



## REHABILITATION PLAN - Wrangler Fire

### Kisatchie Ranger District, Kisatchie National Forest, LA-KIF-011009

**Background:** The Wrangler Fire was detected on October 13, 2010, at approximately 1400 hrs, within the Kisatchie Hills Wilderness (KHW) following lightning events over the prior two days. The fire escaped initial suppression efforts and eventually grew to more than 4,400 acres, nearly all within the Wilderness. Following initial attack (IC N.Miller), the fire was managed by a forest Type 3 team (IC D.McDonald). The Southern Area BLUE TEAM, operating as a Type 2 Incident Management Team (IC M.Quesinberry), managed the fire from Saturday 10/16 at 1900 hrs until Friday 10/22 at 1900 hrs, when it transitioned to a Type 3 organization (IC G.Sanders) comprised of both local and non-local resources.

The Kisatchie National Forest Land and Resource Management Plan (FLMP, Revision, August 1999), and the KNF Fire Management Plan (FMP, February 1, 2005) allow for the management of fires (both naturally ignited and prescribed) within the KHW within certain parameters. Numerous Wyden Agreements, which allow the USFS to construct, maintain, and utilize firelines (for wildfires and prescribed burns) on private land adjacent to the KHW, were developed in 2009 and 2010.

**Rehabilitation Summary:** This Rehab Plan focuses on the rehabilitation of activities associated with the Wrangler Fire management and suppression effort. A BAER (Burned Area Emergency Rehab) assessment will be completed as required within seven (7) days of containment. No significant request for BAER funding is anticipated. Implementation of the Rehab Plan should be accomplished as soon as practical, and prior to the declaration that the fire is out. Some rehab may need to be delayed until needle cast and leaf fall is complete.

On October 13, 2010, the acting Forest Supervisor signed an authorization for the use of aircraft, chainsaws, pumps, leaf blowers, and UTVs in the Wilderness as needed to suppress the Wrangler Fire. The Forest Supervisor will re-evaluate the existing approvals regarding motorized equipment and mechanical transport in the wilderness when the fire is declared controlled.

- Rehab Tasks:**
- 1. Constructed Fireline Rehab (Dozer Line and Hand Line).**
  - 2. USFS Property Monument Reestablishment.**
  - 3. Wilderness Boundary Signage Reestablishment.**
  - 4. Dozer Line Within KHW – Rehab and Obliterate.**
  - 5. Wrangler Helibase Rehab.**
  - 6. Wrangler ICP Rehab.**
  - 7. System Roads Maintenance.**
  - 8. Non-USFS Roads Maintenance.**
  - 9. Cultural Resource Fieldwork.**

**Prepared By:** \_\_\_\_\_ 22 Oct 2010  
Pete Irvine (VA-VAF), Matt Hughes (LA-KIF), READ-Wilderness

**Reviewed By:** \_\_\_\_\_  
Michael Dawson      District Ranger, Kisatchie Ranger District      (date)

**Approved By:** \_\_\_\_\_  
Michael L. Balboni      Forest Supervisor, Kisatchie National Forest      (date)

**Task #1. Constructed Fireline Rehab.**

Dozer Line:	9.09 miles	(includes 0.33 mi in Section 11).
Hand Line (Wilderness, non-trail):	2.78 miles	
Hand Line (Wilderness, System Trail):	4.73 miles	
System Roads as Firelines:	4.54 miles	(FR 339, FH 59)
<u>Planned Fire Line (not constructed):</u>	<u>1.25 miles</u>	
Total Line:	22.39 miles	

Dozer Line	9.09 miles	47,995 feet x 7 feet wide = 335965' = 7.71 ac
Hand Line (W, non-trail)	2.78 miles	14,678 feet x 6 feet wide = 88070' = 2.02 ac
Hand Line (W, system trail)	4.73 miles	24,975 feet x 6 feet wide = 149850' = 3.44 ac

All **Dozer Lines** are to be waterbarred, seeded, and fertilized. Scatter all brushpiles and yaupon windrows. Mulch with straw all portions of dozer lines or connecting handlines within 50 feet of all streams, drains, and scour areas. All work within 50 feet of streams, drains, and scour areas is to be done by hand. Include the disconnected dozer line in Section 11, outside the forest boundary (old IPCo land, approximately 0.33 mile).

Dozer Line work includes both Immediate Seeding and Long-Term Spring Seeding (if needed). Seed for potential Long-Term Spring Seeding should be purchased now and stored on forest.

All **Hand Lines (Wilderness, non-trail)** are to be waterbarred. No seeding or fertilizing is needed. Scatter all brushpiles and yaupon windrows. All handlines within Wilderness are to be covered with native on-site mulch (pine straw, leaf litter, duff) and all berms scattered. Sections of handlines within 50 feet of streams, drains, and scour areas are of special concern – and are to be covered with native on-site mulch (pine straw, leaf litter, duff) as soon as practical after fire passage.

All **Hand Lines (Wilderness, system trail)** are to be waterbarred. Emphasize long, broad waterbars (rolling dips) to allow for horse and hiker use. Scatter all brushpiles and yaupon windrows. No seeding or fertilizing is needed. All areas of “scrape” in excess of the original trail tread are to be covered with native on-site mulch (pine straw, leaf litter, duff), and all berms to be scattered. Where original tread width cannot be determined, reestablish tread to not more than 36” width.

In Wilderness, all work is to be done by hand, utilizing Minimum Impact Suppression Tactics (MIST). Limit the use of authorized mechanized equipment and motorized transport to the minimum needed for safe fire suppression activities, including rehabilitation.

Additional information about MIST is available in the Incident Response Pocket Guide (IRPG), page 100, and the Rehab Guidelines in the Incident Action Plan for Thursday 10/21, back page.

Estimate: (Seed and Fert, immediate seed only): Seed \$40/ac, Fert \$1360/ac, Pine Straw 40 total bales on 8 acres = \$1920.00; Labor: 4 person crew x 5 days = \$ 6250.00, total plus 15% = \$ 9400.00.

**Task #2. USFS Property Monument Reestablishment** - Point #32 of KHW. Existing monument damaged (brass cap in reinforced 5”x5” concrete post 36” long). Replacement post and cap to be surveyed and set by Forest Land Surveyor.

Estimate: Two-person crew, 1 crew day, = \$ 1000.00.

**Task #3. Wilderness Boundary Signage Reestablishment.** Throughout Division D, south of Point #32 of KHW, around west side of Longleaf Vista. Does not include Division E (unburned). Along all

exterior dozer lines (total ~ 4.5 miles), intervisible, as high as possible, standard sign FS 27-06a, aluminum nails. District has supply of signs.

Estimate = 4 miles, two-person crew, 4 crew days = \$2500.00.

**Task #4. Dozer Line Within KHW: Rehab and Obliteration.** Two separate areas: in the vicinity of Point #32 in northwest corner near Div C/D break (already accomplished) and at midpoint of dozer line to northwest of Longleaf Vista on FH59 in Div B. All work to be hand work.

Estimate: 6-person squad, < ½ squad day = \$1500.00.

**Task #5. Wrangler Helibase (H #1, DP #2) Rehab.** USFS one-time use authorized by Land Use Agreement with Bayou Camitte Lands LLC (Charles Churchman) on 10/16/2010. No work anticipated per District FMO Steve Staples on 10/20. Need to re-confirm and document. Involve local purchasing agent Donna Oliveria in KIS S.O. (318-472-7160).

Estimate = \$ no cost.

**Task #6. Wrangler ICP (DP #1) Rehab.** One-time use by USFS authorized by Land Use Agreement with Bayou Camitte Lands LLC (Charles Churchman) on 10/16/2010. Police the entire area (ICP and Supply), remove all trash, smooth all rutted areas with handtools.

Overseed (hand seeder or equipment-mounted seeder) with non-invasive seed mix per landowner preference and in accordance with the LUA. Inspect with landowner after completion. Involve local purchasing agent Donna Oliveria .

Estimate = \$1500.00.

**Task #7. System Road Maintenance.** FR 339 (Montrose Road) from Junction with FH 59 (Longleaf Trail Scenic Byway) north to junction with LA 493. Grading (one-pass) was done on 10/21/2010. One additional grading to reduce washboarding following the completion of major active fire management actions (3-4 weeks out) is needed. Incorporate water (rain event or utilize water tender) to moisten road in advance of grader, if possible. No need is identified or anticipated for any addition of gravel, or any other road maintenance activities.

Estimate: grading = \$ 250.00/mile x 3 miles = \$750.00, tender = \$750.00/day, total = \$1500.00.

**Task #8. Private Road Maintenance.** Vicinity of DP #5 (Cook Compound), and/or DP #6 (High Ridge Trail Access area, Bayou Derbonne Road). Local District personnel need to coordinate with landowners ASAP to determine damages and needs (if any). Initial estimates by fireline supervisors indicate few needs.

Estimate = \$ no cost.

**Task #9. Cultural Resource Fieldwork.** Conduct field assessment of newly disturbed soils (firelines) to survey for evidence of cultural resource sites. Initial pre-disturbance surveys have been completed previously by District Archeologist Geoff Lehmann. Utilize trained para-archeologists (Heritage Resource Technicians – HRT) from the Kisatchie Ranger District if needed. Coordinate with G.Lehmann at Kisatchie RD – 318-472-1840 (District Office) (off on 10/23 & 10/24).

Estimate = 2 days, \$ no cost.

## REFERENCES:

1. Soil and Water, Seedling Specifications for Erosion Control. Kisatchie NF, July 2001.
2. Prescribed Burn Soil, Water and Air Implementation Monitoring Evaluation Form – Buggy Fire, Kisatchie Ranger District, 17 September 2010.
3. Waterbar / Waterbreak Spacing and Specifications, Kisatchie National Forest, February 2003.
4. Emergency Land Use Agreement - Bayou Camitte Lands LLC, (LA-KIF-011009-001), 16 Oct 2010.

5. Legal Description and Map of Record for Kisatchie Hills Wilderness, 7 June 1990.
6. Forest Supervisor 5100/5130 memo authorizing certain mechanical equipment and motorized transport in KHW on Wrangler Fire, 13 October 2010.

**CONSULTATION:**

Michael Balboni	Forest Supervisor, Kisatchie National Forest (KIF)
Mike Dawson	District Ranger, Kisatchie Ranger District (KRD), KIF
Geoff Lehmann	Archeologist, KRD
Bradley Kohls	Wildlife Biologist, KRD
Steve Staples	Fire Management Officer, KRD
Harold Braden	Recreation Technician, Dozer Operator, KRD
David Byrd	Ecosystems Staff Officer, KIF
David Moore	Forest Botanist, KIF
Converse Griffith	Zone Botanist, KIF
Ed Bratcher	Fire Staff Officer, KIF
Ted Soileau	Fisheries Biologist, KIF
Bruce Prudhomme	former Hydrologist, KIF
Jim Caldwell	Recreation Staff Officer, KIF
Shana Ellis	Recreation Program Manager, KIF
Bob Yaeger	Forest Land Surveyor
Blue Team Personnel	OSC1; DIVS on Div A, B, C, D; SITL; GISS.

**End of Main Document – Rehab Plan.  
See Appendices # 1 and #2.  
See Rehab Map.**

**Appendix 1: WATERBAR SPACING and SPECIFICATIONS, Wrangler Fire Rehab.**

- Locate the highest elevation waterbar on slope within 20 feet of top of slope.
- Locate the lowest elevation waterbar on slope at least 50 feet from all drains, streams, and scour channels.
- Compact (pack, with feet or dozer tracks) all waterbars, especially the downhill berms.
- Construct waterbars and an angle of 35-50 degrees downslope, with minimum height of waterbar berm of 18".
- Alternate the orientation of waterbars to either side of the fireline, where practical.
- Waterbar outlet should extend to undisturbed forest soil at same grade as waterbar channel for a minimum length of two feet (2'). Ensure outlet is clear of debris to allow water to flow.
- Place waterbars at least every six feet (6') of elevation change in the fireline. When in doubt, put in more !
- After waterbars are placed, avoid stepping on the downhill berm when walking. Cross downhill berm perpendicularly with UTVs and dozers.

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**Appendix 2: SEEDING SPECIFICATIONS, Wrangler Fire Rehab.**

**Immediate seeding** is to establish ground cover to hold soil in place and minimize erosion. Annual grass species provide the most rapid and reliable establishment and growth outside of the preferred planting season (March – late May). Louisiana does not have a certified weed-free seed or weed-free mulch program. There are no available, locally-adapted genotypes of native grass species.

Native seed sources are not available to meet the requirements of rapid establishment and growth. There are several non-native species which are non-invasive. None of the prescribed non-native, non-invasive seed mixes is expected to spread into the Wilderness, nor to impact Wilderness values.

All prescribed seed species are either native, or non-native / non-invasive.

**Immediate Seeding Mixture:**

Winter Rye (ryegrass)	30 lbs/acre. (Lolium perenne)	\$ 21.50 -39.00/50#	\$ 23.40/ac
Wheat (may be scarce)	30	\$ 13.50-15.00/50#	\$ 9.00/ac
Partridge Pea	4	\$ ?? (Unable to locate source)	

**Total Mixture: 64 lbs/acre.**

(Innoculate all legume seed with the appropriate inoculant.)

(Do NOT use any lespidiza).

**Lime:** None. (Not beneficial, and may predispose to NNIS).

**Fertilizer:** 500 lbs/acre. Chemical Analysis of Fertilizer: 8-24-24 (N-P-K). (\$14.00-\$17.00/50#)

**Straw Mulch:** Bahia Straw (not hay), preferably local, 1-2 tons per acre (40 to 80 bales per acre). (Straw Mulch is ONLY for areas within 50 feet of drains, streams and scour areas along Dozer Lines). Consult with local resource specialist on the option of using local, commercial, **pine straw mulch** instead of grass straw mulch.

Bahia Straw = \$ xx/bale, (Unable to locate source)

Pine Straw = \$ 6.00/bale.

(Price quotes: Highland Growers (DeRitter) 337-463-5558, Petrus Feed & Seed (Alex) 318-443-5929)

**Long-Term Second Seeding Mixture:**

Consult with Forest Botanist(s) to monitor site conditions and confirm need for and desirability of a spring 2011 seeding of Carpetgrass (Axonopus affinus and/or furcatus) on dozer lines. Carpetgrass is a perennial, native species.

Consider mixing carpetgrass with other native species per the Soil and Water Seeding Specifications for Erosion Control, Kisatchie National Forest, July 2001. Options include Alamo Switchgrass, Kaw Big Bluestem, and Partridge Pea.

Total mixture of 20-28 lbs/acre. Consider light disking, and applying with fertilizer.

Consider purchasing seed now with fire rehab funds, and storing until spring planting season. Fire rehab funds generally cannot be used after the fire is declared to be out. Need to determine if secure seed storage is available at Kisatchie R.D. Work Center.

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