| United States Department of Agriculture | Forest Cleveland<br>Service National Forest |               |  | 10845 Rancho Bernardo Road<br>Suite 200<br>San Diego, CA 92127 |                  |  |  |
|---|---|---------------|--|--|------------------|--|--|
| File Code:<br>Route To:                 | 2520/6520                                   |               |  | Date:  | January 11, 2001 |  |  |
| Subject:                                | Viejas Fire Ir                              | nitial BAER I |  |  |                  |  |  |
| To:                                     | Regional For                                | ester         |  |  |                  |  |  |

Enclosed is the Initial Burned Area Emergency Rehabilitation (BAER) Report (Form FS-2500-8) for the Viejas Fire, located on the Descanso Ranger District. The initial request for WFSU funds totals \$20,266 for BAER Team evaluation and administrative support costs.

If you have any questions regarding this report, please contact Kirsten Winter at 858-674-2956.

# /s/ Rich Hawkins

Acting for ANNE S. FEGE Forest Supervisor

Enclosure

cc:

gschmitt@fs.fed.us

AUTHOR: kwinter,01/11/01

|  | Date Of Report: | January | 11, 2001 |
|--|-----------------|---------|----------|
|--|-----------------|---------|----------|

# **BURNED-AREA REPORT**

(Reference FSH 2509.13)

# Part I - Type of Request

| A. Type of Report:   |   |  |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|--|
| [XX] 1. Funding Request for Estimated W  | FSU-FW22 Funds                                  |  |  |  |  |  |  |  |  |
| [ ] 2. Accomplishment Report   |   |  |  |  |  |  |  |  |  |
| [ ] 3. No Treatment Recommendation   |   |  |  |  |  |  |  |  |  |
| B. Type of Action:   |   |  |  |  |  |  |  |  |  |
| [XX] 1. Initial Request (Best estimate of frehabilitation measures).             | unds needed to complete eligible                |  |  |  |  |  |  |  |  |
| [ ] 2. Interim Report:   |   |  |  |  |  |  |  |  |  |
| [] Updating funding request based on more accurate site data or design analysis. |   |  |  |  |  |  |  |  |  |
| [] Status of accomplishments to date.  |   |  |  |  |  |  |  |  |  |
| [ ] 3. Final Report following completion of work.                                |   |  |  |  |  |  |  |  |  |
| Part II – Burned A   | Part II – Burned Area Description               |  |  |  |  |  |  |  |  |
| A. Fire Name: Viejas   | B. Fire Number: CNF-00012                       |  |  |  |  |  |  |  |  |
| C. State: California   | D. County: San Diego                            |  |  |  |  |  |  |  |  |
| E. Region: Pacific Southwest (R-5)   | F. Forest: Cleveland NF (02)                    |  |  |  |  |  |  |  |  |
| G. District: Descanso  |   |  |  |  |  |  |  |  |  |
| H. Date Fire Started: January 3, 2001  | I. Date Fire Controlled: <u>January 8, 2001</u> |  |  |  |  |  |  |  |  |
| J. Suppression Cost: \$7,600,000   |   |  |  |  |  |  |  |  |  |

| K. Fire Su            | ppression .      | Damage            | s Repaired with                  | 1 WFSU         | )-PF12 F   | unas:                          |                              |
|-----------------------|------------------|-------------------|----------------------------------|----------------|--|--------------------------------|------------------------------|
| 1.                    | Firelines        | waterbar          | red (miles):                     |                | 25   | -                              |                              |
| 2.                    | Firelines        | seeded (1         | miles):                          |                | 0  | <u>-</u>                       |                              |
| 3.                    | Other (ide       | entify): <u>1</u> | mile fence rep                   | <u>pair</u>    |  |                                |                              |
| L. Watersh            | ned Numbe        | er(s): <u>180</u> | 07030404, 180                    | 7030408        | <u>8</u>   |                                |                              |
| M. Total A            | Acres Burn       | ed:               | 10,353                           |                | _  |                                |                              |
| NFS [439<br>Sycuan Re | 3]<br>eservation | [176]             | BLM [38]<br>Viejas Reserv        | ation [1       | Private<br>2]  | [5734]                         | ]                            |
|                       |                  |                   | rn mixed chapa<br>oak riparian w |                |  | ixed c                         | haparral, chamise chaparral; |
| O. Domina             | ant Soils:       | Xerorth           | ents (Cienaba f                  | family),       | Haploxe  | eralfs                         | (Las Posas family)           |
| P. Geologi            | c Types:         | Igneous           | Rocks (Tonalit                   | e, Undi        | fferentia  | ted Gr                         | anitic Rocks, and Gabbro)    |
| Q. Miles o            | f Stream C       | Channels          | by Order or C                    | lass:          | 2nd orde<br>2nd orde<br>3 <sup>rd</sup> orde<br>4th ord<br>reservo | ler: 3.1<br>er: 2.6<br>er: 9.6 | miles<br>miles<br>miles      |
| R. Transpo            | ortation Sy      | stem (Fo          | orest Service):                  |                |  |                                |                              |
| Ro                    | ad:              | 0                 | _Miles                           | Trail:_        |  | 0                              | _Miles                       |
|                       |                  |                   | <u> Part III - V</u>             | <u>Vatersh</u> | ed Cond  | <u>lition</u>                  |                              |
| A. Fire Sev           | verity (acre     | es):              | Unburned:                        |                | 0  | <del>-</del>                   |                              |
|                       |                  |                   | Low:                             |                | 2583   | -                              |                              |
|                       |                  |                   | Moderate:                        | -              | 7797   | -                              |                              |
|                       |                  |                   | High:                            |                | 0  | -                              |                              |
| B. Water-r            | epellent S       | oil Acres         | s:                               | 1559           | _  |                                |                              |

| C. Soil Erosion I                   | lazard Rating (acre                               | es):             |      |  |  |  |  |  |
|-------------------------------------|---|------------------|------|--|--|--|--|--|
|                                     | Low:  | 2621             |      |  |  |  |  |  |
|                                     | Moderate:   | 7369             |      |  |  |  |  |  |
|                                     | High:   | 390              |      |  |  |  |  |  |
| D. Erosion Poten                    | tial (tons per acre)                              | : _              | 90   |  |  |  |  |  |
| E. Sediment Pote                    | ential (cubic yards /                             | square mile):    | 2751 |  |  |  |  |  |
| Part IV - Hydrologic Design Factors |   |                  |      |  |  |  |  |  |
| A. Estimated Ve                     | getative Recovery                                 | Period (years):  | 3    |  |  |  |  |  |
| B. Chance of Su                     | ccess (percent):                                  |                  | 65   |  |  |  |  |  |
| C. Equivalent D                     | esign Recurrence I                                | nterval (years): | 10   |  |  |  |  |  |
| D. Design Storm                     | Duration (hours):                                 |                  | 24   |  |  |  |  |  |
| E. Design Storm                     | 5   |                  |      |  |  |  |  |  |
| F. Design Flow                      | 104   |                  |      |  |  |  |  |  |
| G. Estimated Re                     | G. Estimated Reduction in Infiltration (percent): |                  |      |  |  |  |  |  |
| H. Adjusted Des                     | ign Flow (cfs per s                               | square mile):    | 96   |  |  |  |  |  |

### Part V – Summary of Analysis

### A. Describe Watershed Emergency:

The Viejas Incident involved a large number of jurisdictions and ownerships. Because of this complexity, an interdepartmental Burned Area Emergency Rehabilitation Team was convened with representation from the USDA Forest Service, USDI Bureau of Indian Affairs, USDA Natural Resources Conservation Service, San Miguel Fire Department, California Department of Forestry and Fire Protection, San Diego County Flood Control, Sweetwater Authority Water District, and California Department of Fish and Game. The team worked across ownership/jurisdictional boundaries to consider the potential effects of the fire within the fire boundary and downstream from the burn.

The following emergencies exist in the Viejas Fire. Unless otherwise noted, these emergencies are on private lands.

- **1.** Threats to Human Life: Public safety is at risk from washouts of crossings in the Sloan and Lawson sub-watersheds from increased peak flows and debris flows as a result of the fire. This could result in the loss of life and stranding of residents. The crossing locations of concern are on the Sloan Canyon Road in Sections 19 and 20.
- 2. Threats to Property: Property is at risk from washout and accelerated erosion due to increased peak flows and or debris flows brought about by the fire. The road locations include those listed under "threats to human life". A total of 15.5 miles of road with associated fill slopes, road surfaces, drainage and crossing structures are at risk. The roads identified include portions of Sloan Canyon Road, Sloan Canyon to Dam Spur Road, Lawson Creek Road, West Boundary Truck Trail, Montiel Truck Trail, Japatul Dehesa Road, Taylor Creek Road. Water moving downstream on the east side of Palo Verde Estates (Palo Verde Lago Street) may divert out of defined drainage ways and on to the road surface if culverts are plugged and cause damage or loss of property to 3 structures. Approximately 18 structures along Taylor Creek and 1 structure in Lawson Creek could result in property damage or loss as a result of flooding or debris inundation.

### B. Emergency Treatment Objectives:

Protect life and property downstream from the burned area from the 25-year recurrence interval run-off event.

C. Probability of Completing Treatment Prior to First Major Damage-Producing Storm:

Probabilities are low due to the late timing of the fire and length of time before any major damaging storms. Access to do the proposed treatments is good.

#### D. Probability of Treatment Success:

|         | <years after="" treatment=""></years> |      |      |  |  |  |  |
|---------|---------------------------------------|------|------|--|--|--|--|
|         | 1                                     | 3    | 5    |  |  |  |  |
| Land    | n/a                                   |      |      |  |  |  |  |
| Channel | n/a                                   |      |      |  |  |  |  |
| Roads   | 50%                                   | 100% | 100% |  |  |  |  |
| Other   | 50%                                   | 100% | 100% |  |  |  |  |

| E. Cost of No Action  | (including loss):      | \$2,023 | \$2,023,500                    |                                  |  |
|---|------------------------|---------|--------------------------------|----------------------------------|--|
| F. Cost of Selected Al  | Iternative, (including | loss):  | \$901,                         | 723                              |  |
| G. Skills Represented   | on Burned-Area Surv    | vey Tea | ım:                            |                                  |  |
| [X] Hydrology   | [X] Soil               | [X] (   | Geology                        | [] Range                         |  |
| [X] Forestry  | [X] Wildlife           | [X] I   | Fire Mgmt.                     | [] Engineering                   |  |
| [] Contracting  | [X] Ecology            | [X] I   | Botany                         | [X] Archaeology                  |  |
| [X] Fisheries   | [X] Information Off    | icer    |                                | [X] GIS                          |  |
| Team Leader: Kirste   | n Winter               |         |                                |                                  |  |
| Phone: 858-674-2956   | E-mail: <u>kwint</u>   | er@fs.f | fed.us                         | Fax 858-673-6192                 |  |
| BAER Survey Team:   |                        |         |                                |                                  |  |
| US Forest Service:<br>Kirsten Winter, Team<br>Mike McCorison, Hyd | _                      |         | Bureau of Inc<br>Gerald Jones, | dian Affairs:<br>Fire Management |  |
| Ron Wright, Soil Sci  |                        |         | Natural Reso                   | ources Conservation Svc.         |  |
| Corey Ferguson, GIS   |                        |         | Jason Jackson                  |                                  |  |
| Cari VerPlanck Archa  |                        |         |                                |                                  |  |
| Linh Hoang, Botanist  |                        |         |                                | of Forestry and Fire             |  |
| Jeff Wells, Biologist   |                        |         | Protection Thom Porter,        | Forester                         |  |
| Artie Colson, FIO   |                        |         | Thom Torter,                   | Totester                         |  |
| There conson, TTO   |                        |         | California Do                  | ept. Fish and Game               |  |
| San Diego County F  | lood Control           |         | Terri Stewart,                 |                                  |  |
| George Wilkins  |                        |         |                                |                                  |  |
| a   |                        |         | Sweetwater A                   |                                  |  |
| San Miguel Fire Dep   | <u>ot.</u>             |         | Pete Famolaro                  | _                                |  |
| Andy Menshek, FIO   |                        |         | Steve Parker,                  | Reservoir Manager                |  |

Mary Ann Mann, Water Quality Specialist

#### H. Treatment Narrative:

Describe the emergency treatments, where and how they will be applied, and what they are intended to do. This information helps to determine qualifying treatments for the appropriate funding authorities. For seeding treatments, include species, application rates, and species selection rational.

The team considered preventive hillslope and in-channel control treatments in the upper watershed. Effectiveness of all potential treatments in the upper watershed were considered extremely low due to steep slopes, shallow rocky soils, climatic variables, channel cross-sections and configurations, and inaccessibility. Treatments considered but eliminated included seeding, check-dams, mulching, large area coverage of silt fences or wattles, and debris flow retention basins.

The following treatments have been proposed to mitigate the threat to life, property, loss of site productivity and water quality.

#### **Land Treatments:**

None

#### **Channel Treatments:**

None

#### **Roads Treatments:**

### Risks to Roads

#### **Identified Roads**

| Sloan Ranch Road Pvt./Public                                | miles |
|---|-------|
| Sloan Ranch Road to Dam Spur – Pvt.                         | miles |
| West Boundary Truck Trail (Montiel Truck Trail) Public/Pvt. | miles |
| Japatul – Dehesa Highway                                    | miles |
| Taylor Creek Road Pvt.                                      | miles |
| *Palo Verde Lago Residential Street                         | miles |

Total Private roads -- 15.55 miles

### Risks

- a. Potential washouts @ crossing
- b. Exacerbated Surface Drainage problems on unpaved roads > 5%.
- c. \*Blocked/plugged culverts and subsequent loss of water control

# **Potential Treatments**

Flood patrol
Storm Alert network – county
Stage equipment
Notification to residences and users
\*\* Culvert clearing and upgrades
\*\* Drop inlets and Arizona type crossings

- \* Palo Verde Lago problem is loss of water control, once culverts-inlets/outlets are plugged or dammed.
- \*\* Further Options

### Other Treatments:

#### **Notification Letters:**

Obtain owner addresses and allotment residents, draft and mail letter to all landowners within and indirectly downstream from burned area. Since most of these areas are on private property, NRCS will be the lead federal agency for the treatment.

# Part VI – Emergency Rehabilitation Treatments and Source of Funds by Land Ownership

### A. LAND TREATMENTS - None

### **B. CHANNEL TREATMENTS - None**

#### C. ROADS AND TRAILS

|      |                               |       |                  | Private<br>Lands | 75% | 25%   | Other<br>Lands |          |       |
|------|-------------------------------|-------|------------------|------------------|-----|-------|----------------|----------|-------|
| Line | Line Items                    | Units | <b>Unit Cost</b> | Number           | EWP | Other | Number         | EFR      | Other |
| No.  |                               |       | \$               | Of Units         | \$  | \$    | of Units       | \$       | \$    |
|      | Storm Alert<br>Network        | Each  | 10,000           |                  |     |       | 1              | 10,000   |       |
|      | Culvert Clearing and upgrades | Each  | 833              |                  |     |       | 20             | 16,660   |       |
|      | Warning<br>Signs              | Each  | 200              |                  |     |       | 8              | 1600     |       |
| O-2  | Flood Patrol                  | Year  | 13,500           |                  |     |       | 3              | 40,500   |       |
|      | TOTALS                        |       |                  |                  | \$0 |       |                | \$68,760 |       |

# C. ROADS AND TRAILS TOTAL = \$68,760

**D. STRUCTURES - None** 

E. MONITOR - None

|             |                               |       |                 | Private<br>Lands   | 75%       | 25%         | Other<br>Lands  |           |             |
|-------------|-------------------------------|-------|-----------------|--------------------|-----------|-------------|-----------------|-----------|-------------|
| Line<br>No. | Line Items                    | Units | Unit Cost<br>\$ | Number<br>Of Units | EWP<br>\$ | Other<br>\$ | Number of Units | EFR<br>\$ | Other<br>\$ |
| <b>F.</b> O | THER                          |       |                 |                    |           |             |                 |           |             |
|             | Notification<br>Letters       | Pk    | 2,000           | 1                  | 1,500     | 500         |                 |           |             |
|             | Contacts<br>with<br>residents | Ea    | 100             | 40                 | 4000      |             |                 |           |             |
|             |                               |       |                 |                    |           |             |                 |           |             |
|             | TOTALS                        |       |                 |                    | \$5,500   | \$500       |                 |           |             |

# F. OTHER TOTAL = \$6,000

|       |             |               |                  | NFS<br>Lands |          |          | Other<br>Lands |     |       |
|-------|-------------|---------------|------------------|--------------|----------|----------|----------------|-----|-------|
| Line  | Line Items  | Units         | <b>Unit Cost</b> | Number       | WFSU     | Other    | Number         | EFR | Other |
| No.   |             |               | \$               | Of Units     | \$       | \$       | of Units       | \$  | \$    |
| G. BA | AER EVALU   | J <b>ATIO</b> | N/ADMIN          | ISTRATIV     | VE REPO  | RT       |                |     |       |
| G-1   | Salary      | Days          | 378              | 45           | 17,010   |          |                |     |       |
| G-2   | Travel      | Days          | 145              | 10           | 1,450    |          |                |     |       |
| G-3   | Vehicles    | Days          | 43               | 42           | 1,806    |          |                |     |       |
|       |             |               |                  |              |          |          |                |     |       |
| G-5   | Helicopter  | Each          | 0                | 8            | Paid by  | Incident |                |     |       |
| G-6   | Meeting     | Days          | 0                | 11           | Paid by  | CNF      |                |     |       |
|       | Room        |               |                  |              |          |          |                |     |       |
| G-7   | Copier/Fax/ | Days          | 0                | 5            | Paid by  | CNF      |                |     |       |
|       | Phones      |               |                  |              |          |          |                |     |       |
| G-8   | Supplies    | Each          | 0                | 1            | Paid by  | Incident |                |     |       |
|       |             |               |                  |              |          |          |                |     |       |
| i.    | TOTALS      |               |                  |              | \$20,266 |          |                |     |       |

# G. BAER EVALUATION/ADMINISTRATIVE REPORT TOTAL = \$ 20,266

# Part VII - Approvals

| 1 | Rich Hawkins/acting for Anne S. Fege | 1/11/01 |  |
|---|--------------------------------------|---------|--|
|   | FOREST SUPERVISOR                    | DATE    |  |
|   |                                      |         |  |
| 2 |                                      |         |  |
|   | REGIONAL FORESTER                    | DATE    |  |