

Kershaw County, SC

Risk-assessment baseline packet

County FIPS: 45055 **Release:** 2026-10 **Data as of:** 2026-09-30 **Storm Events data through:** 2026-06-30

Hazard Plain is an independent product built from public federal data. It is not a FEMA document and is not reviewed or endorsed by FEMA or any state agency.

Summary

Plan status as of 2026-09-30: Approved, expires 2031-04-22. Plan: Santee-Lynches COG (FEMA plan 111121), approved 2026-04-23.

Since the plan was approved on 2026-04-23: no new hazard declaration and 1 NOAA Storm Events record; details under "What changed since your last plan".

Highest expected annual loss (FEMA National Risk Index, modeled total; see B1-a): Inland Flooding (\$9,560,422 a year), Hurricane (\$3,905,740) and Tornado (\$2,534,537).

The tables that follow are organized by the items of FEMA's Local Mitigation Plan Review Tool, Element B (B1-a to B2-c); each heading says which item its tables support.

TERMS USED

EAL: expected annual loss: FEMA's modeled average yearly loss from a hazard.

NRI: FEMA's National Risk Index (version 1.20, December 2025).

NFIP: National Flood Insurance Program.

RL, SRL: repetitive loss and severe repetitive loss: flood-insured properties with repeated claims (definitions in B2-c).

FMA, HMGP: Flood Mitigation Assistance and Hazard Mitigation Grant Program, FEMA mitigation grants.

PA: FEMA Public Assistance: disaster aid to governments and some nonprofits.

Zone-level: NOAA logged the event for a National Weather Service forecast zone, which may include parts of neighboring counties.

County-coded: NOAA logged the event to this county.

FIPS: the federal code for a place; 45055 is this area.

D0 to D4: U.S. Drought Monitor categories, from abnormally dry (D0) to exceptional drought (D4).

F/EF, EFU: Fujita and Enhanced Fujita tornado ratings; EFU is an unrated tornado.

kt, CONUS: knots (1 kt is about 1.15 mph); the contiguous United States.

CFR: Code of Federal Regulations.

A4-a, E1-a: other items of FEMA's Local Mitigation Plan Review Tool (sources, and changes since the last plan).

Dollars: nominal (as reported, labeled with the year), not adjusted for inflation.

CONTENTS

1. Summary and terms used, page 1
2. Plan clock, page 2
3. What changed since your last plan (approved 2026-04-23), page 2
4. B1-a: hazard identification, page 3
5. B1-b: hazard location, page 4
6. B1-c: hazard extent, page 5
7. B1-d: previous occurrences, page 7
8. B1-e: probability of future events, page 11
9. B1-f: hazards that vary across jurisdictions, page 13
10. B2-a and B2-b: vulnerability and potential impacts, page 14
11. B2-a: vulnerability (county context), page 16
12. B2-c: repetitive loss properties, page 16
13. Sources, what the plan adds, disclaimer and citation, page 17

Plan clock

Status: Approved, expires 2031-04-22

Plan: Santee-Lynches COG (FEMA plan 111121)

Approved: 2026-04-23

Days to expiry: 1,665

What changed since your last plan (approved 2026-04-23)

New federal declarations: none

Storm Events records since approval: 1 record (data through 2026-06-30)

Repetitive loss now: FMA RL 1, SRL 0 (44 CFR 77.2); any definition: 14

Repeat-flood change: this release sets the baseline count.

Sources: 1, 2, 4, 6 (numbered list at the end)

Plan status for every jurisdiction listed in this county

Source: 1

Jurisdiction	Type	Status	Plan	Approved	Expires	Days to expiry <i>negative = days since expiry</i>	Update underway	Notes
Kershaw County (unincorporated area)	Unincorporated	Approved, expires 2031-04-22	Santee-Lynches COG (FEMA plan 111121)	2026-04-23	2031-04-22	1,665		this jurisdiction approved 2026-06-12
Bethune town	Town	Approved, expires 2031-04-22	Santee-Lynches COG (FEMA plan 111121)	2026-04-23	2031-04-22	1,665		this jurisdiction approved 2026-09-17
Camden city	City	Plan 111121 approved 2026-04-23, pending adoption here; not yet eligible	Santee-Lynches COG (FEMA plan 111121), pending adoption here	2026-04-23 by FEMA; not yet adopted here	2031-04-22 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.
Elgin town	Town	Plan 111121 approved 2026-04-23, pending adoption here; not yet eligible	Santee-Lynches COG (FEMA plan 111121), pending adoption here	2026-04-23 by FEMA; not yet adopted here	2031-04-22 once adopted		FEMA tracker shows a plan approvable pending adoption	Not yet eligible: adopt the approved plan.

Plan 111121 lists 12 other participants not on this page, 6 of them not covered by it yet (named in the Excel file).

State plan status and tribal plans in this state: see the state page.

Supports FEMA checklist item B1-a: hazard identification

Hazards NRI does not cover (local data needed)

- dam failure (incl. upstream dams)
- levee failure
- flash flood as its own subtype
- ice jams
- debris flows
- erosion (riverine and coastal)
- land subsidence and sinkholes
- expansive soils

The 18 National Risk Index hazards, ranked by expected annual loss (EAL)

Sources: 5, 6

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records, 1996 to 2026-06-30 <i>count</i>	Storm Events coverage note
1	Inland Flooding	Relatively Low	Relatively Low	\$9,238,499	\$40,797	\$281,126	\$9,560,422	17	
2	Hurricane	Relatively Moderate	Relatively Moderate	\$2,832,931	\$940,674	\$132,136	\$3,905,740	5	
3	Tornado	Relatively Moderate	Relatively Moderate	\$1,688,694	\$6,002	\$839,841	\$2,534,537	14	
4	Earthquake	Relatively Low	Relatively Low	\$1,359,994	n/a	\$562,019	\$1,922,013		Storm Events does not record earthquakes.
5	Strong Wind	Relatively High	Relatively Moderate	\$133,949	\$4,191	\$1,397,614	\$1,535,753	288	Includes 2 High Wind and 3 Strong Wind records (NOAA non-thunderstorm wind types, outside NRI's Strong Wind definition).
6	Cold Wave	Relatively Low	Relatively Moderate	\$3,724	\$58,782	\$1,362,156	\$1,424,662	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).
7	Heat Wave	Relatively Low	Relatively Low	\$40	\$196	\$1,173,157	\$1,173,392	1	
8	Ice Storm	Relatively High	Relatively Moderate	\$364,312	n/a	\$107,643	\$471,955	9	
9	Lightning	Relatively Moderate	Relatively Moderate	\$27,595	n/a	\$417,314	\$444,909	3	
10	Hail	Relatively Low	Relatively Low	\$145,859	\$24,460	\$94,470	\$264,789	108	
11	Wildfire	Relatively Low	Relatively Low	\$134,402	\$397	\$21,242	\$156,041	0	No recorded events in Storm Events since 1996 (data through 2026-06-30).
12	Winter Weather	Relatively Low	Relatively Low	\$1,024	\$58	\$45,763	\$46,846	23	

Rank by EAL	Hazard	NRI risk rating	EAL rating	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year, not property damage</i>	EAL total (see note) <i>modeled dollars per year</i>	Storm Events records, 1996 to 2026-06-30 <i>count</i>	Storm Events coverage note
13	Drought	Very Low	Very Low	n/a	\$8,691	n/a	\$8,691	0	Declared 1 time; no Storm Events record of this type.
14	Landslide	Very Low	Very Low	\$2,331	n/a	\$102	\$2,433	0	Declared 1 time; no Storm Events record of this type.

Total = buildings + agriculture + population equivalence; FEMA values each expected death (or 10 injuries) at \$13.7 million (2024 dollars).

NRI risk rating combines expected annual loss with social vulnerability and community resilience; EAL rating rates expected annual loss alone. Both compare this county with all U.S. counties.

Local data needed: state and local wildfire and landslide records (Storm Events records these hazards only in part).

Not applicable to this county per NRI, with no federal declaration and no Storm Events record since 1996: avalanche, coastal flooding, tsunami and volcanic activity. That is the evidence for leaving them out of the plan.

The state hazard mitigation plan also lists hazards for this county; FEMA asks the plan to explain any hazard it leaves out.

Supports FEMA checklist item B1-b: hazard location

Affects the whole county (national data give no location within it): Cold Wave, Drought, Hail, Heat Wave, Ice Storm, Lightning, Strong Wind and Winter Weather.

Inland Flooding: The FEMA Flood Insurance Rate Map (FIRM) is the required location source for flooding. See the FEMA Flood Map Service Center (<https://msc.fema.gov>) for this county.

Hazards that vary within the county: highest-rated census tracts

Source: 5

Hazard	Highest-rated census tracts <i>NRI risk rating, score 0 to 100</i>
Earthquake	tract 9708 (Relatively Moderate, 88.3); tract 9705 (Relatively Moderate, 82.5); tract 9701 (Relatively Moderate, 80.6)
Hurricane	tract 9708 (Relatively High, 90.5); tract 9705 (Relatively Moderate, 89.7); tract 9702 (Relatively Moderate, 89.7)
Landslide	tract 9703 (Relatively Low, 94.9); tract 9704.01 (Relatively Low, 86.1); tract 9702 (Very Low, 77.1)
Tornado	tract 9708 (Relatively High, 90.4); tract 9705 (Relatively High, 88.8); tract 9706.01 (Relatively High, 75.3)
Wildfire	tract 9701 (Relatively Moderate, 89.4); tract 9707 (Relatively Low, 88.0); tract 9702 (Relatively Low, 87.3)

Up to 3 census tracts per hazard, highest National Risk Index rating first, then highest score; a tract number is the Census tract number (for example 9708 is Census Tract 9708). FEMA's Resilience Analysis and Planning Tool maps the National Risk Index for every tract: <https://www.fema.gov/emergency-managers/practitioners/resilience-analysis-and-planning-tool>

Supports FEMA checklist item B1-c: hazard extent

Extent: scale, observed range and worst recorded event per hazard

Sources: 6, 7

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Cold/Wind Chill, Extreme Cold/Wind Chill	wind chill	0					
Frost/Freeze (outside NRI's Cold Wave definition)	crop damage	0					
Drought	U.S. Drought Monitor scale (D0 to D4)	0					Storm Events enters a drought at D2 or worse east of the Rockies and D3 or worse from the Rockies west (NWS Instruction 10-1605); NRI drought counts D3 and D4 only.
Earthquake	Modified Mercalli (local data)	0					Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	hail size (inches)	130 records, 1960 to 2024	0.25 in to 2.75 in (median 0.88 in); 130 with a recorded value	2.75 in hail, 2011-04-09		Event records naming jurisdictions in the plan: Camden city (26 records), Bethune town (19 records), Elgin town (15 records).	
Excessive Heat, Heat	heat index (in event narratives)	1 record, 1998 (1 zone-level)	1 day; 1 with a recorded value	1 consecutive day, 1998-07-02, 2 direct deaths, zone-level		Countywide (zone-level records).	
Hurricane, Tropical Storm, Tropical Depression	Saffir-Simpson	5 records, 2018 to 2024 (5 zone-level)		Strongest recorded: Tropical Storm record, 2024-09-27, \$2,000,000 property; \$1,000,000 crops (2024 dollars); NWS zone SCZ022		Countywide (zone-level records).	Storm Events files every zone of a storm's episode under the storm's type; flooding from the storm is filed as Flood or Flash Flood records.
Ice Storm	Sperry-Piltz ice scale (local data)	9 records, 1996 to 2026 (9 zone-level)		Ice Storm, 2010-01-30, \$20,000 property; \$0 crops (2010 dollars); NWS zone SCZ022		Countywide (zone-level records).	
Flash Flood, Flood, Lakeshore Flood	damage and flood days (flood depth: FIRM)	17 records, 1996 to 2024		Flash Flood, 1999-09-21, \$50,000 property; crops not reported (1999 dollars)		Event records naming jurisdictions in the plan: Camden city (5 records), Elgin town (4 records), Bethune town (1 record).	Flood depth: see the FEMA Flood Insurance Rate Map. Storm Events damage is often \$0 or blank for floods, major ones included; FEMA Public Assistance by declaration (B1-d) shows which floods cost the most.
Debris Flow	none (count and damage only)	0					

Hazard	Scale	Records <i>count and years</i>	Observed range	Worst recorded event	Most damaging (when different)	How it applies to jurisdictions	Note
Lightning	annualized frequency (the measure FEMA's Local Mitigation Planning Handbook names)	3 records, 2012 to 2017		Lightning, 2012-03-17, \$400,000 property; \$0 crops (2012 dollars)		Event records naming jurisdictions in the plan: Camden city (1 record), Elgin town (1 record).	Storm Events lists lightning with damage or casualties.
High Wind and Strong Wind (outside NRI's Strong Wind definition)	wind speed (kt and mph)	5 records, 2008 to 2023 (5 zone-level)	43 kt (49 mph) to 52 kt (60 mph) (median 45 kt (52 mph)); 5 with a recorded value	52 kt (60 mph) estimated gust, High Wind, 2016-10-08; NWS zone SCZ022		Countywide (zone-level records).	
Thunderstorm Wind	wind speed (kt and mph)	327 records, 1960 to 2026	37 kt (43 mph) to 80 kt (92 mph) (median 55 kt (63 mph)); 283 with a recorded value	80 kt (92 mph) estimated, Thunderstorm Wind, 2002-11-11	Thunderstorm Wind, 1995-01-06, \$1,500,000 property; crops not recorded (1995 dollars)	Event records naming jurisdictions in the plan: Camden city (71 records), Bethune town (31 records), Elgin town (28 records).	
Tornado	Enhanced Fujita (Fujita before Feb 2007)	24 records, 1964 to 2020	F/EF0 to F/EF4 (median F/EF1); 23 with a recorded value	F4 tornado, 1984-03-28, 2 mi path length (whole path, pre-1996), 530 yd wide, \$25,000,000 property; crops not recorded (1984 dollars), 31 direct injuries		Event records naming jurisdictions in the plan: Camden city (5 records), Bethune town (2 records), Elgin town (1 record).	Before 1996 a tornado is listed once, under the county where it began, with its whole path's rating and length; from 1996 on, each county lists its own segment. Length is not used to rank tornadoes (see Methods).
Wildfire	acres burned (local data)	0					
Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet	none in data (snowfall: local data)	23 records, 2002 to 2026 (23 zone-level)		Winter Weather, 2013-02-16, \$3,000 property; \$0 crops (2013 dollars); NWS zone SCZ022		Countywide (zone-level records).	

In event narratives only (local data needed): wind chill, temperature, heat index, ice thickness, acres burned and snow depth; any physical measure of debris flow and lightning.

Storm Events records are more complete after 1996; before 1996 only Tornado (from 1950), Hail and Thunderstorm Wind (from 1955) exist. Zone-level records from zones that no NWS zone-county file places in this county (mostly before 2020) are not counted here (the Methods page explains the zone matching).

Dollars are nominal (as reported), labeled with the year; not adjusted for inflation.

Supports FEMA checklist item B1-d: previous occurrences

Federal declarations for this county: 28 declarations covering 19 separate hazard incidents counted in this packet (declarations for the same incident count once; non-natural and evacuation-only declarations are not counted).

Federal disaster declarations for this county

Sources: 1, 2, 3

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance <i>federal share obligated, nominal dollars</i>	Flags	Notes
2026-01-23	2026-01-21	EM-3632-SC	Emergency	Severe Winter Storm	Winter Weather	no Public Assistance recorded	in the 12 months before plan approval; within last 5 years	
2024-09-29	2024-09-25	DR-4829-SC	Major disaster	Hurricane Helene	Hurricane (primary); also designated: Inland Flooding, Landslide, Tornado	\$212,767.48	within last 5 years	
2024-09-26	2024-09-25	EM-3619-SC	Emergency	Hurricane Helene	Hurricane (primary); also designated: Inland Flooding, Landslide, Tornado	no Public Assistance recorded	within last 5 years	same incident as DR-4829
2024-08-05	2024-08-04	EM-3606-SC	Emergency	Hurricane Debby	Hurricane (primary); also designated: Inland Flooding	no Public Assistance recorded	within last 5 years	
2023-08-31	2023-08-29	EM-3597-SC	Emergency	Hurricane Idalia	Hurricane (primary); also designated: Inland Flooding	no Public Assistance recorded	within last 5 years	
2022-11-21	2022-09-25	DR-4677-SC	Major disaster	Hurricane Ian	Hurricane	no Public Assistance recorded	within last 5 years	
2022-09-29	2022-09-25	EM-3585-SC	Emergency	Hurricane Ian	Hurricane	no Public Assistance recorded	within last 5 years	same incident as DR-4677
2020-03-27	2020-01-20	DR-4492-SC	Major disaster	COVID-19 Pandemic	Non-natural, not counted	\$68,678.82		
2020-03-13	2020-01-20	EM-3470-SC	Emergency	COVID-19	Non-natural, not counted	no Public Assistance recorded		same incident as DR-4492
2019-09-01	2019-08-31	EM-3421-SC	Emergency	Hurricane Dorian	Hurricane	no Public Assistance recorded		
2018-09-10	2018-09-08	EM-3400-SC	Emergency	Hurricane Florence	Hurricane	no Public Assistance recorded		
2017-10-16	2017-09-06	DR-4346-SC	Major disaster	Hurricane Irma	Hurricane	\$20,226.19		
2017-09-07	2017-09-06	EM-3386-SC	Emergency	Hurricane Irma	Hurricane	no Public Assistance recorded		same incident as DR-4346
2016-10-11	2016-10-04	DR-4286-SC	Major disaster	Hurricane Matthew	Hurricane	\$160,991.53		
2016-10-06	2016-10-04	EM-3378-SC	Emergency	Hurricane Matthew	Hurricane	no Public Assistance recorded		same incident as DR-4286
2015-10-05	2015-10-01	DR-4241-SC	Major disaster	Severe Storms and Flooding	Inland Flooding	\$801,577.51		
2015-10-03	2015-10-01	EM-3373-SC	Emergency	Severe Storms and Flooding	Inland Flooding	no Public Assistance recorded		same incident as DR-4241

Declared	Incident began	FEMA number	Type	Title	Mapped hazard	County Public Assistance	Flags	Notes
						<i>federal share obligated, nominal dollars</i>		
2014-02-12	2014-02-10	EM-3369-SC	Emergency	Severe Winter Storm	Ice Storm	no Public Assistance recorded		
2005-09-10	2005-08-29	EM-3233-SC	Emergency	Hurricane Katrina Evacuation	Hurricane: evacuation support, not a local hazard event; not counted	no Public Assistance recorded		
2004-10-07	2004-09-06	DR-1566-SC	Major disaster	Tropical Storm Frances	Hurricane	PA not declared for this county		
2004-02-13	2004-01-26	DR-1509-SC	Major disaster	Severe Ice Storm	Ice Storm	\$110,294.28		
2000-01-31	2000-01-22	DR-1313-SC	Major disaster	Severe Winter Storm	Winter Weather	\$73,311.03		
1999-09-21	1999-09-14	DR-1299-SC	Major disaster	Hurricane Floyd Major Disaster Declarations	Hurricane	\$15,502.90		
1999-09-15	1999-09-14	EM-3145-SC	Emergency	Hurricane Floyd Emergency Declarations	Hurricane	no Public Assistance recorded		same incident as DR-1299
1990-10-22	1990-10-11	DR-881-SC	Major disaster	Severe Storms & Flooding	Inland Flooding	no Public Assistance recorded		
1989-09-22	1989-09-21	DR-843-SC	Major disaster	Hurricane Hugo	Hurricane	no Public Assistance recorded		
1984-03-30	1984-03-28	DR-700-SC	Major disaster	Severe Storms & Tornadoes	Tornado	PA not declared for this county		
1977-08-04	1977-08-04	EM-3047-SC	Emergency	Drought	Drought	no Public Assistance recorded		

County Public Assistance: applicants the FEMA record places in this county, including any state agencies FEMA files there; statewide rows are listed on the state page; federal share obligated, nominal dollars.

Statewide declarations

Source: 2

Declared	Incident began	FEMA number	Type	Title	Mapped hazard
1955-08-20	1955-08-20	DR-44-SC	Major disaster	Hurricanes	Hurricane (primary); also designated: Inland Flooding
1954-10-17	1954-10-17	DR-29-SC	Major disaster	Hurricane	Hurricane (primary); also designated: Inland Flooding

FEMA recorded these with designated area Statewide and no county, so they are listed on every county page in the state and not counted with county rows. Local data needed: whether each one affected this county.

Previous occurrences by hazard, with explicit no-event rows

Sources: 2, 6, 7

Hazard	Storm Events records, all years on file <i>(years in the Period column)</i>	Since plan approval <i>records</i>	In the 12 months before plan approval <i>records</i>	Last 5 years <i>records</i>	Declared incidents, all years <i>separate disasters</i>	Declared since approval <i>separate disasters</i>	Period	Statement
Cold Wave	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Drought	0	0	0	0	1	0	1996 to 2026-06-30	No Storm Events records of this type; 1 federal declared incident (see declarations table)
Earthquake	0	0	0	0	0	0		Storm Events does not record earthquakes; the USGS earthquake catalog is the source.
Hail	130	0	0	7	0	0	1955 to 2026-06-30	
Heat Wave	1	0	0	0	0	0	1996 to 2026-06-30	
Hurricane	5	0	0	2	11	0	1996 to 2026-06-30	
Ice Storm	9	0	1	2	2	0	1996 to 2026-06-30	
Inland Flooding	17	0	0	1	5	0	1996 to 2026-06-30	
Landslide	0	0	0	0	1	0	1996 to 2026-06-30	No Storm Events records of this type; 1 federal declared incident (see declarations table)
Lightning	3	0	0	0	0	0	1996 to 2026-06-30	
Strong Wind	332	1	9	54	0	0	1955 to 2026-06-30	Includes 2 High Wind and 3 Strong Wind records.
Tornado	24	0	0	0	2	0	1950 to 2026-06-30	
Wildfire	0	0	0	0	0	0	1996 to 2026-06-30	No recorded events, 1996 to 2026-06-30, NOAA NCEI Storm Events
Winter Weather	23	0	2	5	2	0	1996 to 2026-06-30	

Notable Storm Events records

Sources: 1, 6, 7

Date	Event type	Magnitude or extent	Damage <i>nominal dollars</i>	Deaths, injuries <i>direct only</i>	Location	Flags	Why listed
2024-09-27	Tropical Storm		\$2,000,000 property; \$1,000,000 crops (zone total, 2024 dollars)	0, 0	NWS zone SCZ022 (KERSHAW), zone-level	within last 5 years	B1-c worst recorded: Hurricane, Tropical Storm, Tropical Depression
2016-10-08	High Wind	52 kt (60 mph) estimated gust	\$600,000 property; \$0 crops (zone total, 2016 dollars)	0, 0	NWS zone SCZ022 (KERSHAW), zone-level		B1-c worst recorded: High Wind and Strong Wind
2015-10-04	Flash Flood		\$20,000 property; \$0 crops (2015 dollars)	1, 2	LUGOFF		deaths or injuries recorded
2013-02-16	Winter Weather		\$3,000 property; \$0 crops (zone total, 2013 dollars)	0, 0	NWS zone SCZ022 (KERSHAW), zone-level		B1-c worst recorded: Winter Storm, Heavy Snow, Blizzard, Lake-Effect Snow, Winter Weather, Sleet
2012-03-17	Lightning		\$400,000 property; \$0 crops (2012 dollars)	0, 0	ELGIN		B1-c worst recorded: Lightning
2011-04-09	Hail	2.75 in	\$120,000 property; \$20,000 crops (2011 dollars)	0, 0	CAMDEN		B1-c worst recorded: Hail
2010-01-30	Ice Storm		\$20,000 property; \$0 crops (zone total, 2010 dollars)	0, 0	NWS zone SCZ022 (KERSHAW), zone-level		B1-c worst recorded: Ice Storm
2002-11-11	Thunderstorm Wind	80 kt (92 mph) estimated	\$18,000 property; \$0 crops (2002 dollars)	0, 0	BETHUNE		B1-c worst recorded: Thunderstorm Wind
1999-09-21	Flash Flood		\$50,000 property; crops not reported (1999 dollars)	0, 0	CAMDEN		B1-c worst recorded: Flash Flood, Flood, Lakeshore Flood
1998-07-02	Heat		damage not reported	2, 0	NWS zone SCZ022 (KERSHAW), zone-level		deaths or injuries recorded
1996-06-20	Thunderstorm Wind	50 kt (58 mph), measurement type not recorded	\$18,000 property; crops not reported (1996 dollars)	1, 0	BETHUNE		deaths or injuries recorded
1984-03-28	Tornado	F4, 2 mi path length (whole path, pre-1996), 530 yd wide	\$25,000,000 property; crops not recorded (1984 dollars)	0, 31	location not recorded		B1-c worst recorded: Tornado

The full list is in the Excel file, sheet "B1-d Storm Events history" (544 rows).

Location is the place NOAA recorded, as written in its data; it need not be a jurisdiction in this plan.

Local data needed: state-declared emergencies, from your state emergency management agency (federal data do not include them).

Tribal and special-area declarations in this state are listed on the state page.

Supports FEMA checklist item B1-e: probability of future events

Probability: FEMA annualized frequency and descriptor per hazard

Sources: 5, 6

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Cold Wave	0.368	event-days per year	about 0.368 days per year		Storm Events event-days in 0 of 30 years, 1996 to 2025 (0%)	7	2005-11-12 to 2024-11-12 (19 years)	countywide	No Storm Events cold wave record, 1996 to 2025.
Drought	20.1	event-days per year	about 20.1 days per year		Storm Events event-days in 0 of 30 years, 1996 to 2025 (0%)	714	2000 to 2025 (25.25 years; D3 and D4 only)	countywide	No Storm Events drought record, 1996 to 2025
Earthquake	0.00305	annual probability at a location	chance a given location in the county has at least minor-damage shaking in a year: 0.305%			not shown	modeled	see B1-f	No descriptor (Storm Events does not record earthquakes).
Hail	3.84	events per year	about 3.84 per year	Highly likely	FEMA annualized frequency (modeled)	145.8 (modeled)	1986 to 2023 (38 years)	countywide	
Heat Wave	4.05	event-days per year	about 4.05 days per year	Possible	Storm Events event-days in 1 of 30 years, 1996 to 2025 (3.33%)	61	2005-11-12 to 2024-11-12 (19 years)	countywide	
Hurricane	0.192	events per year	about 1 in 5 years	Likely	FEMA annualized frequency (modeled)	63	1851 to 2024 (Atlantic)	see B1-f	NRI counts hurricane and tropical storm tracks passing within storm-force wind range; federal declarations are in B1-d.
Ice Storm	1.2	event-days per year	about 1.2 days per year	Likely	Storm Events event-days in 7 of 30 years, 1996 to 2025 (23.3%)	81	1946-12-31 to 2014-02-12 (67 years)	countywide	
Inland Flooding	0.464	event-days per year	about 0.464 days per year	Likely	Storm Events event-days in 13 of 30 years, 1996 to 2025 (43.3%)	13	1996 to 2023 (28 years)	see B1-f	
Landslide	0.346	events per year (modeled)	about 1 in 3 years	Likely	FEMA annualized frequency (modeled)	not shown	modeled	see B1-f	
Lightning	57.8	days per year with a strike	about 57.8 days per year	Highly likely	FEMA annualized frequency (modeled)	not shown	1995 to 2023 (29 years; CONUS)	countywide	
Strong Wind	5.29	events per year	about 5.29 per year	Highly likely	FEMA annualized frequency (modeled)	202	1986 to 2023 (38 years)	countywide	

Hazard	FEMA annualized frequency (modeled) <i>unit per row</i>	Unit	In plain terms	Descriptor	Descriptor basis	NRI events or days in its record period (hail, wind and tornado are area-weighted, so can be fractional)	NRI period	Location	Note
Tornado	0.503	events per year	about 0.5 per year	Likely	FEMA annualized frequency (modeled)	not shown	1950 to 2023 (EF2+); 1986 to 2023 (EF0-1)	see B1-f	
Wildfire	0.000899	annual probability at a location	chance a given location in the county burns in a year: 0.0899%		Storm Events records in 0 of 30 years, 1996 to 2025 (0%)	not shown	modeled	see B1-f	No descriptor: no Storm Events record 1996 to 2025
Winter Weather	2.32	event-days per year	about 2.32 days per year	Likely	Storm Events event-days in 13 of 30 years, 1996 to 2025 (43.3%)	44	2005-11-12 to 2024-11-12 (19 years)	countywide	

FEMA annualized frequency (modeled) is the National Risk Index v1.20 (December 2025) estimate of how often a hazard affects this county in a year; it is not recorded events divided by years, and its unit differs by hazard (events, event-days, or days with a lightning strike per year). For earthquake, wildfire, coastal flooding and tsunami the value is the chance (or number of events) at a location in the county, not across the county, so no "1 in N years" is given and the descriptor comes from Storm Events where it has a record (none for earthquake). The Methods page gives each hazard's method, from FEMA's National Risk Index Technical Documentation v1.20.

Where NRI gives event-days, the descriptor comes from the share of years with a Storm Events record; NRI's source records more events, so the two differ.

Descriptor scale used in this packet (defined per unit)

Sources: 5, 6

Unit	Descriptor	Definition
events per year	Highly likely	1 or more per year
events per year	Likely	about once in 1 to 10 years
events per year	Possible	about once in 10 to 100 years
events per year	Unlikely	less than once in 100 years
annual probability	Likely	10% to under 100% chance in a given year
annual probability	Possible	1% to under 10% chance in a given year
annual probability	Unlikely	under 1% chance in a given year
event-days (share of years)	Highly likely	event-days recorded in 90% or more of years
event-days (share of years)	Likely	event-days recorded in 10% to under 90% of years
event-days (share of years)	Possible	event-days recorded in some years but under 10% of years
lightning strike-days	Highly likely	cloud-to-ground strikes on 1 or more days per year

Intensity bands: historical frequency (Storm Events)

Source: 6

Hazard	Band	Years	Events <i>county-coded records</i>	Years in period	Events per year <i>events / years</i>
Hail	1.00-1.99 in	1996 to 2025	45	30	1.5
Hail	2.00 in+	1996 to 2025	4	30	0.133
Thunderstorm Wind (counted as NRI Strong Wind)	50-64 kt	1996 to 2025	260	30	8.67
Thunderstorm Wind (counted as NRI Strong Wind)	65 kt+	1996 to 2025	18	30	0.6
Thunderstorm Wind (counted as NRI Strong Wind)	unmeasured or below 50 kt	1996 to 2025	2	30	0.0667
Tornado	EF0-1	1996 to 2025	9	30	0.3
Tornado	EF2-3	1996 to 2025	5	30	0.167
Tornado	EF4-5	1996 to 2025	0	30	0
Tornado	unrated (EFU)	1996 to 2025	0	30	0

The bands show how often events of each severity were recorded in this county, to profile how severe events have been (FEMA's probability item asks for the range of intensities).

Hail smaller than 1 inch is not counted: on 2010-01-05 the National Weather Service raised its severe-hail threshold from 3/4 inch to 1 inch, so smaller reports became less common after 2009 (NWS Service Change Notice 09-52). NRI hail frequency uses a 0.75 inch threshold.

Optional: future conditions. Not a required item in the 2025 FEMA Local Mitigation Planning Policy Guide; some states ask for it. The federal Climate Mapping for Resilience and Adaptation (CMRA) site gives county exposure to future climate conditions (<https://resilience.climate.gov/>).

Supports FEMA checklist item B1-f: hazards that vary across jurisdictions

Range of census tract risk within the county

Source: 5

Hazard	Tracts <i>rated of all</i>	NRI risk score, 0 to 100			Tracts by rating
		Min	Median	Max	
Cold Wave	18 of 18	41.0	59.9	81.2	Relatively High 2, Relatively Moderate 15, Relatively Low 1
Drought	17 of 18	68.5	74.2	84.3	Relatively Low 3, Very Low 14, No Rating 1
Earthquake	18 of 18	51.9	68.4	88.3	Relatively Moderate 3, Relatively Low 15
Hail	18 of 18	51.0	62.7	78.1	Relatively Moderate 4, Relatively Low 14
Heat Wave	18 of 18	40.9	65.9	87.8	Relatively High 2, Relatively Moderate 13, Relatively Low 3
Hurricane	18 of 18	78.7	83.4	90.5	Relatively High 1, Relatively Moderate 17
Ice Storm	18 of 18	78.7	86.9	95.7	Relatively High 5, Relatively Moderate 13
Inland Flooding	18 of 18	7.4	34.5	90.7	Relatively High 3, Relatively Moderate 3, Relatively Low 11, Very Low 1
Landslide	18 of 18	37.1	58.7	94.9	Relatively Low 2, Very Low 16
Lightning	18 of 18	49.4	72.9	94.2	Relatively High 7, Relatively Moderate 11
Strong Wind	18 of 18	74.0	87.5	97.5	Very High 2, Relatively High 14, Relatively Moderate 2

Hazard	Tracts <i>rated of all</i>	NRI risk score, 0 to 100			Tracts by rating
		Min	Median	Max	
Tornado	18 of 18	54.4	63.9	90.4	Relatively High 4, Relatively Moderate 14
Wildfire	18 of 18	71.9	82.2	89.4	Relatively Moderate 1, Relatively Low 17
Winter Weather	18 of 18	34.7	49.0	71.4	Relatively Moderate 11, Relatively Low 7

Drought: Agriculture is all of NRI's expected annual loss for this hazard in the county, so the tract range mostly reflects where crop and livestock value is.

Rated tracts only: No Rating (score 0.0), Not Applicable and Insufficient Data tracts are counted but not used for the minimum, median and maximum.

The score ranks a tract against all U.S. tracts (100 = highest). The rating is FEMA's category for the tract's risk value, computed differently, so the two can disagree.

Frequency data for cold wave, drought, hail, heat wave, ice storm, lightning, strong wind and winter weather are county-wide or coarse (49 km grid or NWS zone), the same for every jurisdiction; the tract range mostly reflects where buildings and people are (crop and livestock value where a line above names agriculture).

Each jurisdiction (starting figures from federal data)

Sources: 1, 3, 4, 6

Jurisdiction	Type	Plan status	Repetitive loss <i>FMA RL and SRL (44 CFR 77.2); repeat-flood, any definition</i>	Public Assistance to this jurisdiction <i>FEMA records matched by applicant name; federal share obligated, nominal dollars</i>	Event records naming this place <i>all years; since its plan</i>	Notes
Kershaw County (unincorporated area)	Unincorporated	Approved, expires 2031-04-22	FMA RL 1, SRL 0; any 14	\$537,105.88	0 total; 0 since its plan	Includes \$53,299.43 for declarations not counted as hazard incidents (DR-4492-SC).
Bethune town	Town	Approved, expires 2031-04-22	FMA RL 0, SRL 0; any 0	no Public Assistance recorded	53 total; 0 since its plan	
Camden city	City	Plan 111121 approved 2026-04-23, pending adoption here; not yet eligible	FMA RL 0, SRL 0; any 0	\$580,881.16	108 total; no approved plan	Includes \$11,588.37 for declarations not counted as hazard incidents (DR-4492-SC).
Elgin town	Town	Plan 111121 approved 2026-04-23, pending adoption here; not yet eligible	FMA RL 0, SRL 0; any 0	\$3,791.02	49 total; no approved plan	Includes \$3,791.02 for declarations not counted as hazard incidents (DR-4492-SC).

Repetitive-loss counts are for whole NFIP communities, which can extend beyond this county (see the note in B2-c).

County Public Assistance in B1-d also includes applicants filed under the county that are not jurisdictions in this plan (for example state agencies, special districts and nonprofits), so the jurisdiction rows add up to less.

Supports FEMA checklist items B2-a and B2-b: vulnerability and potential impacts

Local data needed

The table below gives county-level starting figures; the plan describes impacts for each jurisdiction and its own assets.

- Critical facilities and lifelines per hazard
- A problem statement per jurisdiction per hazard

- Changes in development in hazard-prone areas since the last approval, or a statement of none (E1-a)
- Future assets

County-level starter: exposure, expected annual loss and damage since the plan

Sources: 1, 2, 3, 5, 6, 7

Hazard	Building exposure <i>modeled dollars</i>	Agriculture exposure <i>modeled dollars</i>	Population exposed <i>people</i>	EAL buildings <i>modeled dollars per year</i>	EAL agriculture <i>modeled dollars per year</i>	Cost of expected deaths and injuries <i>FEMA's dollar value per year; not property damage</i>	EAL as % of exposure <i>buildings; agriculture where noted</i>	Storm Events damage since 2026-04-23 <i>county-coded records, property plus crops, nominal dollars</i>	Zone-level damage since plan <i>property plus crops, reported for the zone</i>	Public Assistance since plan <i>nominal dollars; see note</i>	Note
Cold Wave	\$14,431,708,216	\$177,099,243	65,395	\$3,724	\$58,782	\$1,362,156	under 0.0001%				
Drought	n/a	\$3,360,653	n/a	n/a	\$8,691	n/a	0.259% (agriculture)				NRI has no building exposure for this hazard; agriculture shown
Earthquake	\$24,868,681,210	n/a	65,403	\$1,359,994	n/a	\$562,019	0.00547%				
Hail	\$14,431,708,216	\$177,099,243	65,395	\$145,859	\$24,460	\$94,470	0.00101%				
Heat Wave	\$14,431,708,216	\$177,099,243	65,395	\$40	\$196	\$1,173,157	under 0.0001%				
Hurricane	\$14,431,708,216	\$177,099,243	65,395	\$2,832,931	\$940,674	\$132,136	0.0196%				
Ice Storm	\$14,431,628,841	n/a	65,394	\$364,312	n/a	\$107,643	0.00252%				
Inland Flooding	\$14,417,489,410	\$6,235,244	1,003	\$9,238,499	\$40,797	\$281,126	n/a (see note)				NRI counts the full building value of any census block with some flood loss; this is not the value of buildings in the floodplain. Use local FIRM overlays for B2-a/B2-b.
Landslide	\$123,235,100	n/a	478	\$2,331	n/a	\$102	0.00189%				
Lightning	\$14,431,708,216	n/a	65,395	\$27,595	n/a	\$417,314	0.000191%				
Strong Wind	\$14,431,708,216	\$177,099,243	65,395	\$133,949	\$4,191	\$1,397,614	0.000928%	\$0			
Tornado	\$14,431,708,216	\$177,099,243	65,395	\$1,688,694	\$6,002	\$839,841	0.0117%				
Wildfire	\$1,996,923,827	\$56,244,548	17,312	\$134,402	\$397	\$21,242	0.00673%				
Winter Weather	\$14,431,708,216	\$177,099,243	65,395	\$1,024	\$58	\$45,763	under 0.0001%				

Totals since 2026-04-23 (Storm Events through 2026-06-30): 1 county-coded records, 1 with a damage value recorded (including \$0), \$0; 0 zone-level records, 0 with a damage value recorded (including \$0), \$0 reported for the zone; Public Assistance: no counted declaration since the plan.

FEMA does not split Public Assistance by hazard. A declaration mapped to several hazards is listed under each of them with its full amount, so the per-hazard column does not add up to the total; the unit total counts each declaration once.

NRI computes earthquake exposure on its own basis, so it exceeds the county building value in B2-a.

Supports FEMA checklist item B2-a: vulnerability (county context)

County context

Source: 5

Measure	Value
Population	65,395
Building value (total, not at risk)	\$14,431,708,216
Agriculture value (total, not at risk)	\$177,099,243
NRI risk rating (all hazards)	Relatively Low
Expected annual loss, buildings and agriculture, all hazards	\$17,017,601
Expected annual loss, population equivalence, all hazards (NRI values each statistical life at \$13.7M; a modeled value of expected deaths and injuries, not property damage)	\$6,434,583
Social vulnerability rating	Relatively Moderate
Community resilience rating	Relatively Low
NRI version	December 2025

FEMA's all-hazard expected annual loss adds buildings, agriculture and population equivalence; this table gives the property part and the population-equivalence part as separate rows.

Social vulnerability: higher means people are more likely to be harmed and slower to recover. Community resilience: lower means the community is less able to recover. High social vulnerability and low resilience both raise the NRI risk rating.

Supports FEMA checklist item B2-c: repetitive loss properties

Repetitive loss in this county, both definitions

Sources: 1, 4

Definition	Properties	Severe repetitive loss	Properties
Repetitive loss, FMA definition (44 CFR 77.2)	1	Severe repetitive loss, FMA definition (44 CFR 77.2)	0
Repetitive loss, NFIP insurance definition	14	Severe repetitive loss, NFIP insurance definition	0

The state NFIP coordinator's list, the source FEMA's Handbook names, often uses the NFIP insurance definition (second row).

Repeat-flood properties: county and state-level rows

Sources: 1, 4

Scope	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
County total	1	0	14	0	14	0	9
of which: Kershaw County (unincorporated area)	1	0	14	0	14	0	9
Statewide, no county in FEMA's file	0	0	2	0	2	0	0

The statewide row counts properties FEMA's file gives with no county in this state; they are listed for reference and are not in this county's counts.

Repeat-flood properties by jurisdiction in the plan (NFIP community)

Sources: 1, 4

Jurisdiction	NFIP community ID	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
Kershaw County (unincorporated area)	450115	1	0	14	0	14	0	9
Bethune town	450116	0	0	0	0	0	0	0
Camden city	450117	0	0	0	0	0	0	0
Elgin town	450118	0	0	0	0	0	0	0

Counts by occupancy group for each jurisdiction are in the Excel file, sheet "B2-c Jurisdictions".

Jurisdiction rows are whole NFIP communities and need not add up to the county total: a community that extends into another county is counted in full on each jurisdiction row, while the county table counts only its part in this county.

County repeat-flood properties by occupancy group

Sources: 1, 4

Occupancy group	RL, FMA <i>properties</i>	SRL, FMA <i>properties</i>	RL, NFIP <i>properties</i>	SRL, NFIP <i>properties</i>	Any category <i>properties</i>	Mitigated <i>properties</i>	Currently insured <i>properties</i>
single-family residential	1	0	14	0	14	0	9
2 to 4 unit residential	0	0	0	0	0	0	0
other residential	0	0	0	0	0	0	0
non-residential	0	0	0	0	0	0	0
not reported	0	0	0	0	0	0	0

FEMA's occupancy groups have no institutional class; institutional properties are counted in non-residential or other residential in the table by occupancy group.

FMA RL and FMA SRL are the Flood Mitigation Assistance definitions (44 CFR 77.2), the ones the FEMA Local Mitigation Planning Policy Guide cites. NFIP repetitive loss (the FEMA insurance definition) is 2 or more claims over \$1,000 in 10 years, and a property can leave that group once it is mitigated. Also shown: NFIP severe repetitive loss, any category, mitigated and currently insured. The Methods page gives the OpenFEMA field details.

Counts are aggregates of FEMA's public NFIP Multiple Loss Properties file (FEMA's data date 2026-08-02; file version 2026-08-04). No property is identified. County assignment is FEMA's geocode.

In this county 0 properties are FMA repetitive loss but not NFIP repetitive loss, and 13 properties are NFIP repetitive loss but not FMA repetitive loss.

Exact counts; no count suppression.

Sources

Tables cite these sources by number. The full list, for the plan's bibliography (FEMA review item A4-a):

1. FEMA, OpenFEMA HazardMitigationPlanStatuses v1, version 2026-09-29T134039Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/HazardMitigationPlanStatuses> (API)

2. FEMA, OpenFEMA DisasterDeclarationsSummaries v2, version 2026-09-29T162832Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v2/DisasterDeclarationsSummaries> (API)

3. FEMA, OpenFEMA PublicAssistanceFundedProjectsSummaries v1, version 2026-09-29T150754Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/PublicAssistanceFundedProjectsSummaries> (API)

4. FEMA, OpenFEMA NfipMultipleLossProperties v1, version 2026-08-04T164045Z, pulled 2026-09-30, <https://www.fema.gov/api/open/v1/NfipMultipleLossProperties> (API)

5. FEMA, FEMA National Risk Index 1.20.0 (December 2025), county and census tract tables, version 1.20.0, pulled 2026-09-30, https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_Counties.zip (download, 25 MB), https://www.fema.gov/about/reports-and-data/openfema/nri/v120/NRI_Table_CensusTracts.zip (download, 635 MB)
6. NOAA NCEI, NOAA NCEI Storm Events Database, details files (csvfiles v1.0), version c20260918, pulled 2026-09-30, <https://www.ncei.noaa.gov/pub/data/swdi/stormevents/csvfiles/>
7. NOAA National Weather Service, NWS county-public forecast zones correlation file, version bp03mr20 to bp16ap26 (11 files; newest bp16ap26), pulled 2026-09-30, <https://www.weather.gov/gis/ZoneCounty>
8. U.S. Census Bureau, Census 2024 Gazetteer, 2020 place by county, CT county-to-cousub crosswalk, version 2024-gazetteer, pulled 2026-09-30, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gazetteer/2024_Gaz_counties_national.zip, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_cousubs_national.zip, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_place_national.zip, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_unsd_national.zip, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_elsd_national.zip, https://www2.census.gov/geo/docs/maps-data/data/gazetteer/2024_Gaz_scsd_national.zip, https://www2.census.gov/geo/docs/reference/codes2020/national_place_by_county2020.txt, https://www2.census.gov/geo/docs/reference/ct_change/ct_cou_to_cousub_crosswalk.xlsx (used to match place names and codes; no table prints its values)

What this packet is and what the plan adds

This packet is the federal data for the plan's risk assessment (the summary on page 1 says how it is organized); the plan and FEMA's review decide whether each item is met.

The plan adds what only the community has: local data on assets, critical facilities, development and each jurisdiction's impacts; local hazard history, including state-declared emergencies; the mitigation strategy; and adoption.

How the federal data are built: National Risk Index values are FEMA's model, not counts of events. Storm Events is more complete from 1996; zone-level records are placed by forecast zone, not by location in the county. Public Assistance for a jurisdiction is matched by applicant name. The Methods page gives every rule and the known edge cases.

OpenFEMA disclaimer

This product uses the Federal Emergency Management Agency's OpenFEMA API, but is not endorsed by FEMA. The Federal Government or FEMA cannot vouch for the data or analyses derived from these data after the data have been retrieved from the Agency's website(s).

Reuse, citation and corrections

Reuse and citation: Hazard Plain text and tables are licensed under Creative Commons Attribution 4.0 International (CC BY 4.0, <https://creativecommons.org/licenses/by/4.0/>); credit Hazard Plain and the release. The underlying federal data are public domain; OpenFEMA data are also subject to the OpenFEMA terms and conditions.

Cite this: Hazard Plain (2026). Kershaw County, SC: risk-assessment baseline packet, release 2026-10 (data as of 2026-09-30; County FIPS 45055). Automated baseline. <https://hazardplain.org/sc/45055/> Built from FEMA OpenFEMA, the FEMA National Risk Index and NOAA NCEI Storm Events; source versions in the packet's Sources list.

Corrections: to report an error, name the packet, the table and what your records show. Contact: contact@hazardplain.org