6.

10.

## BURNED AREA REPORT (Reference FSH 2509.13, Report FS-2500-A)

### PART I - TYPE OF REQUEST

1. Type of Report	
[ ] A. Funding (Request for estimated FFF funds) [x] B. Accomplishment Report	
2. Type of Action	
[ ] A. Initial (estimated funding is first requested) [ ] B. Interim	
<ul> <li>Updating the initial funding request.</li> <li>Supplying information for accomplishments to date on emergency work underway.</li> <li>C. Final</li> </ul>	
<ul><li>[ ] Best estimate for funds needed to complete eligible rehabilitation measure.</li><li>[x] Following completion of funded work.</li></ul>	
PART II - FIRE LOCATION	
Fire Name (from Form FS-5100-29): Herry Forest Supervisor's Fire No. (from Form FS-5100-29): State: New Mexico County: Sandoval Region: 03 Forest: 10 Santa Fe National Forest Ranger District: 03 Jemez Ranger District Date Fire Started: 6-27-91 Date Fire Controlled: 6-29-91 Estimated Suppression Costs: \$640,000.00 Fire Suppression Damages Repaired with FFF 102 Funds:	
Other (identify)	
Fire Intensity:50_ % (low)25_ % (medium)25_ % (high	1)
PART III - NATIONAL FOREST SYSTEM PROBLEM INVENTORY	
Watershed No.: 130202044  NFS Acres Burned: 807  Water Repellant Soil:20_ % of NFS acres burned	

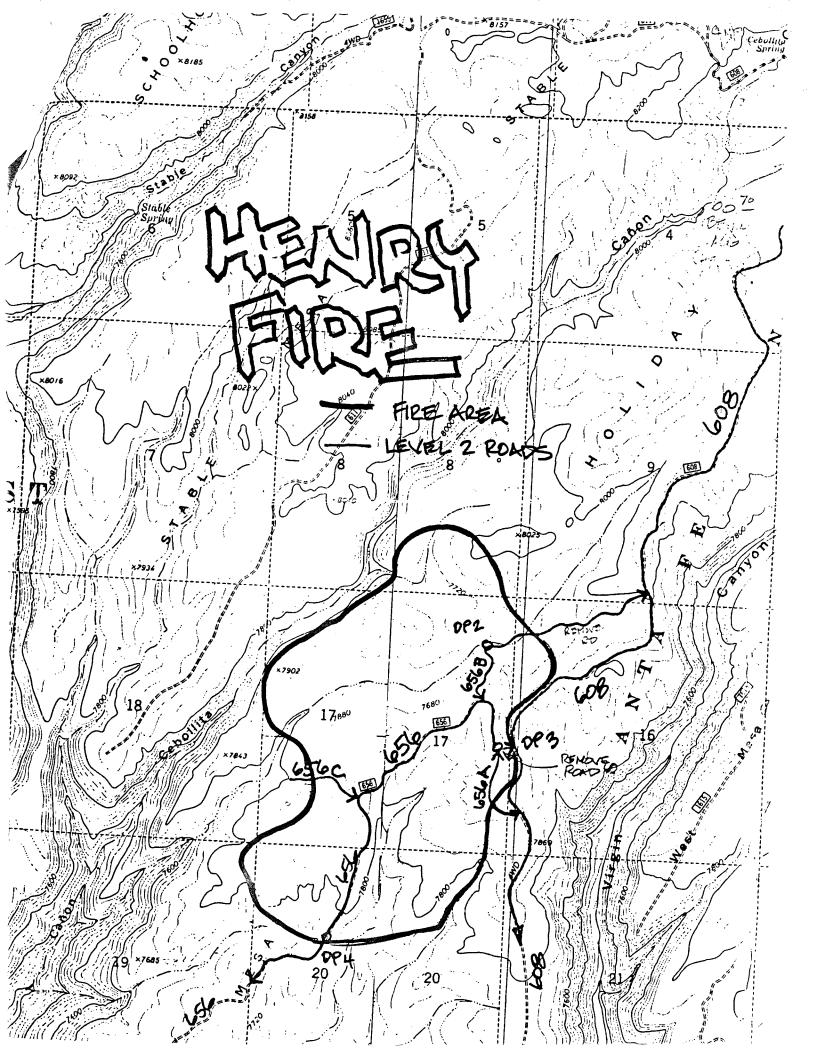
v	
4.	Vegetation Types: Pipo/Quga, Pist, Rhus
	Geologic Types: Tuff
6.	Soil Erosion Hazard Rating:
	70_ % (low)20_ % (medium)10_ % (high)
7.	Erosion Potential:696_ cu. yds/sq. miles
8.	Miles of Stream Channels by Regional Order or Classes: I=1, II=3, III=3/
9.	Miles of Forest Service Trails: 0
10.	Miles of Forest Service Roads by Maintenance Levels:
	miles (Level I)3_ miles (Level II)
	miles (Levels III, IV, V)
	PART IV - CALCULATED RISK AND CLIMATIC EVALUATION
1.	Estimated Vegetative Recovery Period: _5 years.
2.	Chance of Success Desired by Management: _90 percent.
3.	Equivalent Design Recurrence Period: _5 years.
4.	Related Design Storm Duration:1 hours.
5.	Related Design Storm Magnitude: 1.4 inches.
6.	Related Design Flow 147 cfsm.
	Estimated Reduction in Infiltration: _20 percent.
8.	Adjusted Related Design Flow:785 cfsm.
	PART V - SUMMARY OF SURVEY AND ANALYSIS
1.	Skills Represented on Burned Area Survey Team ("x" appropriate boxes):
	[X] Hydrology [Y] soils
i	[X] Hydrology [X] Soils [ ] Geology [ ] Range
i	[] Timber [X] Wildlife [] Fire Mgmt. [X] Engineering
•	[ ] Contracting [X] Local Mgmt. [ ] Research [X] Other (identify)  Recreation
2. De	scribe Emergency: Wildfire
3. En	ergency Rehabilitation Objective: Protection of water quality, site
_	bability of Completing Treatment Prior to First Major Damage Producing torm:
· L	and80_ % Channel80_ % Roads80_ % Other %
5. N	et Environmental Quality Benefit Index:
	[X] Significant [ ] Not Significant
6. N	et Social Well Being Benefit Index:
	[ ] Significant [X] Not Significant
7. Be	enefit/Cost Ratio: 1.5
8. Ne	t Benefits: \$ 5,102.00
9. Co	st Effectiveness Index: [ ] I. [X] II. [ ] III. [ ] IV.

9.

# PART VI - ELIGIBLE EMERGENCY REHABILITATION MEASURES OR TREATMENTS AND SOURCE OF FUNDS

NOTE: Emergency rehabilitation is work done promptly following a wildfire and is not to solve watershed problems that existed prior to the wildfire.

7.2			NF	S Lands			Other L	ands	All Lands
Line Items	Units	Unit	No. of	FFF 09:	2 Other \$	No. of	Federal\$	Total	
	1	Cost	Units	\$	1	Units			\$ \$
	Ţ			FFPF	FFF 102	İ		,	!
(1)	ļ	i !		1	ident.	İ	ident.	identify	) 
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	! [
A. LAND	<u> </u>								
a. Seed		L P	1	<u> </u>					
b. Application	Acres	1	210	2,100					
	Acres	8/1	210	1,680	1				
c.Re-seed Application		8	125	1,000	11				
d.Additional Seed	Acre	10/	125	1,250	- Commence of the Commence of				
е.	<u> </u>	-1921		6030		1			
B. CHANNELS			l						
						İ	1		
Trans Hatti							1		
courses	Miles								
b. Stabilizing			}			1			
	Miles							1	
	Miles					<u>-</u>			
	Each	45	32	1,350	.	1	<u></u>		<del></del>
sediment traps)					10		<del></del> _		
2012	Each	45	32	2,250	3,1			<u>-</u>	
	Miles 1	167	3	1	3,500	1	<del></del>		
a.					The same of the sa	<u></u>			
b.					1				
· c.					1			<u>-</u>	
						1			
. MAJOR STRUCTURES						<u>i</u>			
a. Preplanned -				I	]	<u> </u>			
from Forest				1	1				
Plans				1			<u></u>		
	·		i	i					
TOTAL	1		l ¢	9,630	2 500	\$	\$		





United States Department of Agriculture

Forest Service Santa Fe National Forest P.O. Box 1689 Santa Fe, NM 87504 505 988-6940

Reply To: 2500 Watershed

Date: July 1, 1991

Subject: Burned Area Report - Henry Fire P38107

To: NOEL D. LARSON

Director, Watershed and Air Management

Attached is the Burned Area Restoration Report for the Henry Fire P38107. A total of 210 acres out of the 807 acres burned is recommended for seeding. In addition, 32 straw bale check dams are recommended and 3 miles of roadway will be maintained and drained.

ALAN S. DEFLER

Forest Supervisor

WATERSHED & AIR MANAGEMENT, R-3

JUL 2 1991

RECEIVED

Australia Company



BURNED AREA RESTORATION REPORT HENRY FIRE P38107

#### Team Members:

Bruce Sims Steve McWilliams Ozzie Cummins Powys Gadd Duane Fisher Claudia Mielke

#### NARRATIVE SUMMARY Engineering

### ROADS FIRE REHABILITATION NEEDS Henry Fire, Jemez Ranger District

The Henry Fire, Jemez Ranger District, Santa Fe NF, involves a total of 13.5 miles of roads; 3.0 Miles of which are in the fire area, and 10.5 are outside the area of the fire, but are heavily affected by the fire suppression effort. Of these roads, 6.25 miles involve moderately high standard roads (Maintenance Level III), none in the fire area itself, and 7.25 miles are low standard native surface roads (Level I or II). There are no forest trails in this area.

The general condition of the fire impact is light due to a spotty burn with little fire in drainages and flat terrain. Most of the low standard roads are in poor condition drainage wise, made worse by the suppression efforts and resulting extreme dusting conditions.

Road rehabilitation needs come from drainage deficiencies and dusting conditions. Poor drainage coupled with heavy dust, sometimes 4" thick, make erosion and stream siltation a high probability risk with an intense summer thunder storm. Increased runoff due to the effect of the fire within the burn area is expected to be generally light, but does increase the risk and intensity. The need for rehabilitation of these roads is to preserve our current investment in usable access, to minimize next couple of years maintenance needs, and to minimize watershed impacts from sediment, include the following items of work:

- 1. Adding needed waterbars/rolling dips on the low standard roads.
- 2. Construction of a reinforced low water ford in Sec 17 at MP 0.04 of the 656B road, the road to the old Holiday Logging Camp.
- 3. Obliterate and waterbar the portion of 656B past the Holiday Logging Camp to Rd 608. This road is poorly located, of questionable use, and in poor condition.
- 4. All roads within the Fire area should be seeded.
- 5. Blade, with watering, the first 2 miles of road 604. (A Suppression cost Maintenance item)
- Cleaning existing catch basins and ditches needing cleaning. (A Suppression cost maintenance item)
- 7. Installation of riprap at outlets of dips on the graveled roads. They are recurrently headcutting across the gravel to the ditch on the uphill side.

The priority area for work is the areas of hot burns, in the east 1/4 of Sec 17, all areas with road grades over 3%. The first four items are the highest priority work items since they involve inadequate drainage crossings, steep grades with little or no surface drainage, and potentially moderate sediment production. Estimated cost of this work is \$3,500 for the Dips and Low Water Crossing, and another \$500 for the obliteration of the road above the Holiday Logging Camp. All of these items should be completed as soon as possible before the summer rainy season for maximum benefit.

Lower Priority work, but areas which will still be impacted by the fire and involve potential sediment production are Items 5 to 7 with an estimated cost of an additional \$1,800. These items should ideally be accomplished before summer storms, but represent a lower hazard than the above listed work items.

The total estimated cost of needed work, using Public Works Contract rates, is \$6,000.

#### SUPPRESSION ROAD MAINTENANCE Henry Fire, Jemez Ranger District 6/91

Level III roads in the area of the fire were generally in a very good drainable condition prior to fire activities. It is important to leave with these roads in as good a drainable condition as possible especially because of the timing. We are going into the rainy season with a probability of heavy rainy periods very soon, possibly before Rehab efforts can get underway.

All roads need the following maintenance near the end of suppression and mop up activities:

- 1. Clean catch basins and ditches and inlets of all culverts of excess soil, all loose limbs, sticks, rocks, and debris that may obstruct free flow of water. This includes outlet ditches. Ditches should not be bladed where not required for free flow of water grassing in the ditches should be maintained where possible.
- 2. <u>Blade First 2 Mi of 604.</u> This means that the primary consideration for blading is drainage, not necessarily smoothness for high speed drivability. But we don't want increased dusting which leads to increased sedimentation when the rains come. Therefore, watering with blading activities is very important. Generally, blade from the low side to the high side to keep or enhance the draining shape of the road.

When <u>cleaning catch basins and ditches</u> on this road the material will need to be removed from the aggregate on the road. Therefore, it could be bladed across the road and placed on the fill bank. Some minor amounts of soil left on the aggregate is not harmful on this road. Watering should be done with this activity, like any blading activity.

Remove ruts that tend to keep water on the road. This should be the only reason for blading the 604 road, not all of the road will require blading, however. When blading the ruts out, the loose material filling the ruts will require compaction by operating an Engine and/or water truck on the loose material while the material is moist from watering.

- 3. Other roads should not be bladed at all. These roads have stabilized quite well with grass and time, and should not be disturbed further by blading. The primary drainage facility for these roads are dips, not a bladed surface. The only thing requiring blading on the rest of the Level III, rocked roads are the dips; they should be improved.
- 4. Surface drain facilities Dips . Dips are the primary drainage facility on these roads. Dips should be bladed for improvement of function. Riprap should be placed at the outlet of these dips to prevent the headcutting across the aggregate that has been taking place. The elevation of this riprap needs to be carefully controlled to the elevation of the road surface to prevent headcutting or silt buildup.

- 5. Excess dusting has occurred in some areas. Excess dusting is any area with loose material thicker than one half inch. This condition can be mitigated somewhat by heavy watering, preferably at night or early morning while the evaporation rate is low, and compacting while moisture is in the soil. One or two engines could follow the water trucks, and stagger their tracks to cover more area, starting at low side of road and ending at high side. This may require several passes.
- 6. Road 608 from the end of the gravel to the fire area should be water bared or constructed with dips to drain. This section is very poorly drained. This type of work will require Archaeological clearance during construction. This road should, also, be seeded after construction of dips.

Ozzie

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USDA-Forest Service

### ON-SITE AND OFF-SITE DEVELOPMENTS SUBJECT TO HAZARDS

#### (Reference FSH 2509.13)

Fire Name			Date of Repor
HENRY - P38107 - Santa Fe National Forest			6-30-91
Line Items	Type of	Number of	Estimated
	Units	Units	Value \$
(a)	(b)	(c)	(d)
	1	-	
1. Community and urban development	People		
	People	-	
2. Municipal and domestic water supply	Served		
	1		
3. Transportation systems	Miles	5	25,000
	1	1	
4. Water distribution system (irrigation)	Miles	11	1,000
	1	l	
5. Agricultural development (crops, facilities)	Acres		1
	1	1	1
6. Radustrial development (dams, power, manufacturing)	Number	<u>                                     </u>	
	l		1
7. Power and communication lines	Miles		<u> </u>
	1		1
8. Recreation development	PAOT		<u> </u>
	1		
9. Fish habitat	Miles	12	92,450 *
		1	1
10. Other (specify)		<u> </u>	1
2	XXXXXXXX	XXXXXXXXX	
11. Total Hazard Potential	XXXXXXXX	XXXXXXXXX	1

<sup>|</sup> 12. Narrative (Optional- if additional space is needed, attach another sheet).

<sup>|\* 5000</sup> Fisherman per year at 3 hours per visit equals 1250 Fisherman User Days. Each Fisherman User
| Day is valued at \$ 73.96.

Hazards from floods, floating debris, erosion, or sediment because a watershed is impaired by wildfire. (Do not include value of resources damaged or destroyed by the fire reported on FS-5100-29.)

 $<sup>^{\</sup>rm 2}$  Indicates values threatened by design storm. Does not enter into the B/C.

|USDA-Forest Service

## EXAMINING IMPACTS OF MANAGEMENT ALTERNATIVES FOR AN EMERGENCY PROGRAM

(Reference FSH 2509.13)

E	. ENVIRONMEN	THE QUALITY	BENEFIT INDE	•			
	Weight	Without	Treatment	With	Treatment	Diff	ference
Environmental Factor	Factor	Actual	Weighted	Actual	Weighted	Actual	Weighte
(a)	(b)	(c)	(d)	(e)	(f)	) (g)	(h)
1. Erosion and sediment	6	1 2	12	1 1	6	1	6
2. Aesthetic land quality	3	1 1	3	   0	0	1	3
3. Water quality	   8	   2	   16	1	8	   1	8
4. Site productivity	   7	   2	14	   1	   7	1	   7
5. Wildlife habitat	4	1 1	   4	   0	   0	1	4
6. Fish habitat	2	   0	   0	1 0	0	0	1 0
7. Other (Cultural Resources)	   10	1	10	0	0	1 1	   10
8. TOTAL	   40	XXXXXXXXX  XXXXXXXXXX	•	XXXXXX	•	XXXXXXX	38
9. Average weighted index	XXXXXXXXXX	XXXXXXXXX	1.4	XXXXXX	•	XXXXXXX	.9
O. Net environmental quality		<del> </del>	XXXXXXXXXXX	<del></del>	XXXXXXXXXXX	<b>'</b>	·
benefit index	•	•	XXXXXXXXXXXX	•	XXXXXXXXXXX	XXXXXXX	] .9
В.	SOCIAL WELL-	<u> </u>	<u> </u>	-\	•		
	Weight	Without	Treatment	With	Treatment	Diff	erence
Social Criteria	Factor	Actual	Weighted	Actual	Weighted	Actual	Weighte
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1. Life, health, safety	2	1 1	1 2	1 1	2	 	0
2. Employment	1 1	0	0	1 1	1 1	<u> </u>	1 1
3. Recreational opportunity	5	1 0	0	1 1	5	<u> </u>	   5
4. Economic stability	1 1	0	   0	   0	   0	<u> </u>	<u> </u>
5. Income distribution	1 1	0	0	1 0	   0	<u> </u>	<u> </u>
6. Preserve special sites	1 1	0	   0	1 0	   0		1 <u> </u>
	10	1 0	0	0	   0	1	1
7. Other (Cultural Resources)	,	XXXXXXXXX	1 .	XXXXXX	1	XXXXXXX	1
	1			1		1	1 -
	21	xxxxxxxx	2	XXXXXX	8	XXXXXXX	6
8. TOTAL	XXXXXXXXX	xxxxxxxxx	1	xxxxxx		xxxxxx	İ
8. TOTAL	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	.1	XXXXXX  XXXXXX	.4	xxxxxxx	İ
7. Other (Cultural Resources)  8. TOTAL  9. Average weighted index  0. Net social well-being benefit index	XXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	.1	XXXXXX  XXXXXXX	   .4  xxxxxxxxxx	xxxxxx	6

#### D. EXPECTED DAMAGE REDUCTION BENEFIT SUMMARY Note: At current Water Resources Council interest rate 8.875 percent Damage Expected Economic Benefit Indices Units of Without Treatment With Treatment Expected \$ Measure | No. of Present No. of | Present Damage Units Value (\$) Units | Value (\$) Reduction (a) (b) (c) (d) (e) (f) (g) I. Watershed Impacts Sediments 1. Downstream water storage 2. Sediment removal Cu. Yd. 700 1072 3. Fish habitat FUD 125 14090 14090 4. Water quality II. Flood Water Land 2. Water Improvements XXXXXXXX X XXXXXXXXX I 1xxxxxxxxxx | 3. Subtotal, Watershed XXXXXXXX XXXXXXXX | XXXXXXXXX III. Resource Related Impacts 1. Range 2. Wildlife and Recreation 3. Timber XXXXXXXXX XXXXXXXXX | XXXXXXXXX 4. Subtotal, Resource Related XXXXXXXXX XXXXXXXX X XXXXXXXXX IV. Other Impacts XXXXXXXXX XXXXXXXXX | XXXXXXXXX 2. Subtotal, Other |XXXXXXXXX |XXXXXXXXXX | IXXXXXXXXX I TOTAL DOLLARS REMARKS 10% of the 12 miles of fishery stream could be expected to be impacted in a 5 year flood. This equals 1.2 miles and

125 fisherman days or \$9,245.

·									
USDA-FOREST SERVICE						Fire	Name Henr	y - P38107	- SFNF
SUMMARY OF EMERGENCY REHABILITATION   (Reference FSI		LANDOWNER	SHIP				of Report		
Landownership	A. Acre	es   B.	Emerge	ency Reh	abilita	tion	Needs		
	Burned	·	Land	(2) Ch	annel	(3	Road &   	(4) Other	
Federal (NFS)	807	21	0			 	·   		
Other (specify)	<u> </u>	1				   	<u> </u> 		
Subtotal (NFS)	 	1. 1		 		   	.	2.02.45000.01	
Non-Federal (State & County)						!   	<u> </u>		
Indian Reservation	   	<u> </u>	•			 	;   		
Private	1	! !				   			
Subtotal (Non-Federal)		! 				 			
TOTAL	807	21				1	<u> </u>		
C. Source of Emerger	cy Rehabil	litation F	unds fo	or Neede	d Work	(\$)			
	1. F		-		3. FR	& T	. Other	5. Non-	6. Total
Landownership	(a) 092	(b) 102		ooa evention		   	Federal (Enter fund)	Federal   (Enter   fund)	
			1		! 	į.		İ	
·								1	
Federal (NFS)	9960	3500			 				13460
Federal (NFS) Other (specify)	9960     	3500	1		 			1	13460
	9960       	3500			· ·				13460
Other (specify)	9960           	3500			 				13460
Other (specify) Subtotal (NFS)	9960	3500							13460
Other (specify)  Subtotal (NFS)  Non-Federal (State & County)	9960	3500							13460
Other (specify)  Subtotal (NFS)  Non-Federal (State & County)  Indian Reservation	9960	3500							13460
Other (specify)  Subtotal (NFS)  Non-Federal (State & County)  Indian Reservation  Private	9960	3500							13460
Other (specify)  Subtotal (NFS)  Non-Federal (State & County)  Indian Reservation  Private  Subtotal (Non-Federal)									
Other (specify)  Subtotal (NFS)  Non-Federal (State & County)  Indian Reservation  Private  Subtotal (Non-Federal)  TOTAL									

WHAT THERE

#### SCS STORM HYDROGRAPH

044 Page No. 1

INPUT SUMMARY FOR WATERSHED: 044

STORM:

WATERSHED:

DEPTH = 1.40 inches
DURATION = 1.00 hrs
DISTRIB = SCS TYPE B

AVG LAND SLOPE = 6.0 % LENGTH LONGEST CHANNEL = 5000. ft

HRU No. AREA (sq mi) CN
----1 1.25 79.00

+------! CUM RAINFALL | CUM RUNOFF | INCR RUNOFF | OUTFLOW OUTFLOW (hrs) | (in) | (in) | (iph) (cfs) 0.32 0.3059 0.0000 0.0370 0.0000 0.00 0.43 0.8641 0.0370 0.0423 0.0000 0.00 0.54 1.0321 0.0375 0.0793 0.0103 8.30 0.65 1.1504 0.1168 0.0329 0.0324 26.11 0.75 1.2419 0.1497 0.0273 0.0649 52.34 0.86 1.3119 0.1770 0.0281 0.1066 85.98 0.97 1.3797 0.2051 0.0087 -0.1559125.74 1.08 1.4000 0.2138 0.0000 0.1965 158.52 1.19 1.4000 0.2138 0.0000 0.2207 178.05 1.29 1.4000 0.2138 0.0000 0.2282 184.09 1.40 1.4000 0.2138 0.0000 0.2210 178.30 1.51 1.4000 0.2138 0.0000 0.2017 162.71 1.62 1.4000 0.2138 0.0000 0.1699 137.02 1.72 1.4000 0.2138 0.0000 0.1341 108.21 1.83 1.4000 0.2138 0.0000 0.0984 79.40 1.94 1.4000 0.2138 53.91 0.0000 0.0668 2.05 1.4000 0.2138 0.0000 0.0420 33.88 2.16 1.4000 0.2138 0.0000 0.0237 19.12 2.26 1.4000 0.2138 0.0000 0.0112 9.01 2.37 1.4000 0.2138 0.0000 0.0035 2.83 2.48 1.4000 0.2138 0.0000 0.0005 0.39 2.59 1.4000 0.0000 0.2138 0.0000

## OUTPUT SUMMARY FOR WATERSHED: 044

TOTAL DRAINAGE AREA = 1.250 sq mi CN =79.00 TIME OF CONCENTRATION = 0.808 INITIAL ABSTRACTION = 0.5316 inches TOTAL RUNOFF DEPTH = 0.2138 inches ( 14.25 acre-ft) PEAK FLOW = 184.09 cfs (0.2282 iph) PEAK TIME = 1.29 hrs

With - Treatment

#### RUSLE / MUSLE

SOIL LOSS for this field: 1.547 tons/acre/yr

RAINFALL FACTOR (R): 52.519

SLOPE-LENGTH FACTOR (LS): 0.491

SOIL ERODIBILITY FACTOR (K): 0.150

COVER AND MANAGEMENT FACTOR (C): 0.400

With Treatment

#### RUSLE / MUSLE

SEDIMENT YIELD for this field and this storm: 229.996 tons

STORM DURATION: 1.000 hours

STORM RAINFALL: 1.400 inches

STORM RUNOFF VOLUME: 14.250 acre-feet

STORM PEAK FLOW: 184.090 cubic feet/sec

RUNOFF FACTOR (R): 7090.370

SLOPE-LENGTH FACTOR (LS): 0.491

SOIL ERODIBILITY FACTOR (K): 0.150

COVER AND MANAGEMENT FACTOR (C): 0.400

#### SCS STORM HYDROGRAPH

HENRY Page No. 1

INPUT SUMMARY FOR WATERSHED: HENRY

STORM:

WATERSHED:

DEPTH = 1.40 inches
DURATION = 1.00 hrs
DISTRIB = SCS TYPE B

AVG LAND SLOPE = 6.0 % LENGTH LONGEST CHANNEL = 5000. ft

HRU No. AREA (sq mi) CN

1 1.25 95.00

TIME (hrs)	CUM RAINFALL     (in)	CUM RUNOFF (in)	INCR RUNOFF	OUTFLOW (iph)	OUTFLOW (cfs)
0.12	0.0744	0.0000	0.0004	0.0000	0.00
0.18	0.1200	0.0004	0.0075	0.0000	0.00
0.23	0.1740	0.0079	0.0258	0.0002	0.17
0.29	0.2563	0.0337	0.0899	0.0043	3.45
0.35	0.4295	0.1236	0.2658	0.0216	17.40
0.41	0.7927	0.3893	0.1102	0.0850	68.58
0.47	0.9254	0.4995	0.0766	0.2849	229.81
0.53	1.0148	0.5762	0.0682	0.5410	436.42
0.58	1.0930	0.6443	0.0477	0.8303	669.77
0.64	1.1470	0.6920	0.0455	1.1334	914.29
0.70	1.1980	0.7376	0.0426	1.3872	1119.00
0.76	1.2455	0.7801	0.0354	1.4460	1166.46
0.82	1.2848	0.8156	0.0323	1.4362	1158.54
0.88	1.3204	0.8479	0.0327	1.3816	1114.51
0.93	1.3563	0.8806	0.0359	1.2877	1038.70
0.99	1.3956	0.9165	0.0040	1.1714	944.90
1.05	1.4000	0.9205	0.0000	1.0377	837.09
1.11	1.4000	0.9205	0.0000	0.8772	707.62
1.17	1.4000	0.9205	0.0000	0.7087	571.70
1.23	1.4000	0.9205	0.0000	0.5775	465.82
1.29	1.4000	0.9205	0.0000	0.4693	378.56
1.34	1.4000	0.9205	0.0000	0.3587	289.34
1.40	1.4000	0.9205	0.0000	0.2666	215.06
1.46	1.4000	0.9205	0.0000	0.1913	154.34
1.52	1.4000	0.9205	0.0000	0.1303	105.10
1.58	1.4000	0.9205	0.0000	0.0827	66.69
1.64	1.4000	0.9205	0.0000	0.0467	37.67
1.69	1.4000	0.9205	0.0000	0.0210	16.95
1.75	1.4000	0.9205	0.0000	0.0053	4.32
1.81	1.4000	0.9205	0.0000	0.0004	0.34
1.87	1.4000	0.9205	0.0000	0.0000	0.00

#### OUTPUT SUMMARY FOR WATERSHED: HENRY

TOTAL DRAINAGE AREA = 1.250 sq mi

CN = 95.00

TIME OF CONCENTRATION = 0.438

INITIAL ABSTRACTION = 0.1053 inches

TOTAL RUNOFF DEPTH = 0.9205 inches ( 61.37 acre-ft)

# No Treatment

#### RUSLE / MUSLE

SOIL LOSS for this field: 5.852 tons/acre/yr

RAINFALL FACTOR (R): 52.519

SLOPE-LENGTH FACTOR (LS): 0.491

SOIL ERODIBILITY FACTOR (K): 0.568

COVER AND MANAGEMENT FACTOR (C): 0.400

# No Treatment

#### RUSLE / MUSLE

SEDIMENT YIELD for this field and this storm: 870.313 tons

STORM DURATION: 1.000 hours

STORM RAINFALL: 1.400 inches

STORM RUNOFF VOLUME: 14.250 acre-feet

STORM PEAK FLOW: 184.090 cubic feet/sec

RUNOFF FACTOR (R). : 7090.370

SLOPE-LENGTH FACTOR (LS): 0.491

SOIL ERODIBILITY FACTOR (K): 0.568

COVER AND MANAGEMENT FACTOR (C): 0.400