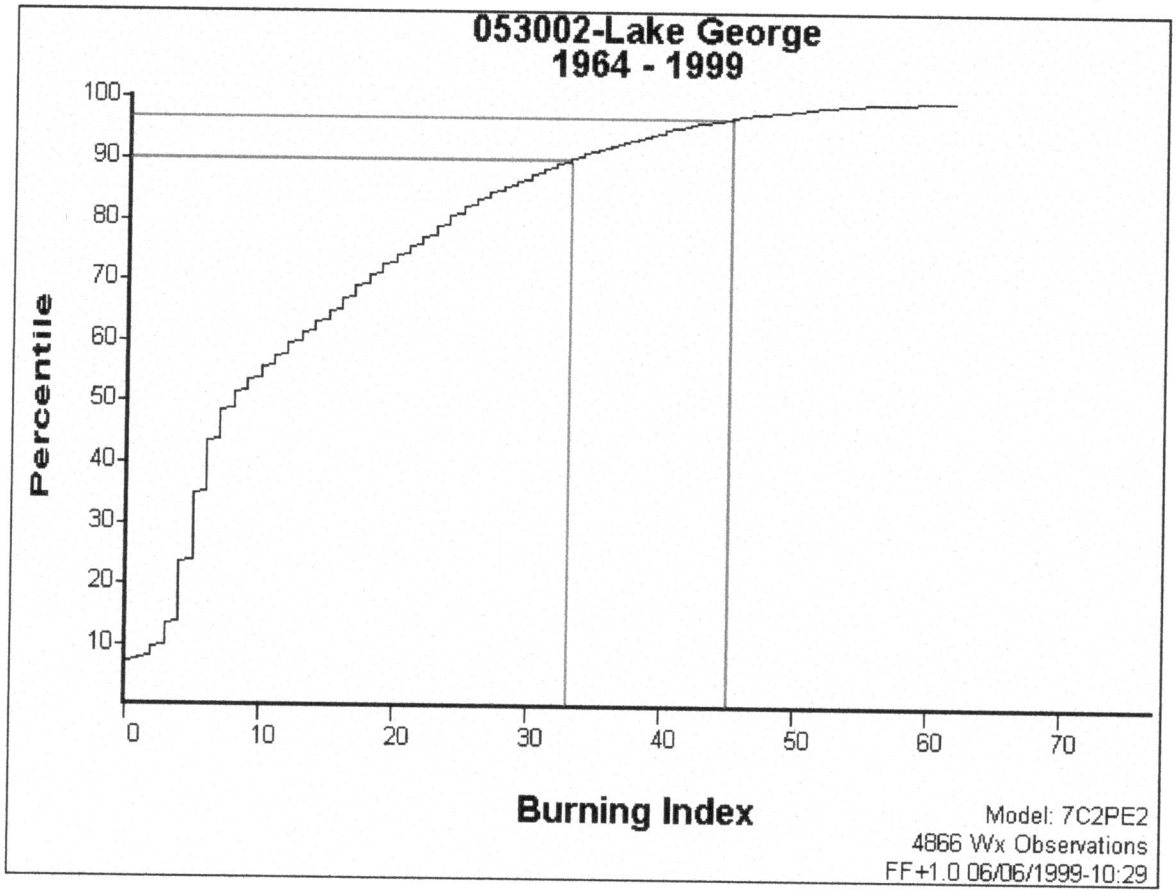
Fuel Stk: 01-Jun-1999 Wdy FM Mea: _____
Site: 2 Elev: 8040 Asp: 4 Ann Prec: 12.00 Season:
Ltng scale: .90 Hum code: 2 Temp code: 1 Pres code: 1
Wind Spd code: 1 KBDI: 100 One/Ten Fl: N

User: OPS$FS11540 Acc Lst: PSF
Comments:

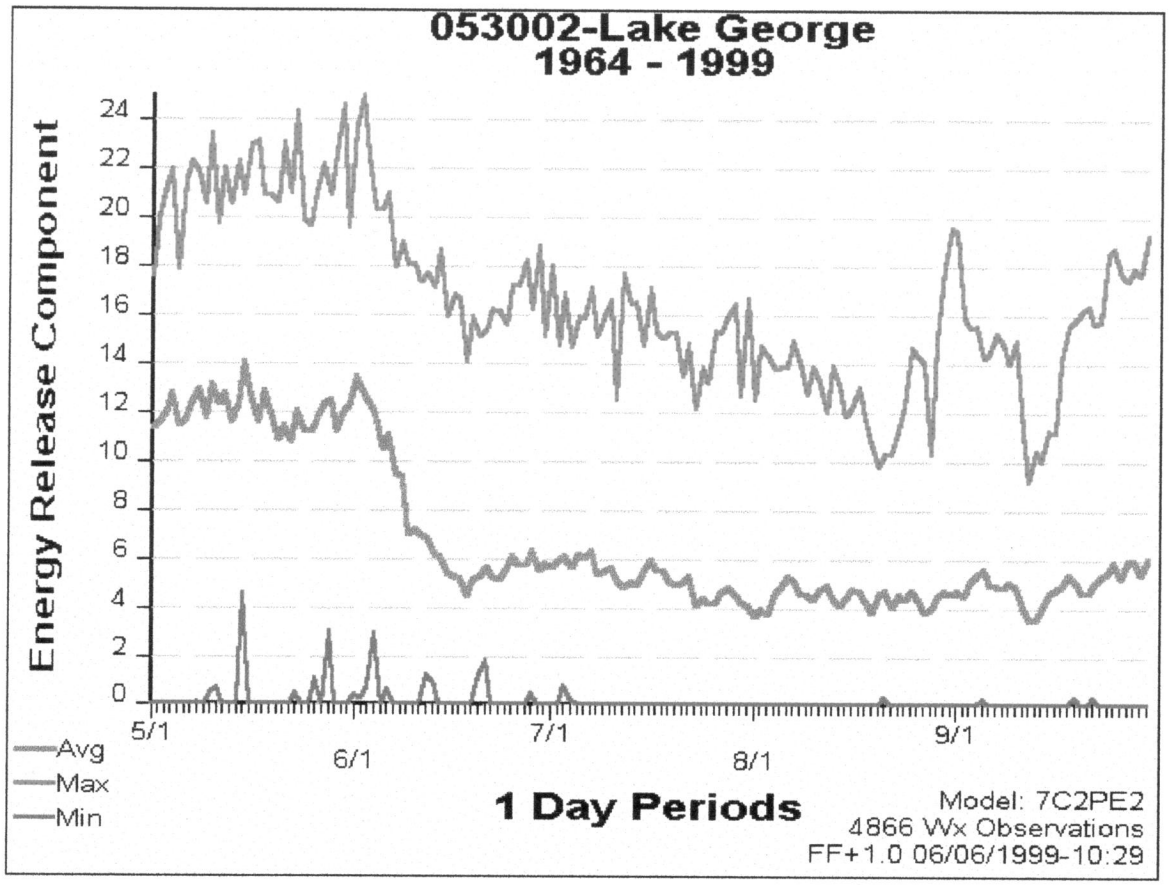
Pri	FM	H S	Herb Date	** 78 NFDRS Only ** Greenup Date	88	S b	G p	C s	l i	Staffing SI	Idx DC	Breakpnts Low SI%	Low Val	High SI%	High Val
1	7C	G	02-JUN-99	02-JUN-99	_	2	P	2	BI	6	90	38	97	50	
2	7U	G	02-JUN-99	02-JUN-99	_	2	P	2	BI	6	90	38	97	47	

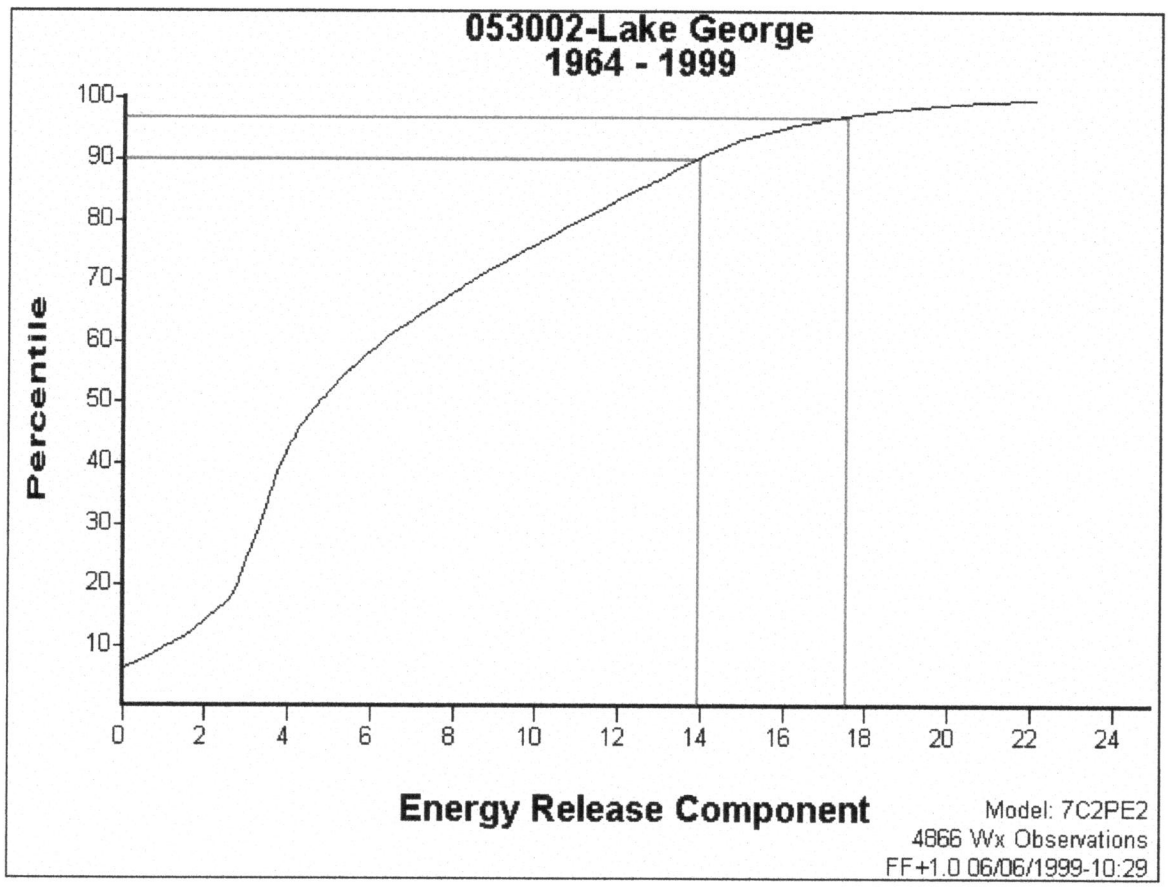
NESDIS	S#	Description	SHEF
3240C3D8	9	Wind, Gust Direction	UX
3240C3D8	10	Wind, Gust Speed	UG

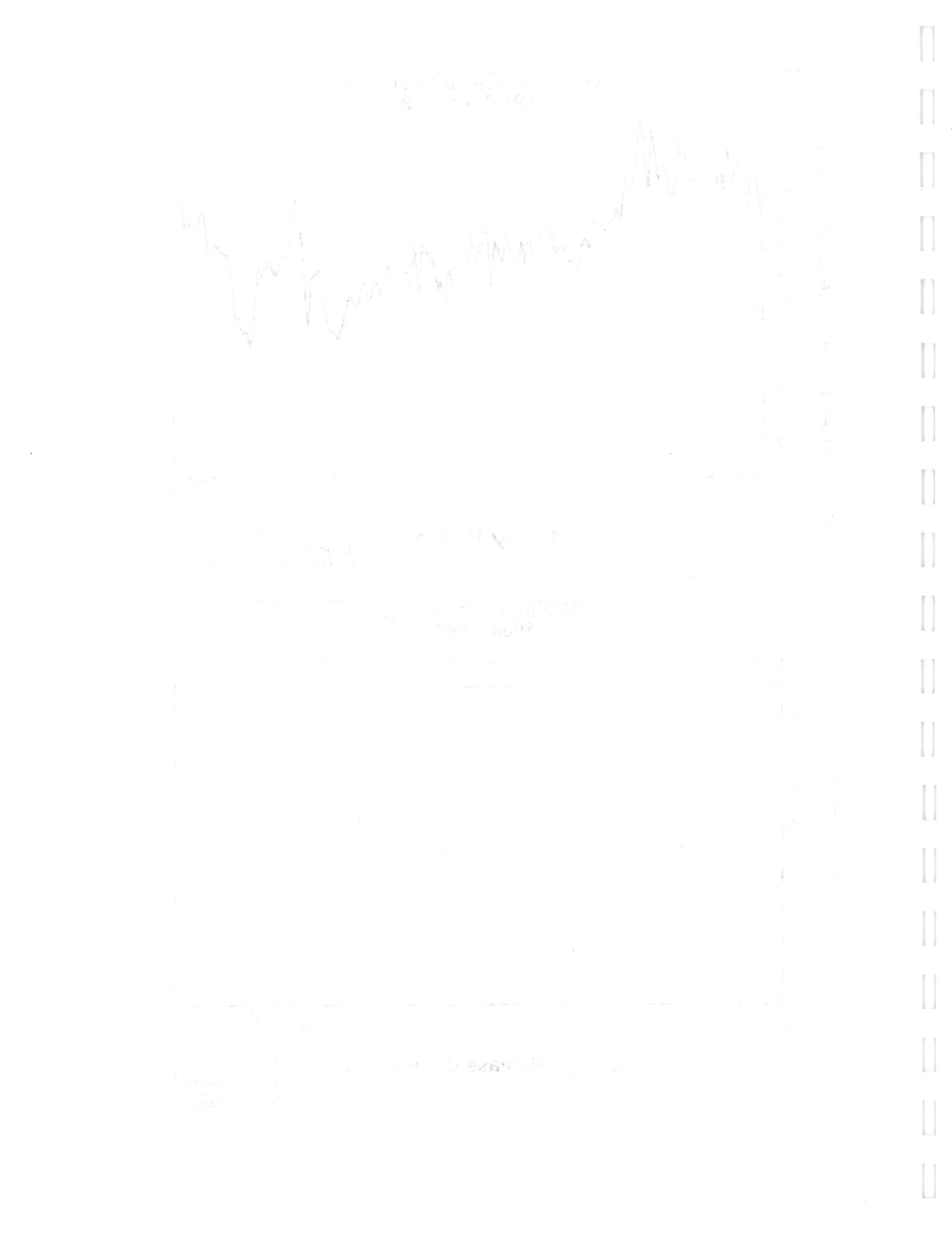

053002-Lake George
1964 - 1999
Burning Index
70
60
50
40
30
20
10
0
5/1
6/1
7/1
8/1
9/1
Avg
Max
Min
1 Day Periods
Model: 7C2PE2
4866 Wx Observations
FF+1.0 06/06/1999-10:29

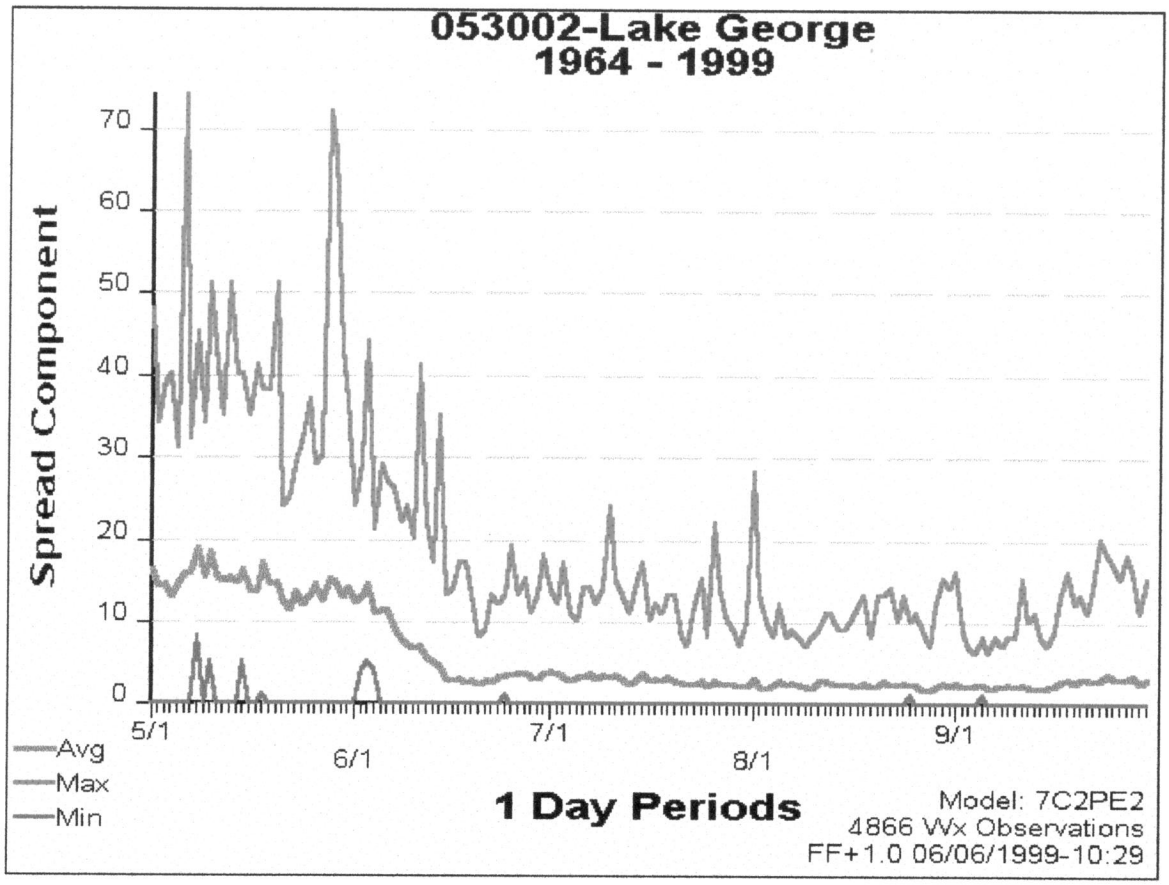

053002-Lake George
1964 - 1999
Percentile
100
90
80
70
60
50
40
30
20
10
0
10
20
30
40
50
60
70
Burning Index
Model: 7C2PE2
4866 Wx Observations
FF+1.0 06/06/1999-10:29

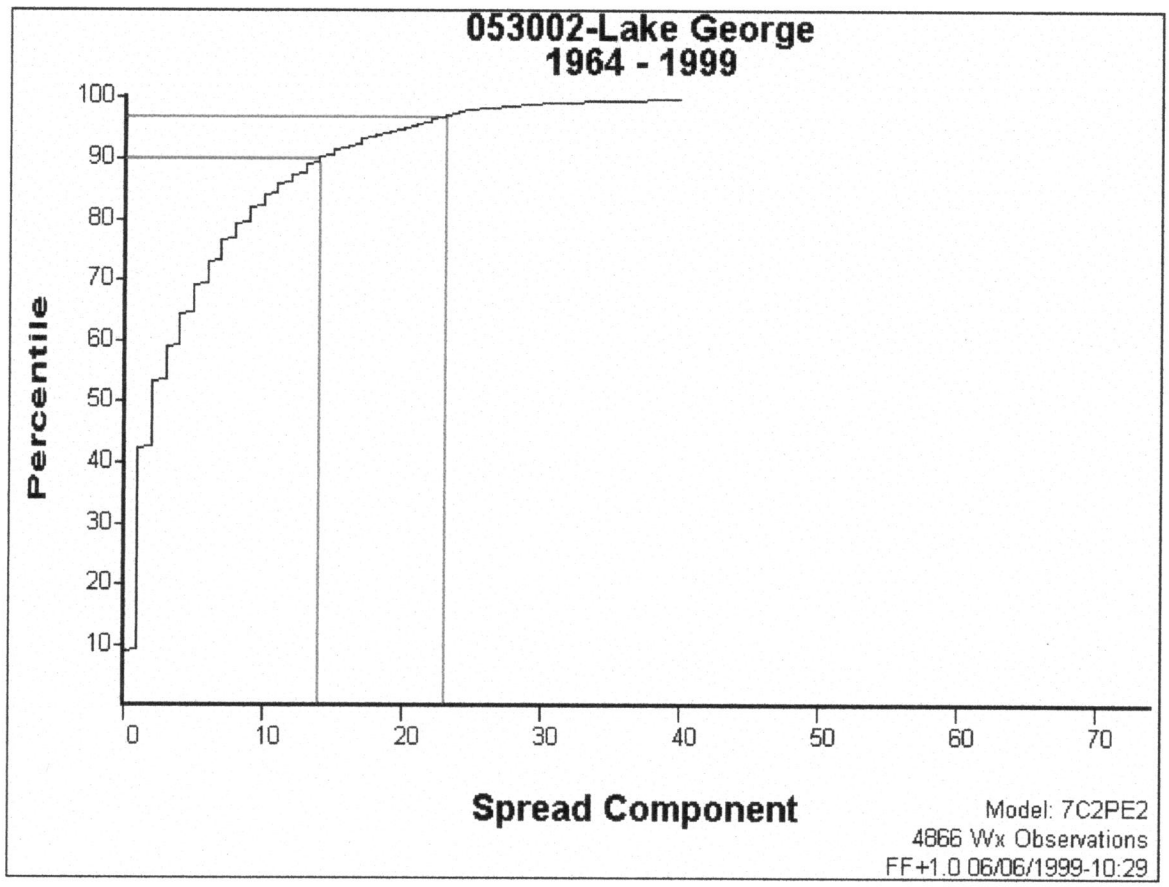


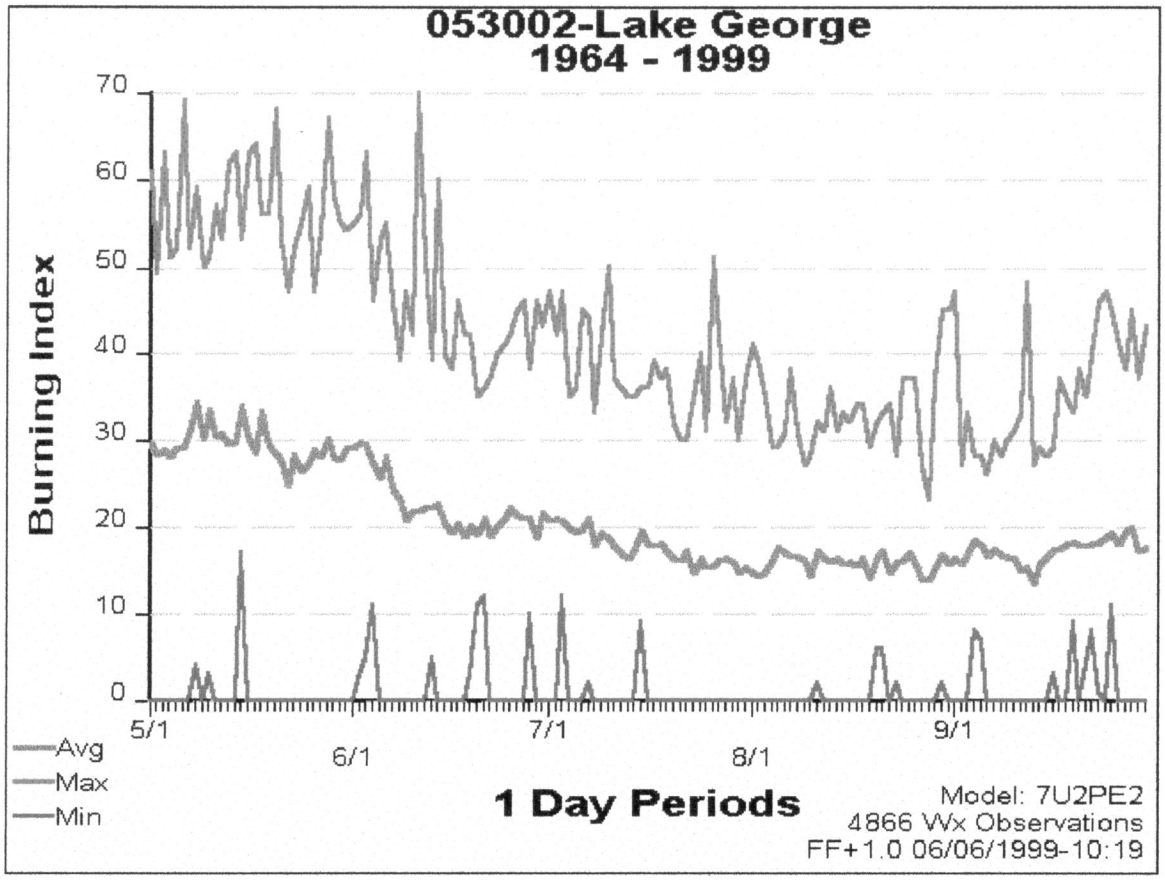

053002-Lake George
1964 - 1999
Energy Release Component
24
22
20
18
16
14
12
10
8
6
4
2
0
5/1
6/1
7/1
8/1
9/1
Avg
Max
Min
1 Day Periods
Model: 7C2PE2
4866 Wx Observations
FF+1.0 06/06/1999-10:29

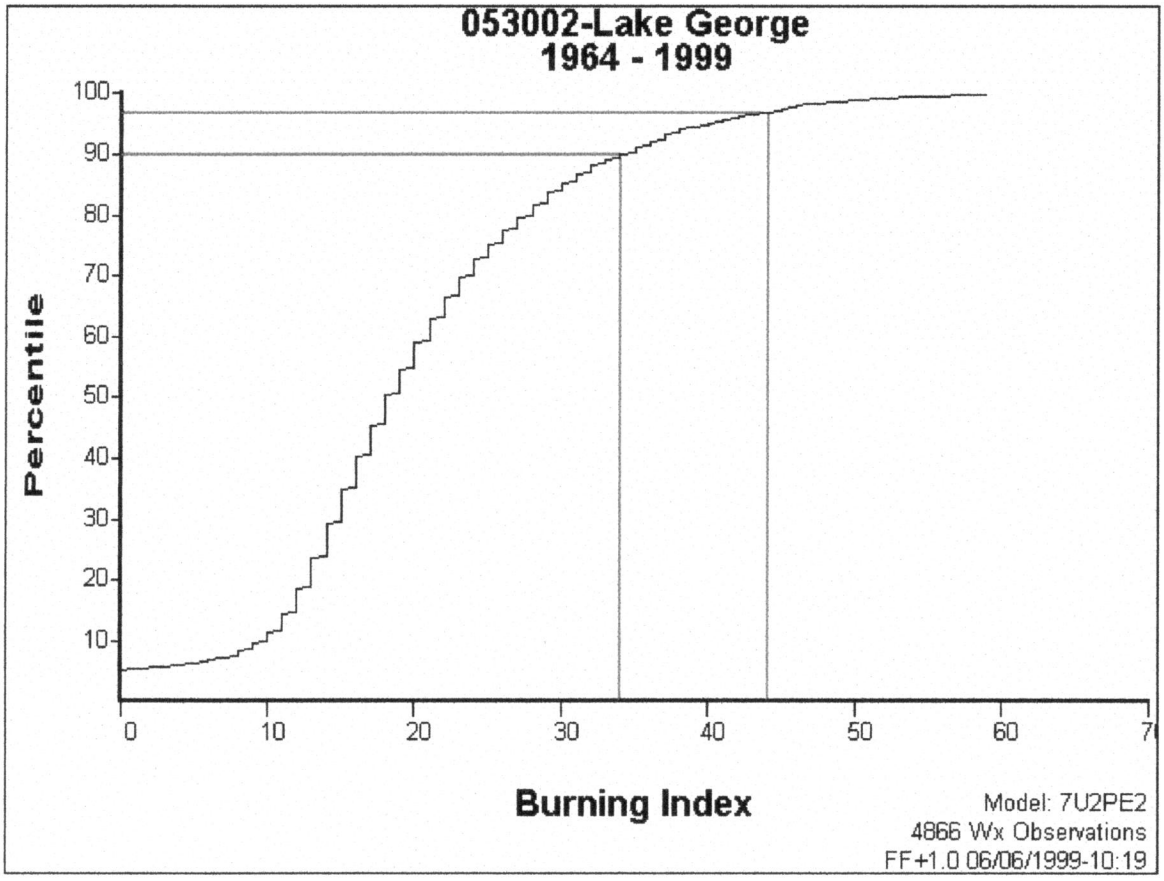

053002-Lake George
1964 - 1999
Percentile
100
90
80
70
60
50
40
30
20
10
0
2
4
6
8
10
12
14
16
18
20
22
24
Energy Release Component
Model: 7C2PE2
4866 Wx Observations
FF+1.0 06/06/1999-10:29



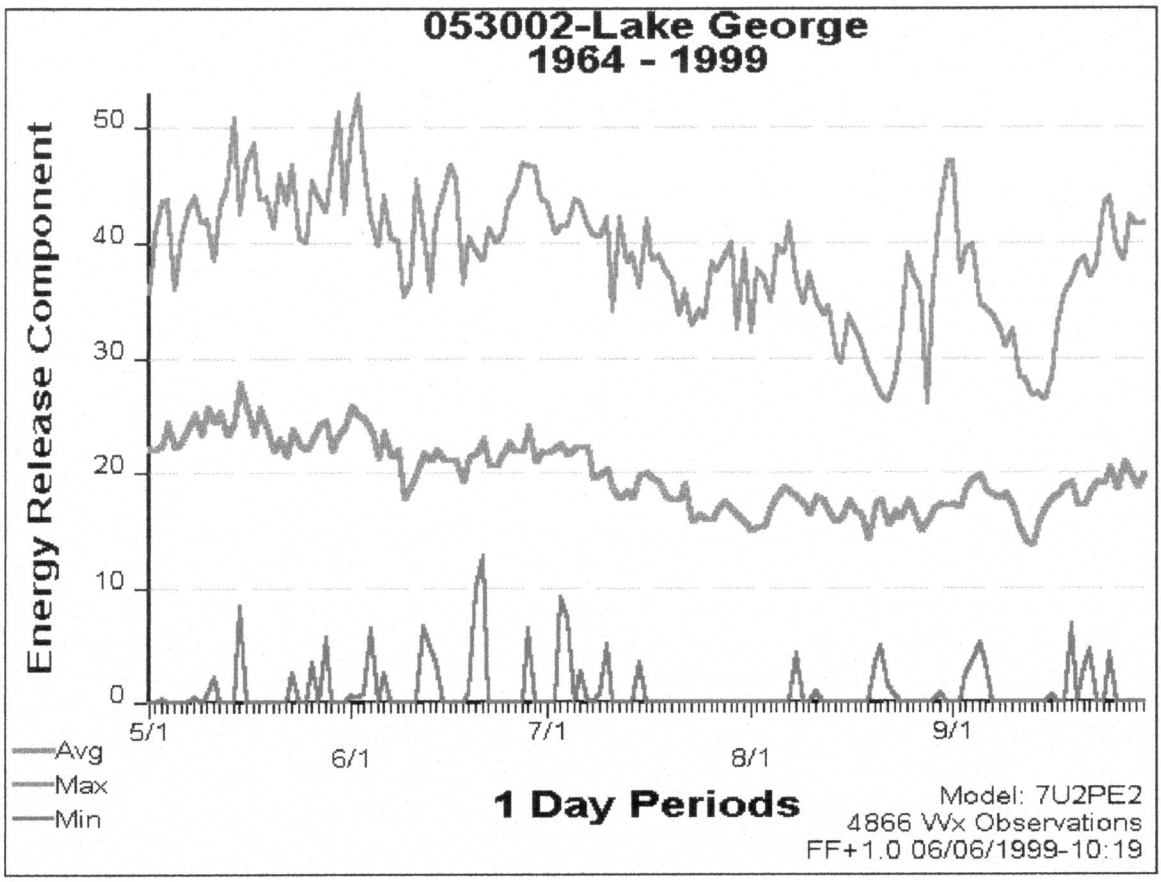

053002-Lake George
1964 - 1999
Spread Component
70
60
50
40
30
20
10
0
5/1
6/1
7/1
8/1
9/1
Avg
Max
Min
1 Day Periods
Model: 7C2PE2
4866 Wx Observations
FF+1.0 06/06/1999-10:29

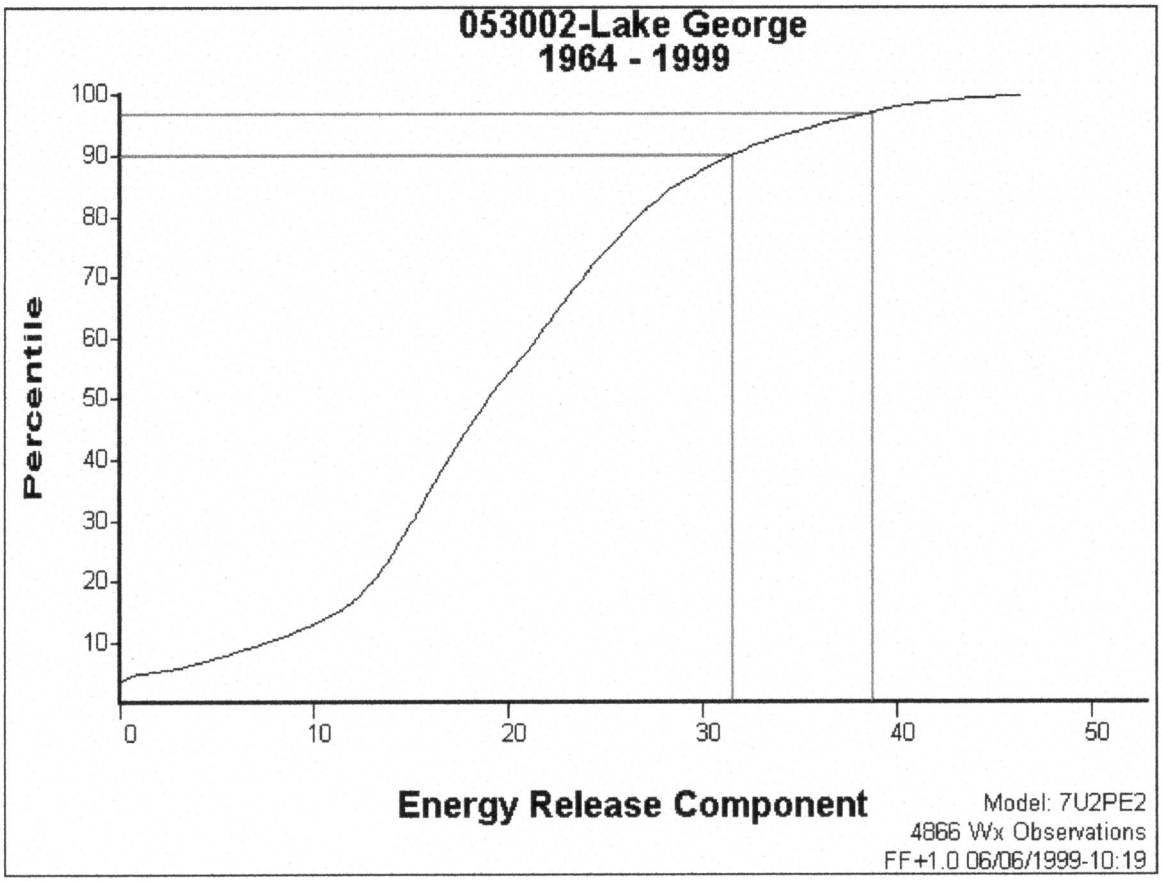

053002-Lake George
1964 - 1999
Percentile
100
90
80
70
60
50
40
30
20
10
0
10
20
30
40
50
60
70
Spread Component
Model: 7C2PE2
4866 Wx Observations
FF+1.0 06/06/1999-10:29


053002-Lake George
1964 - 1999
Burning Index
70
60
50
40
30
20
10
0
5/1
6/1
7/1
8/1
9/1
Avg
Max
Min
1 Day Periods
Model: 7U2PE2
4866 Wx Observations
FF+1.0 06/06/1999-10:19

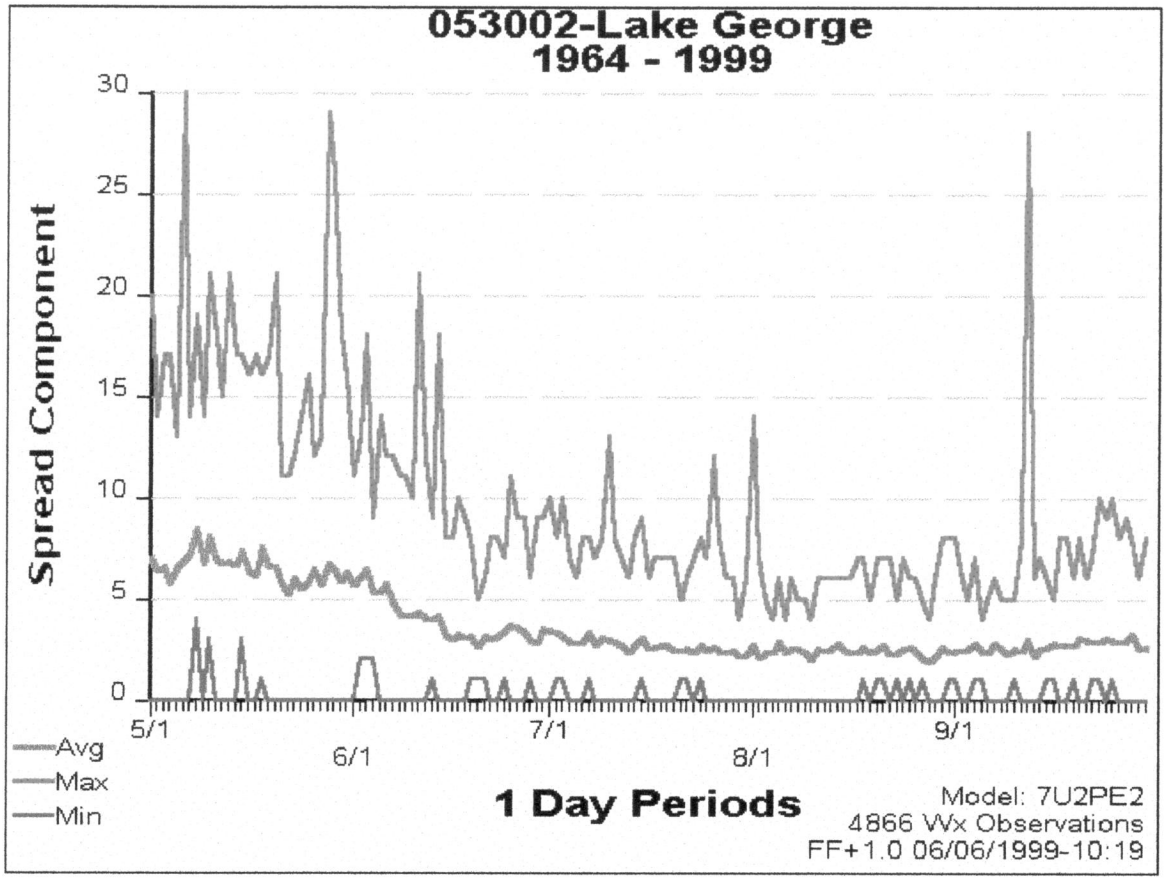

053002-Lake George
1964 - 1999
Percentile
100
90
80
70
60
50
40
30
20
10
0
10
20
30
40
50
60
Burning Index
Model: 7U2PE2
4866 Wx Observations
FF+1.0 06/06/1999-10:19

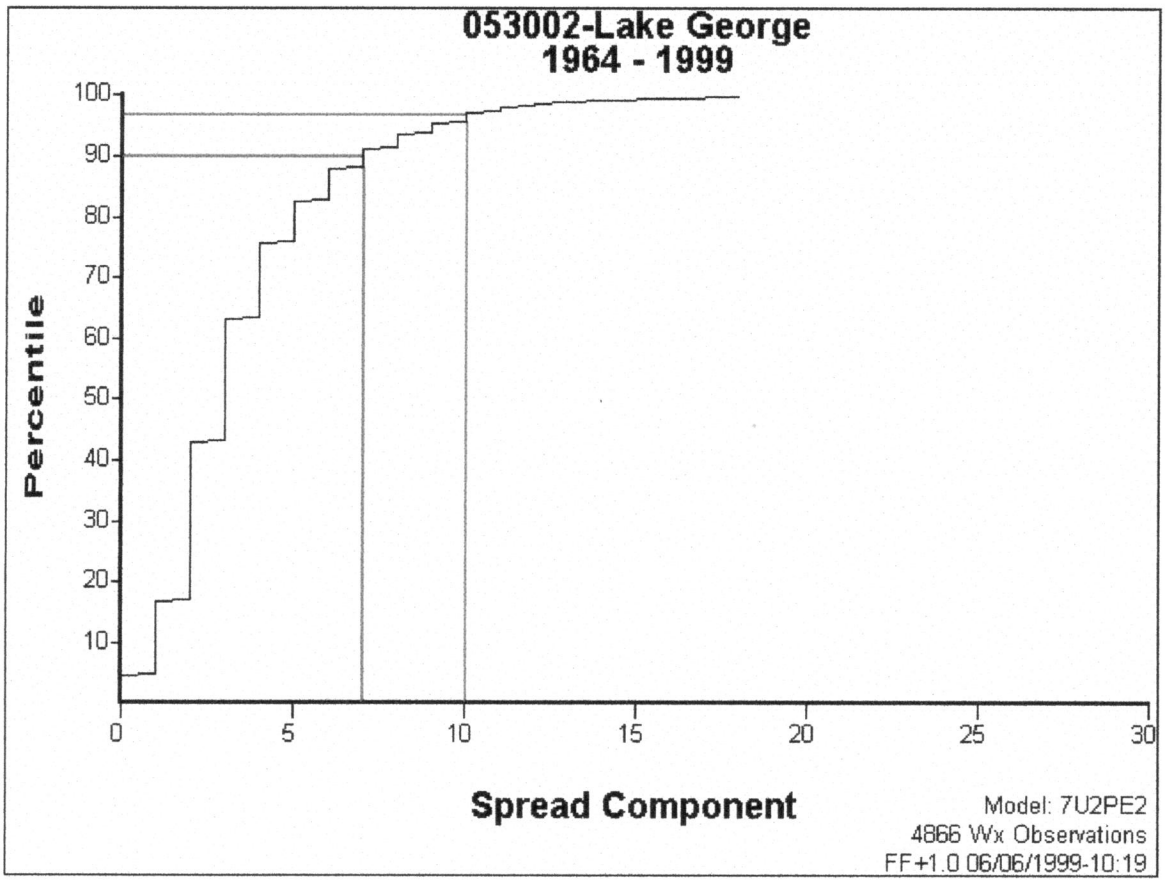


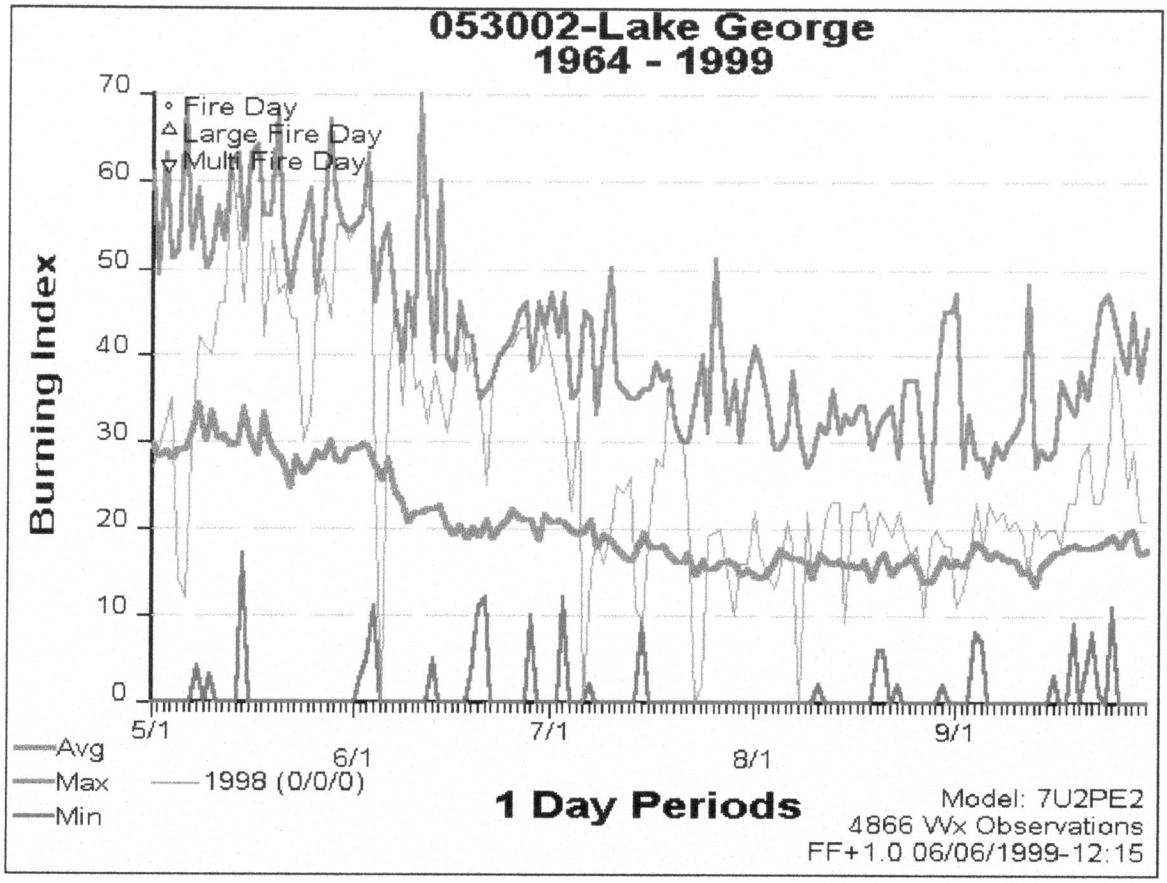

053002-Lake George
1964 - 1999
Energy Release Component
50
40
30
20
10
0
5/1
6/1
7/1
8/1
9/1
Avg
Max
Min
1 Day Periods
Model: 7U2PE2
4866 Wx Observations
FF+1.0 06/06/1999-10:19

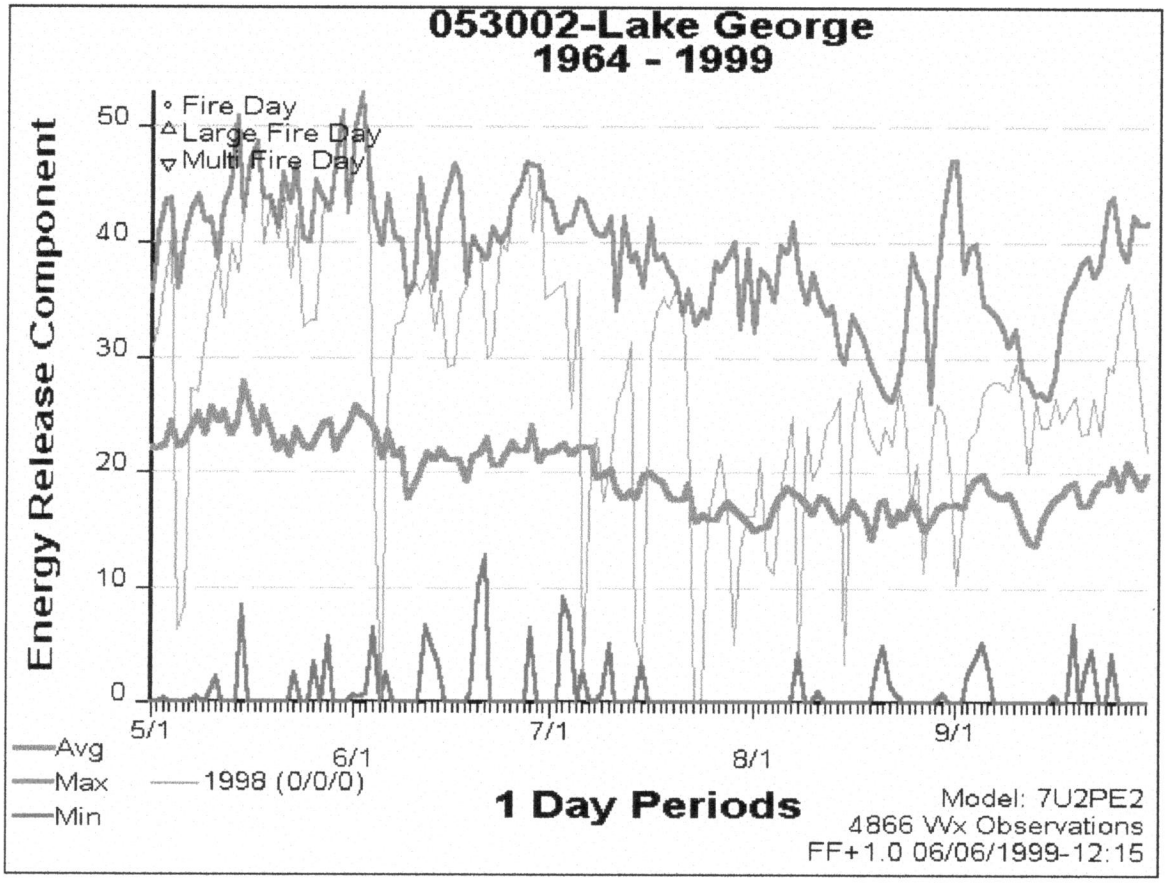

053002-Lake George
1964 - 1999
Percentile
100
90
80
70
60
50
40
30
20
10
0
10
20
30
40
50
Energy Release Component
Model: 7U2PE2
4866 Wx Observations
FF+1.0 06/06/1999-10:19



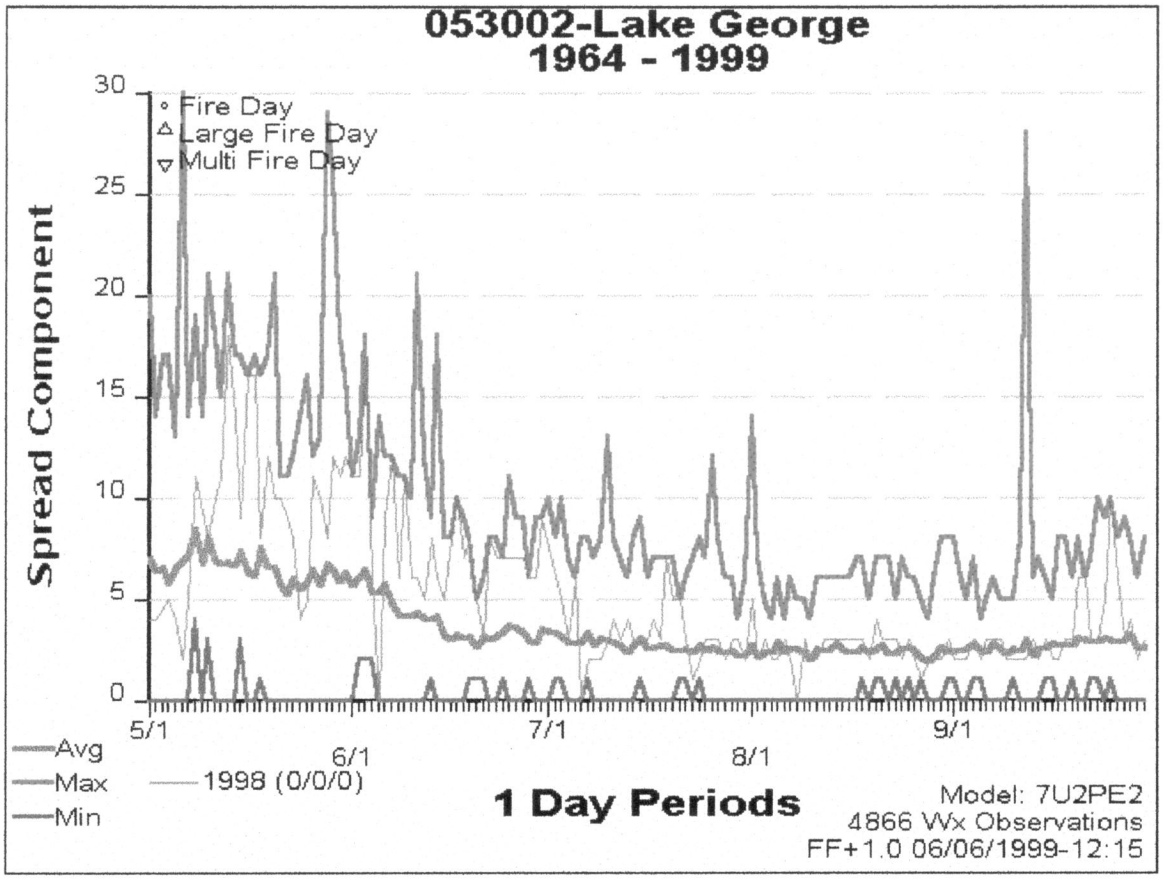

053002-Lake George
1964 - 1999
Spread Component
30
25
20
15
10
5
0
5/1
6/1
7/1
8/1
9/1
Avg
Max
Min
1 Day Periods
Model: 7U2PE2
4866 Wx Observations
FF+1.0 06/06/1999-10:19

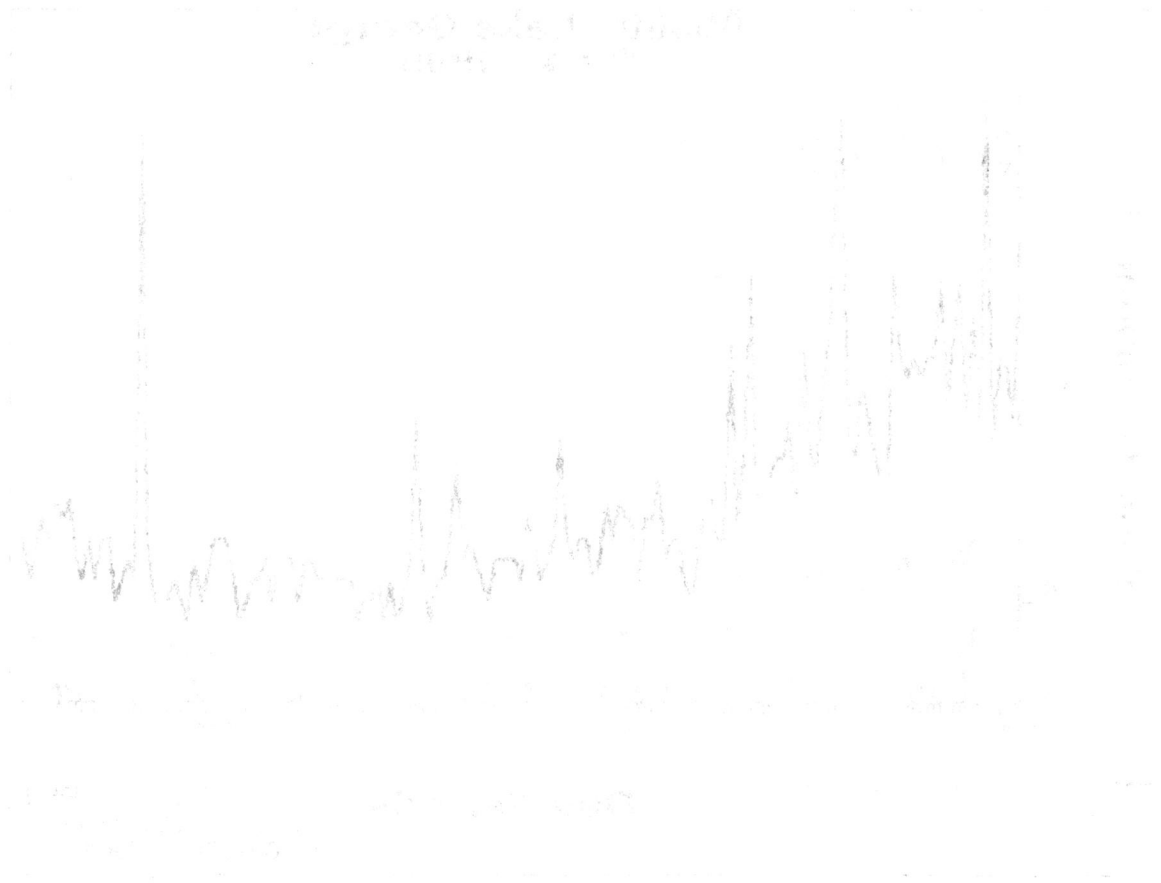

053002-Lake George
1964 - 1999
Percentile
100
90
80
70
60
50
40
30
20
10
0
5
10
15
20
25
30
Spread Component
Model: 7U2PE2
4866 Wx Observations
FF+1.0 06/06/1999-10:19


053002-Lake George
1964 - 1999
Fire Day
Large Fire Day
Multi Fire Day
Burning Index
70
60
50
40
30
20
10
0
5/1
6/1
7/1
8/1
9/1
Avg
Max
Min
1998 (0/0/0)
1 Day Periods
Model: 7U2PE2
4866 Wx Observations
FF+1.0 06/06/1999-12:15


053002-Lake George
1964 - 1999
Fire Day
Large Fire Day
Multi Fire Day
Energy Release Component
50
40
30
20
10
0
5/1
6/1
7/1
8/1
9/1
Avg
Max
Min
1998 (0/0/0)
1 Day Periods
Model: 7U2PE2
4866 Wx Observations
FF+1.0 06/06/1999-12:15




053002-Lake George
1964 - 1999
Spread Component
30
25
20
15
10
5
0
Fire Day
Large Fire Day
Multi Fire Day
5/1
6/1
7/1
8/1
9/1
Avg
Max
Min
1998 (0/0/0)
1 Day Periods
Model: 7U2PE2
4866 Wx Observations
FF+1.0 06/06/1999-12:15



StationID	ObsDate	Temp	RH	WS
053002	7/1/75 1:00:00 PM	85	15	10
053002	8/30/75 1:00:00 PM	83	7	10
053002	9/1/75 1:00:00 PM	83	9	10
053002	6/27/76 1:00:00 PM	81	5	12
053002	7/9/76 1:00:00 PM	83	15	10
053002	6/17/77 1:00:00 PM	84	12	11
053002	7/1/77 1:00:00 PM	82	10	10
053002	6/19/78 1:00:00 PM	80	21	13
053002	6/25/78 1:00:00 PM	82	18	17
053002	7/3/78 1:00:00 PM	83	11	12
053002	7/4/78 1:00:00 PM	80	8	10
053002	8/17/78 1:00:00 PM	80	8	10
053002	7/23/79 1:00:00 PM	83	16	10
053002	6/27/80 1:00:00 PM	84	11	12
053002	7/19/80 1:00:00 PM	83	25	14
053002	6/24/81 1:00:00 PM	85	20	11
053002	7/6/85 1:00:00 PM	85	7	11
053002	7/7/85 1:00:00 PM	83	12	10
053002	7/31/86 1:00:00 PM	80	12	11
053002	7/9/87 1:00:00 PM	80	14	13
053002	7/10/87 1:00:00 PM	80	14	11
053002	6/20/88 1:00:00 PM	80	23	11
053002	7/10/89 1:00:00 PM	80	16	12
053002	6/5/90 1:00:00 PM	80	12	13
053002	6/30/90 1:00:00 PM	89	12	10
053002	6/25/91 1:00:00 PM	82	12	17
053002	6/29/93 1:00:00 PM	80	9	13
053002	7/2/93 1:00:00 PM	83	11	11
053002	7/15/93 1:00:00 PM	80	17	10
053002	7/26/93 1:00:00 PM	82	12	16
053002	6/14/94 1:00:00 PM	80	5	12
053002	6/24/94 1:00:00 PM	80	11	11
053002	6/27/94 1:00:00 PM	84	9	10
053002	6/28/94 1:00:00 PM	81	14	10
053002	7/17/94 1:00:00 PM	82	13	10
053002	8/25/94 1:00:00 PM	80	22	10
053002	8/8/95 1:00:00 PM	83	25	10
053002	6/5/96 1:00:00 PM	80	16	14
053002	7/4/96 1:00:00 PM	84	20	10
053002	8/13/96 1:00:00 PM	82	15	11
053002	8/14/96 1:00:00 PM	81	22	11
053002	7/19/98 1:00:00 PM	85	18	11