

OPHIR FIRE

DAMAGE ASSESSMENT REPORT



CAL FIRE

Butte County, California

June 2008

Damage Assessment Report

OPHIR FIRE

CDF Incident CA-BTU-007021

Prepared for:
Incident Command Team # 2
(Bob Wallen)

and

**California Department of Forestry
& Fire Protection – Butte County Fire Rescue**
(Henri Brachais, Unit Chief)



June 17, 2008

DAMAGE ASSESSMENT TEAM STAFF

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This project demonstrates a successful execution of CAL FIRE's total force strategy employing a team consisting of Fire Captains, Foresters and a Watershed Specialist. The Humboldt Incident (CA-BTU-007089) broke as the Ophir Incident was active. Damage Assessment personnel were shared between Incidents in the initial stages of the Humboldt Fire to gather critical initial information.

FIRE IMPACT SUMMARY

The Ophir Fire was reported at 11:27 on June 10, 2008, along State Hwy 70, approximately 2 miles south of the town of Oroville. The Ophir fire was wind driven. At 14:40 hours the fire was approximately 1,000 acres and posed an immediate threat to the community of Palermo, which was evacuated. By 18:39 hours the fire had consumed 1,600 acres and had burned through several ranches, residential and commercial areas within Palermo. At this time the fire was 50% contained and continued to threaten the communities of Palermo and Honcut, which is located approximately 4 miles south of Palermo.

By 19:00 hours on June 11, 2008 the Ophir fire was 100% contained and had consumed 1,600 acres. A preliminary damage assessment of the fire estimated that 21 residential structures, one commercial structure (Bern's Towing), and 28 outbuildings were destroyed.

A comprehensive damage assessment was conducted on June 12, 2008. The final damage assessment numbers are 19 residences, 1 commercial building, and 55 outbuildings destroyed. Fire fighting efforts saved at least 25 dwellings directly exposed to the fire.

The table below summarizes the condition of the dwellings after the fire shown by type of dwelling:

Types of Dwellings Burned	Post –Fire Condition of Dwelling or Property Affected				
	Destroyed	Damaged	Total Burned	Saved	Total Affected
Houses	7	0	7		
Mobile Homes	12	1	13		
Other structures used as dwellings	0	0	0		
Total Residential Dwellings	19	1	20	25	45
Other Buildings	4	0	4		4
TOTAL Dwellings & Buildings	23	1	24		49
Outbuildings	55				
Vehicles	53				

The following definitions explain the terms used in the table:

Dwelling: Dwellings include houses, mobile homes, and trailers or other structures believed to be used as primary residential dwellings. The post-fire condition is only detailed for dwellings burned or directly exposed to the fire.

Destroyed: The property is completely destroyed or burned beyond repair. This term is applied to buildings, mobile homes, trailers or other structures used as dwellings, as well as vehicles and outbuildings.

Damaged: The property is burned but may be economically repaired. It includes subcategories of: major damage, property uninhabitable; minor damage, where property is habitable; and minimal damage, where damage does not affect habitability but was burned (may also involve substantial repair costs). This category does not include non-burn damage such as smoke damage to structure or contents.

Undamaged: An undamaged property receives no burn damage but is directly exposed to the fire, defined as within 100 feet of any burned vegetation, spot fire, or burned structural material.

Other Buildings: Structures not used as residential dwellings. This includes commercial, agricultural, educational, institutional and other types of structures.

Using market value assumptions, the total market value of structure-related property impacts from fire including structures, contents and vehicles was estimated to be approximately \$2.3 million.

The assessed value of property saved due to firefighting efforts was approximately \$10.8 million.

The value of agriculture and rangeland impacts was estimated at approximately \$166,000.

The value of infrastructure impacts (power lines, telephone lines, etc.) was estimated at approximately \$270,000.

CONCLUSIONS

Principal Factors Contributing to Structure Damage

The Ophir fire was a fast moving, wind driven grass fire. The fire was pushed with 25 mph sustained winds with gusts of 40 mph. The combination of the high winds, low relative humidity, and low fuel moistures put all structures within the path of the fire at extreme risk. Both undamaged and destroyed structures are located within and throughout the fire perimeter. Concentrations of damaged structures are located on Horny Toad Road, Kenneth Way and in the town of Palermo near South Villa Ave and Perkins Ave.

Defensible space played a critical role in saving structures. In many cases vegetation clearance was erratic, with fair to good clearance on three sides. Many of the destroyed structures had poor clearance on two or more sides. There were also several damaged or destroyed structures that had a contiguous low (less than 4 inches) fuel bed of dead grass leading to wood siding or wood decks. There were several examples of good to excellent vegetation clearance that resulted in little to no damage to the structure.

TECHNICAL ADDENDUM: DAMAGE ASSESSMENT METHODS

On June 11, fire suppression personnel conducted a preliminary damage assessment. This assessment was a rapid survey of all roads within the fire perimeter and a tally of the number of damaged and destroyed structures and their locations. The primary functions of this survey are for situation status purposes and to enable emergency management agencies to mobilize the resources necessary to aid affected persons.

On June 12, three teams conducted a detailed ground-based assessment of all damaged or destroyed structures or vehicles. Some undamaged properties were also surveyed (located within 100 feet of burned fuel). A separate survey form was filled out for every dwelling on each parcel. The survey collected information on property location, structure type, whether or not defensive action was taken for the structure (if known), and the extent of damage. The number of outbuildings and operating vehicles damaged or destroyed were also tallied. The number and assessed value of structures within the fire perimeter was estimated from county assessor data. This provided an estimate of undamaged values within the perimeter. Although there were unburned islands of fuel within the fire perimeter, this was a conservative estimate since there were exposures on the edges of the fire that were outside the perimeter.

Additional data was collected for damaged or destroyed residences, including building dimensions, relative value, construction type, area of origin, and form of heat of ignition. Information on contributing factors, including building material, wind, humidity, access, water supply, fuel moisture, clearance and defensive actions was also collected.

The following assumptions based on previous experience and the judgment of a licensed real estate appraiser were made in calculating the market value of structures: \$125 per square foot for houses, \$25,000 per mobile home, \$40% of structure value for contents, \$500 per outbuilding including contents, \$2,000 per trailer, \$5,000 per vehicle, \$5,000 per RV, and \$7,000 per motor home.

Ophir Fire Impacts on Infrastructure

Impacts on infrastructure were estimated through interviews with experienced local personnel from Pacific Gas and Electric Company (PG&E) and AT&T.

Ophir Fire Impacts on Agriculture

Butte County Agricultural Commissioner, Richard Price, provided the following preliminary estimates of agricultural Ophir Fire damage:

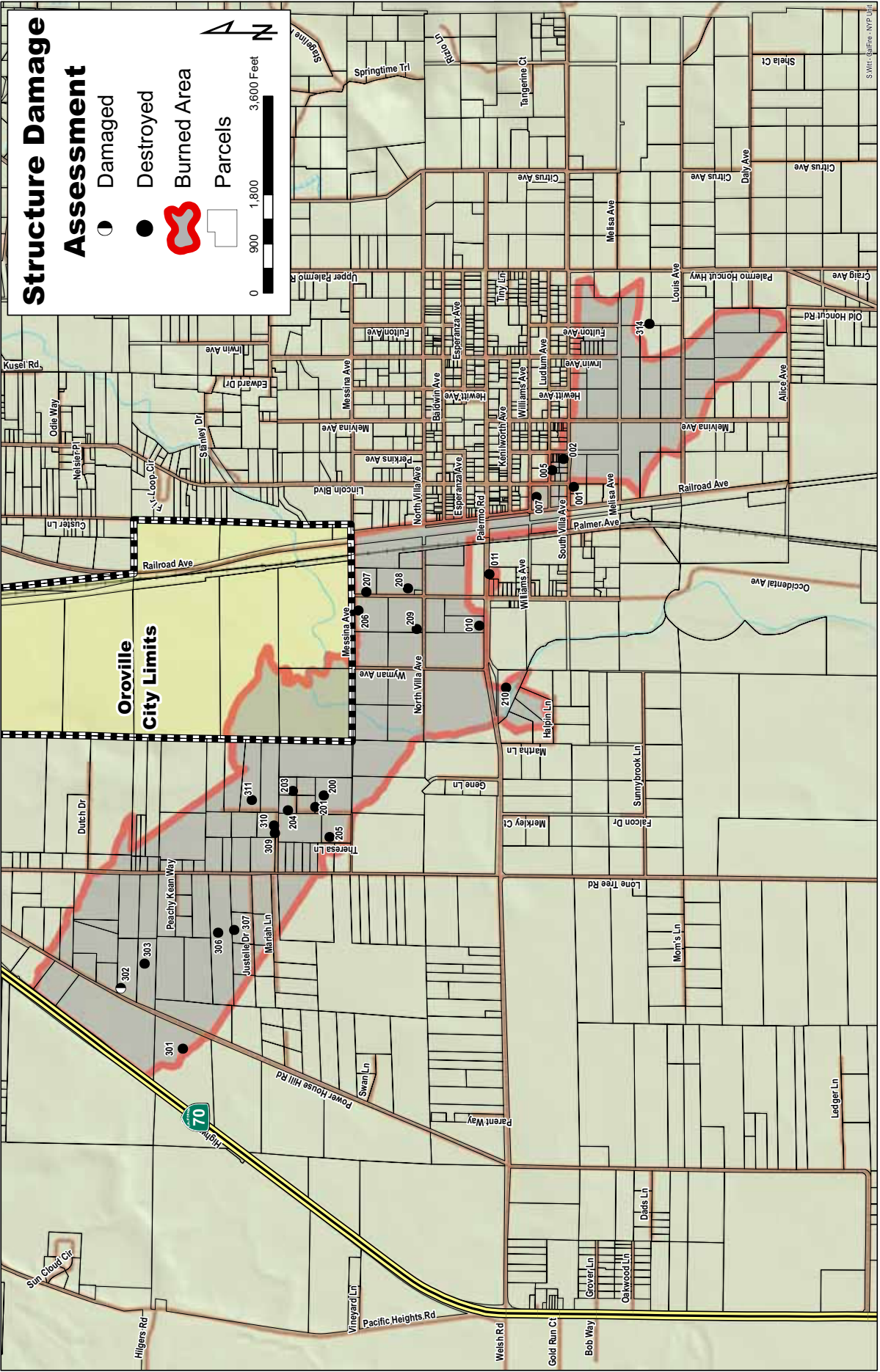
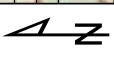
1. Fifty-five (55) animals with an approximate value \$29,000.
2. Orchards/vineyards with an approximate value of \$100,000.
3. Irrigated pasture with an approximate value of \$22,000.
4. Other miscellaneous losses, approximate value \$11,000.

Preliminary agricultural loss estimates for the Ophir Fire total \$166,000. Acreage estimates and more refined dollar value estimates will be available from the Butte County Agricultural Commission within a few days.

The report issued by the Agricultural Commissioner will include a combination of losses from both recent Butte County fires, the Ophir Fire (1,600 acres) and the Humboldt Fire (23,162 acres). Even though the Ophir Fire was by far the smaller of the two fires, it was responsible for most of the agricultural fire damage since all of the Ophir Fire acreage was located on the valley floor.

Structure Damage Assessment

- Damaged
- Destroyed
- 🔴 Burned Area
- ▭ Parcels



**OPHIR FIRE
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Waypoint 001, 1981 South Villa Ave 6/12/08



Waypoint 001, 1981 South Villa Ave 6/12/08

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Waypoint 002, 2080 South Villa Ave 6/12/08



Waypoint 002, 2080 South Villa Ave 6/12/08

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Waypoint 003, 2060 South Villa Ave 6/12/08



Waypoint 003, 2060 South Villa Ave 6/12/08

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Waypoint 003, 2060 South Villa Ave 6/12/08



Waypoint 003, 2060 South Villa Ave 6/12/08

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Waypoint 005, 2061 Ludlum Ave 6/12/08



Waypoint 005, 2061 Ludlum Ave 6/12/08

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Waypoint 006, 2055 Williams Ave 6/12/08



Waypoint 006, Waypoint 006, 2055 Williams Ave 6/12/08

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Waypoint 007, 1921 Williams Ave 6/12/08



Waypoint 007, 1921 Williams Ave 6/12/08

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Waypoint 008, 7111 Occidental Ave 6/12/08



Waypoint 008, 7111 Occidental Ave 6/12/08

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Waypoint 009, 1784 Palermo Rd 6/12/08



Waypoint 009, 1784 Palermo Rd 6/12/08

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Waypoint 010, 1780 Palermo Rd 6/12/08



Waypoint 010, 1780 Palermo Rd 6/12/08

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Waypoint 011, 1827 Palermo Rd 6/12/08



Waypoint 011, 1827 Palermo Rd 6/12/08

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Waypoint 200, 111 Prince Rd 6/12/08



Waypoint 200, 111 Prince Rd 6/12/08

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Waypoint 201, 62 Horney Toad Rd 6/12/08



Waypoint 201, 62 Horney Toad Rd 6/12/08

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Waypoint 201, 62 Horney Toad Rd 6/12/08

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Waypoint 203, 29 Mur-Mel Rd 6/12/08



Waypoint 203, 29 Mur-Mel Rd 6/12/08

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Waypoint 204, 88 Horney Toad Rd 6/12/08



Waypoint 204, 88 Horney Toad Rd 6/12/08

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Waypoint 205, Theresa Lane 6/12/08



Waypoint 205, Theresa Lane 6/12/08

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Waypoint 206, 7024 Occidental Ave 6/12/08



Waypoint 206, 7024 Occidental Ave 6/12/08

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Waypoint 207, 7025 Occidental Ave 6/12/08



Waypoint 207, 7025 Occidental Ave 6/12/08

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Waypoint 208, 7095 Occidental Ave 6/12/08



Waypoint 208, 7095 Occidental Ave 6/12/08

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Waypoint 209, 1760 North Villa Ave 6/12/08



Waypoint 209, 1760 North Villa Ave 6/12/08

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Waypoint 210, 1737 Palermo Rd 6/12/08



Waypoint 210, 1737 Palermo Rd 6/12/08

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Waypoint 301, 5112 Powerhouse Hill Rd 6/12/08



Waypoint 301, 5112 Powerhouse Hill Rd 6/12/08

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Waypoint 302, 5171 Powerhouse Hill Rd 6/12/08



Waypoint 302, 5171 Powerhouse Hill Rd 6/12/08

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Waypoint 303, 5433 Powerhouse Hill Rd 6/12/08



Waypoint 303, 5433 Powerhouse Hill Rd 6/12/08

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Waypoint 304, 63 Peachy Kean Way 6/12/08



Waypoint 304, 63 Peachy Kean Way 6/12/08

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Waypoint 305, 354 Lone Tree Rd 6/12/08



Waypoint 305, 354 Lone Tree Rd 6/12/08

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Waypoint 306, 378 Lone Tree Rd 6/12/08



Waypoint 306, 378 Lone Tree Rd 6/12/08

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Waypoint 307, 546 Justelle Drive 6/12/08



Waypoint 307, 546 Justelle Drive 6/12/08

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Waypoint 308, 467 Lone Tree Rd 6/12/08



Waypoint 308, 467 Lone Tree Rd 6/12/08

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Waypoint 309, 57 Kenneth Ln 6/12/08



Waypoint 309, 57 Kenneth Ln 6/12/08

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Waypoint 310, 65 Kenneth Ln 6/12/08



Waypoint 310, 65 Kenneth Ln 6/12/08

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Waypoint 311, 60 Geary Ct 6/12/08



Waypoint 311, 60 Geary Ct 6/12/08

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Waypoint 312, 7874 Irwin Ave 6/12/08



Waypoint 312, 7874 Irwin Ave 6/12/08

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Waypoint 313, 7875 Irwin Ave 6/12/08



Waypoint 313, 7875 Irwin Ave 6/12/08

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Waypoint 314-A, 2540 Palermo-Honcut Hiway 6/12/08



Waypoint 314-A, 2540 Palermo-Honcut Hiway 6/12/08

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Waypoint 314-B, 2540 Palermo-Honcut Hiway 6/12/08



Waypoint 314-B, 2540 Palermo-Honcut Hiway 6/12/08

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Waypoint 314-C, 2540 Palermo-Honcut Hiway 6/12/08



Waypoint 314-C, 2540 Palermo-Honcut Hiway 6/12/08

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Waypoint 315, 2420 Louis Ave 6/12/08



Waypoint 315, 2420 Louis Ave 6/12/08

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Waypoint 316, 8033 Melvina Ave 6/12/08



Waypoint 316, 8033 Melvina Ave 6/12/08

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Waypoint 317, 2430 Alice Ave 6/12/08



Waypoint 316, 8033 Melvina Ave 6/12/08

GPS Waypoint	Address	Parcel	Structure Type	Condition	# Outbuildings Burned	# Vehicles Burned	Market Value	Contents Value	Outbuildings Value	
001	1981	South Villa Ave	026-230-035-000	mobile	Destroyed	2	1	\$25,000	\$10,000	\$1,000
002	2080	South Villa Ave	026-202-015-000	mobile	Destroyed	7	1	\$25,000	\$10,000	\$3,500
003	2060	South Villa Ave	026-202-019-000	house		1	0	\$0	\$0	\$500
004	2063	Ludlum Ave	026-202-013-000	house		2	2	\$0	\$0	\$1,000
005	2061	Ludlum Avenue	026-202-022-000	house	Destroyed	1	0	\$125,000	\$50,000	\$500
006	2055	Williams Avenue	026-174-003-000	house		1	0	\$0	\$0	\$500
007	1921	Williams Ave	026-173-001-000	other	Destroyed	1	25	\$0	\$0	\$500
008	7111	Occidental Ave	026-100-022-000	house		1	0	\$0	\$0	\$500
009	1784	Palermo Rd	026-100-024-000	house		1	1	\$0	\$0	\$500
010	1778	Palermo Rd	026-100-023-000	mobile	Destroyed	1	1	\$25,000	\$10,000	\$500
011	1827	Palermo Rd	026-280-025-000	house	Destroyed	2	0	\$150,000	\$60,000	\$1,000
200	111	Prince	026-010-039-000	mobile	Destroyed	5	2	\$25,000	\$10,000	\$2,500
201	62	Horney Toad Road	026-010-039-000	mobile	Destroyed	1	1	\$25,000	\$10,000	\$500
202	62	Horney Toad Road	026-010-045-000	house		1	0	\$0	\$0	\$500
203	29	Mur-Mel Road	026-010-049-000	mobile	Destroyed	3	0	\$25,000	\$10,000	\$1,500
204	88	Horney Toad Road	026-010-046-000	mobile	Destroyed	3	0	\$25,000	\$10,000	\$1,500
205	26	Theresa Lane	026-010-020-000	mobile	Destroyed	1	1	\$25,000	\$10,000	\$500
206	7024	Occidental Ave	026-100-028-000	mobile	Destroyed	1	0	\$25,000	\$10,000	\$500
207	7025	Occidental Ave	026-100-003-000	house	Destroyed	1	0	\$125,000	\$50,000	\$500
208	7095	Occidental Ave	026-100-004-000	trailer	Destroyed	0	0	\$2,000	\$0	\$0
209	1760	North Villa Ave	026-100-031-000	mobile	Destroyed	0	1	\$25,000	\$10,000	\$0
210	1737	Palermo Road	026-250-005-000		Destroyed	1	0	\$500	\$0	\$0
301	5112	Powerhouse Hill Road	025-240-065-000	other	Destroyed	1	0	\$0	\$0	\$500
302	5171	Powehouse Hill Road	025-360-021-000	mobile	Minor Damage	1	0	\$0	\$0	\$500
303	5433 (about)	Powerhouse Hill Road	025-360-020-000	RV	Destroyed	0	1	\$5,000	\$2,000	\$0
304	63	Peachy Kean Way	025-340-006-000	house		1	0	\$0	\$0	\$500
305	354	Lone Tree Road	025-340-009-000	house		2	0	\$0	\$0	\$1,000
306	378	Lone Tree Road	025-340-004-000	house	Destroyed	5	1	\$162,000	\$64,800	\$2,500
307	546 (about)	Justelle Drive	025-340-018-000	mobile	Destroyed	0	0	\$25,000	\$10,000	\$0
308	467	Lone Tree Road	026-260-025-000	house		1	0	\$0	\$0	\$500
309	57	Kenneth Lane	026-260-025-000	other	Destroyed	1	0	\$0	\$0	\$500
310	65	Kenneth Lane	026-260-025-000	other	Destroyed	1	0	\$0	\$0	\$500
311	60	Geary	026-260-030-000	motor	Destroyed	0	0	\$7,000	\$2,800	\$0
312	7874	Irwin Ave	026-230-060-000	house		1	14	\$0	\$0	\$500
313	7875	Irwin Ave	026-270-007-000	house		1	0	\$0	\$339,600	\$500
314	2540	Palermo-Honcut Hiway	026-230-041-000	house	Destroyed	0	0	\$150,000	\$60,000	\$0
314	2540	Palermo-Honcut Hiway	026-230-041-000	house	Destroyed	0	1	\$150,000	\$60,000	\$0
314	2540	Palermo-Honcut Hiway	026-230-041-000	house	Destroyed	0	0	\$93,750	\$37,500	\$0
315	2420	Louis Ave	026-230-056-000	house		1	0	\$0	\$0	\$500
316	8033	Melvina Avenue	027-310-027-000	house		1	0	\$0	\$0	\$500
317	2430	Alice Ave	027-310-002-000	house		1	0	\$0	\$0	\$500

GPS Waypoint	Address	Condition	Defensive Action	No of Floors	Square Feet	Total Value (Dwelling + Outbuildings + Vehicles)	Contents	Structure Type
001	1981 South Villa Ave	Destroyed	Unknown			\$31,000	\$10,000	mobile
002	2080 South Villa Ave	Destroyed	Unknown			\$33,500	\$10,000	mobile
003	2060 South Villa Ave	Undamaged	Yes			\$500		house
004	2063 Ludlum Ave	Undamaged	Yes			\$11,000		house
005	2061 Ludlum Avenue	Destroyed	Unknown	1	1,000	\$125,500	\$50,000	house
006	2055 Williams Avenue	Undamaged	Yes			\$500		house
007	1921 Williams Ave	Destroyed	No	1	60,000	\$125,500		other
008	7111 Occidental Ave	Undamaged	Yes			\$500		house
009	1784 Palermo Rd	Undamaged				\$5,500		house
010	1778 Palermo Rd	Destroyed	Unknown			\$30,500	\$10,000	mobile
011	1827 Palermo Rd	Destroyed	Unknown	1	1,200	\$151,000	\$60,000	house
200	111 Prince	Destroyed	Unknown		0	\$37,500	\$10,000	mobile
201	62 Horney Toad Road	Destroyed	Unknown		0	\$30,500	\$10,000	mobile
202	62 Horney Toad Road	Undamaged	Unknown			\$500		house
203	29 Mur-Mel Road	Destroyed	Unknown		0	\$26,500	\$10,000	mobile
204	88 Horney Toad Road	Destroyed	Unknown		0	\$26,500	\$10,000	mobile
205	26 Theresa Lane	Destroyed	Unknown		0	\$30,500	\$10,000	mobile
206	7024 Occidental Ave	Destroyed	Unknown		0	\$25,500	\$10,000	mobile
207	7025 Occidental Ave	Destroyed	Unknown	1	1,000	\$125,500	\$50,000	house
208	7095 Occidental Ave	Destroyed	Unknown		0	\$2,000		trailer
209	1760 North Villa Ave	Destroyed	Unknown		0	\$30,000	\$10,000	mobile
210	1737 Palermo Road	Destroyed	Unknown	1	480	\$500		
301	5112 Powerhouse Hill Road	Destroyed	No			\$500		other
302	5171 Powehouse Hill Road	Minor Damage	Yes			\$500		mobile
303	5433 (about) Powerhouse Hill Road	Destroyed	Unknown			\$10,000	\$2,000	RV
304	63 Peachy Kean Way	Undamaged	Yes			\$500		house
305	354 Lone Tree Road	Undamaged	Yes			\$1,000		house
306	378 Lone Tree Road	Destroyed	Unknown	1	1,296	\$169,500	\$64,800	house
307	546 (about) Justelle Drive	Destroyed	No		0	\$25,000	\$10,000	mobile
308	467 Lone Tree Road	Undamaged	Yes			\$500		house
309	57 Kenneth Lane	Destroyed	Unknown			\$500		other

GPS Waypoint	Address	Condition	Defensive Action	No of Floors	Square Feet	Total Value (Dwelling + Contents)	Contents	Structure Type
310	Kenneth Lane	Destroyed	No			\$500		other
311	Geary	Destroyed	Unknown		0	\$7,000	\$2,800	motor
312	Inwin Ave	Undamaged	Unknown			\$70,500		house
313	Inwin Ave	Undamaged	Yes			\$500	\$339,600	house
314	Palermo-Honcut Hiway	Destroyed	Yes	1	1,200	\$150,000	\$60,000	house
314	Palermo-Honcut Hiway	Destroyed	Yes	1	750	\$150,000	\$60,000	house
314	Palermo-Honcut Hiway	Destroyed	Yes	1	1,200	\$98,750	\$37,500	house
315	Louis Ave	Undamaged	Yes			\$500		house
316	Melvina Avenue	Undamaged	Yes			\$500		house
317	Alice Ave	Undamaged	Yes			\$500		house