

2024 Actuarial Report for HPCC Actuarial Liability Estimates

# Hermit's Peak / Calf Canyon Fires

## 2024 Actuarial Report of the Claim Liability Forecast Estimate

Federal Emergency Management Agency ("FEMA") has engaged STi to provide an Actuarial Report for the future liability for FEMA from claims by victims of the Hermit's Peak / Calf Canyon fire ("HPCC"). This fire primarily occurred in the counties of San Miguel and Mora in New Mexico during the Spring of 2022.

This report provides STi's estimate of an actuarial claim liability forecast as of the valuation date of September 30, 2024. The accounting date of this forecast is also September 30, 2024.

Through discussions with FEMA employees and an analysis of the claims data provided, STi has determined that the table shown below comprises the significant portion of the HPCC claim estimate. The word "significant" is being used because after the time that this report is issued, STi may become aware of other items that emerge through future damage claims by affected residents of New Mexico.

It should be noted that claimants must file a Notice of Loss to FEMA by December 20, 2024<sup>1</sup>, or an amended Notice of Loss filed by November 14, 2025.

Please note that in the report we have prepared as of September 30, 2024, we have noted an increase in the estimate of actuarial liability since last year and have outlined the differences below.

### Identification

I, Amanda Hu, am a Senior Actuary of STi. I am an Associate of the Society of Actuaries and a Member of the American Academy of Actuaries. I meet the Academy's qualification standards for rendering a Statement of Actuarial Opinion. I was appointed by FEMA (the "Company") to render this opinion.

I am an independent consultant to the Company. STi was retained by the Company to perform actuarial estimates and analyses for this report. I am independent of the Company outside of the services STi performs for the Company. I am not aware of any consultant employed by STi that has any direct financial interest in the Company pertaining to this scope of work that provides any conflict of interest.

The STi team has experience in forecasting and budgeting expenses and liabilities based on claims and member data for small and large groups. In addition, the team holds experience in processing and analyzing data for modeling purposes. The team completes continuing education requirements through seminars and self-study of available documentation on topics relevant to the subject of this report.

STi was first engaged to do this work in 2023 and provided the first liability estimate as of September 30, 2023. This report represents the second year in which the STi team has been tasked with determining the actuarial liability. Over the course of this period, the Actuaries have become familiar with the data and reporting processes related to HPCC and have been able to utilize the knowledge learned to render this report.

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## 2024 Actuarial Report for HPCC Actuarial Liability Estimates

### Purpose

The purpose of this report is to provide an estimate of the actuarial claim liability forecast to FEMA. Reliance on this estimate for any other purpose is not permitted.

### Significant Items of Actuarial Liability

**Table 1. Forecast of Liability by Category**

<b><u>Ref.</u></b>	<b><u>Claim Loss Category</u></b>	<b><u>Amount (\$)</u></b>
A.	NRCS (Reforestation and Revegetation; Debris Removal; Access Routes; Fencing; etc.)	\$1.922B
B.	Smoke and Ash Cleaning	\$1.610B
C.	Homes and Buildings Repair, Replacement, and Outdoor Infrastructure	\$771M
D.	Contents and Assets	\$286M
E.	Government Infrastructure and Projects	\$273M
F.	Claims Preparation Expenses	\$143M
G.	NFIP Policies	\$60M
H.	Risk Reduction	N/A
I.	Business Interruption	\$1M
J.	Vehicles and Equipment	\$3M
K.	Evacuation and Relocation Expenses	\$75M
L.	Personal	\$0.4M
<b>M.</b>	<b>Total</b>	<b>\$5.144B</b>

### Payments Made

For an accurate, current assessment of total estimated financial liability, liabilities (Ref. A-L) reported in Table 1 should be reduced by current paid claims as FEMA remits the same in the future.

Accordingly, the STi team maintains accounting of cumulative total payments pulled from the Salesforce database and has shown this figure within Table 2 (Ref. Y). The cumulative total payments do not

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include any dummy or test claims that are in the claims database. Conclusively, total bottom-line financial liability, also known as the unpaid claims estimate (Ref. Z), in Table 2 reflects an up-to-date accounting of the total estimated financial liability net of cumulative total claims paid.

**Table 2. Unpaid Claims Estimate**

<u>Ref.</u>	<u>Description</u>	<u>Amount (\$)</u>
M.	Total Estimate of Actuarial Liability	\$5.144B
Y.	Total Claims Paid as of September 30, 2024	\$1.403B
Z.	<b>Unpaid Claims Estimate</b>	\$3.741B

### Determination of Line Items Values

The categories from Table 1 were determined by the current groupings and details for claims within the CLIP (claims) database. The naming of the categories was based on professional judgement and reviewed by HPCC staff to ensure alignment with internal procedures. See ‘Assessment of CLIP (Claims) Database’ below for more details on the review of the dataset.

In the 2023 Actuarial Report, very little claims information was available, and we relied on discussions with the Claims office, information on losses for other similar disasters, and professional judgment to determine the line items. Since there is now more claims data available, the current categories in this report are based on the categorization within the database, which is a significant change from the category determinations in the 2023 Report.

The detailed methodology for each line item follows. Note that, in some cases, claims navigators may not have followed the same taxonomy<sup>2</sup> used to generate the “recommended” paid amount for each category, which may result in a difference in reconciliation of actual claims paid.

Sales tax is added to certain categories based on discussion with Claims Office. We received documentation<sup>3</sup> from Claims Office to help determine which categories have sales tax associated with them. Those that have sales tax included are noted within each category. For certain reimbursement, tax based on the county schedule is applied. The effective rate for Mora County is 6.64% and 7.36% for San Miguel County, and the blended rate for the two counties is 7.26%<sup>4</sup>. This blended rate is used for categories that are affected by sales tax. From our understanding, contents, equipment, and home-related claims have taxes applied. Additionally, personal property and equipment leases are also covered with sales tax. Vehicles have a 4% tax rate while boats have a 5% rate. Rental properties, insurance proceeds, and construction equipment do not. A separate tax for government projects is denoted in the relevant category below.

### Modeling

For categories using the sampling methodology, generally: (1) claimants were randomly selected; (2) it was confirmed that there were no open claims for the claimant; and (3) at least one claim (otherwise "Proof of Loss") was checked as "Final". Limited work has been done to differentiate different periods of sampling. A significant number of additional samples would be needed to credibly determine how the reporting of claims has changed over time. The categories that were forecasted using the sampling methodology were Ref. A (NRCS), Ref. B (Smoke and Ash Cleaning), Ref. C (Homes and Buildings), Ref. D (Contents and Assets), and Ref. K (Evacuation).

Initially, the model was set to use the entire claims data file to create average loss per unit (acre, housing Square-Feet, etc.). However, due to how the unit (acre, housing Square-Feet, etc.) information is input into the CLIP/Claims database, it was not possible to retrieve that information in an automated way. For example, for NRCS (reforestation, revegetation, etc.), we wanted to utilize the size of the area covered but the only way for us to determine that was by looking at individual PDF documentation saved in the CLIP/Claims database.

For categories with estimates developed from our modeling methods, we have performed the necessary review and evaluations to ensure their reasonability and consistency, in accordance with ASOP 56, "Modeling". The models have been tested, reviewed, and reconciled given the resources we have. The sources we have relied upon in the determination of assumptions and the data itself have been documented. We do recognize the limitations within our model such as the applicability for categories with limited claims due to the lack of sufficient data. We have not relied on any other outside models and the models have been cross-reviewed within the team for validity.

### Determination of Exposed Area and Population

In this report, the term 'exposure' refers to the population or amount of area within the burn perimeter and the 'average claim per unit' refers to the average cost per acre or unit. To determine the size of the total exposed area and population to the impacts of the fire, we referenced map data developed by HPCC staff<sup>5 6</sup> along with publicly available census information<sup>7 8 9 10 11</sup>. We considered which areas of either the burn perimeter or smoke plume area eligible for the expedited smoke process had overlapped with Census Bureau Geographic Areas. In situations where only a partial overlap existed, we pro-rated the relevant Census Bureau information.

Census Bureau Geographic Areas<sup>12</sup> are provided in several different delineations. We reviewed the possibility of using each of the different delineations in our calculations. We ultimately determined that the most appropriate source for this project were ZIP Code Tabulation Areas (ZCTAs)<sup>13</sup> in conjunction with 2020 Census urban areas<sup>14</sup>. Other delineations were ignored because they would provide larger areas than ZCTAs, which means that they would result in comparatively less precision when a partial overlap existed with the burn perimeter/smoke plume.

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The 2020 Census of urban areas were also used to consider the impact of highly populated areas. None of the 2020 Census fell within the burn perimeter and only the Las Vegas, NM urban area fell within the smoke plume area eligible for the expedited smoke process. A summary of our calculations<sup>15</sup> is provided below:

	Burn Perimeter	Smoke Area
<b>Total Population</b>	3,267	27,464
<b>Housing Units</b>	2,143	16,212
<b>Households</b>	1,393	11,850
<b>Businesses</b>	32	478

### Prior vs Current Year Comparison

We cannot provide an apples-to-apples comparison of the change in forecasted liabilities from last year for each category as our line-item categorization has changed from last year. As such, we have only compared the prior year and current year estimate in its entirety. Last year, we forecasted a total liability of \$3.65B. Currently, we are projecting \$5.14B. The reason for this change is not only due to the new methodologies that are using a more credible source (aka the CLIP database) but also the new programs put into place such as Smoke and Ash Cleaning, which added a significant liability amount.

We recognize that, last year, we were working with very little usable data and had to make inferences based on what we understood about the Claims Reimbursement Process and the available information provided to us at the time. Therefore, we feel that our estimate this year provides a much clearer picture on expectations compared to last year. Additionally, as of September 30, 2024, there has been close to \$1.4B in paid claims reported, as seen in Table 2. Each category below also includes the actual claims paid and unique claimants<sup>16</sup>. We are tracking the total claims reported and paid weekly and have included the most recent claims triangle<sup>17</sup> with data through September 30, 2024 within the documentation as well to show the payment patterns over time.

## Categories

### A. NRCS (Reforestation and Revegetation; Debris Removal; Access Routes; Fencing; etc.)

“NRCS” refers to a procedure<sup>18</sup> and set of standard rates being used by the Claims Office to determine compensation for certain real property losses (e.g. Reforestation and Revegetation; Debris Removal, Access Routes; Fencing; etc.). Since they are all following the same NRCS procedure and that it is reasonable to assume they all have the same exposure basis, these items have been grouped within the same category. Previously, ‘Reforestation and Revegetation’ and ‘Debris Removal, Access Routes, and Fencing’ were shown as two separate line items. The overall total forecast for these two categories has decreased since our report last year due to new sampling methodology and the availability of sufficient, credible data.

The estimated liability is determined by multiplying the ‘exposure’ by the ‘average claim per unit’:

To calculate the exposure, we relied on publicly available data from the U.S. Forest Service (Phase I<sup>19</sup>, Phase II<sup>20</sup>, and Phase III<sup>21</sup> BAER soil burn severity maps<sup>22</sup>) and determined that 200,000 acres of private land were directly impacted by the fire.

To calculate the average claim per acre, we randomly sampled the NRCS claims data<sup>23</sup>. The claims data included line items related to reforestation and revegetation, debris removal, fencing replacement, and access route repair. To arrive at our estimate from the samples we:

- Netted Sales Tax and Claim Preparation Fees (Claim Preparation Fees related to NRCS are included in Ref. F) out of our estimate.
- Adjusted our estimate to consider an increased standard rate for fencing<sup>24</sup> that will be applied both retrospectively and prospectively.

Based on our professional judgement, we believe that enough claims have been sampled to provide a credible estimate of the average NRCS claim per acre. In addition, the average cost per acre falls reasonably in-line with initial expectations from the Claims Office<sup>25</sup>.

An example of the sampling calculation for this category is shown below:

#### *Calculation of Adjustment for Fencing*

Linear Ft for Replaced Fencing in NRCS Plan	11,348 ft
New Standard Fencing Rate (excluding \$1.64 for disposal)	<u>\$12.36/ft</u>
Replacement Fencing Cost	\$140,261
Less Fencing Cost in NRCS plan (excluding disposal)	<u>\$ 82,878</u>
<b>Adjustment for new fencing rate</b>	<b><u>\$ 57,383</u></b>

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### *Calculation of Average Cost per Acre*

Total Payment from Letter of Determination (LOD)	\$2,221,483
Less "NRCS Sales Tax" in LOD	\$ 132,944
Less "5% Claims Preparation" in LOD	\$ 25,000
Plus Adjustment for Fencing	<u>\$ 57,383</u>
<b>Adjusted Total Cost</b>	<b>\$2,120,922</b>
<b>Acres Covered from NRCS Plan</b>	<b><u>220 Acres</u></b>
Average Cost/Acre for Sample	<u>\$9,641/Acre</u>
<b>In Burn Perimeter</b>	<b>Yes</b>

The results of the individual samples were aggregated and the final average cost per acre was calculated. This was then applied to the total 200,000 acres of the burn perimeter and an additional margin was included to consider sampled claims that fell outside of the burn perimeter. Our detailed calculation and model for sampling has been included in the documentation<sup>26</sup>.

The randomly sampled NRCS claims included some properties that fell outside the burn perimeter. These claims appeared to be on or near a running body of water. They were included in this loss category to ensure that they were accounted for in the final estimate. Separating the NRCS claims that fell inside vs outside the burn perimeter would have been difficult to accurately measure so they were not done for this report.

For reference, of the more than 100 sampled claims, the claims that fell outside the burn perimeter represented approximately 3% of the total NRCS liability for the 100 samples. The adjustment was applied uniformly to all claims which increased the total liability for this loss category. Due to the manual nature of determining the claims to use as samples and the relatively small impact of NRCS claims outside the burn perimeter, an alternative method that would create a credible comparison was not established.

**This results in an estimated liability of \$1.792B. With the addition of the 7.26% sales tax, the liability is for this category \$1.922B.**

**As of September 30th, 2024, the CLIP (claims) database contains approximately \$701.5M in paid claims for approximately 3,260 unique claimants.**

### **B. Smoke and Ash Cleaning**

This is a new category introduced this year based on newly established reimbursement policies and currently has a significant amount of claims paid. The Claims Office has developed a standard rate<sup>27</sup> and

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procedure<sup>28</sup> to be used for smoke and ash cleaning claims of residences, detached structures, and contents.

The estimate<sup>29</sup> is based on multiplying the exposure within the smoke plume area eligible for the expedited smoke cleaning reimbursement by the average claim per unit.

To calculate the exposure, which refers to the number of eligible housing units in the smoke plume area, we relied on the method described in the “Determination of Exposed Area and Population” section to arrive at an estimate of 16,212 housing units<sup>30</sup>. We currently see approximately 14,171 unique claimants in CLIP, which tracks closely to the estimate number of units that we have produced. Note that this figure includes all claimants in the reimbursement process, even for those that have only had a “Letter of Acknowledgement” sent and no loss line item yet.

To calculate the average cleaning claim per housing unit, we randomly sampled the available claims. The smoke cleaning claims data included line items related housing cleaning, detached structure cleaning, and content cleaning. Based on our professional judgement, we believe that enough claims have been sampled to provide a credible estimate of the average smoke cleaning claim per housing unit. This average cost amounted to \$92,575.

**The result is an estimated liability of \$1.501B. With the addition of the 7.26% sales tax, the liability for this category is \$1.610B.**

**As of September 30th, 2024, the CLIP (claims) database contains approximately \$420.5M in paid claims for approximately 4,370 unique claimants.**

### C. Homes and Buildings Repair, Replacement, and Outdoor Infrastructure

This line item consists of home and building repair, replacement, and other claims related to outdoor infrastructure. These are for damages independent of smoke and ash cleaning in Ref. B. The estimate<sup>31</sup> is based on multiplying the exposures within the burn perimeter by the average claim per unit.

To calculate the exposure, which refers to the number of home and building square feet in the burn perimeter, a file<sup>32</sup> generated by GIS (Geographic Information System) using data collected from April 2022 to July 2022 (when it was last updated) from FEMA to survey the residential homes and property damage was used:

- This file identified 1,484 buildings that made up at least 388 addresses (not all properties have addresses) and the various type of structures (single family home, manufactured home, agriculture, retail, unclassified).
- Note that as of September 30, 2024, not all buildings on this file have suffered damage. It is possible that buildings originally thought to not have suffered damage could file claims proving damage.



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To calculate the average repair or replacement cost per square foot, we randomly sampled the CLIP claims data. Based on our professional judgement, we believe that enough claims have been sampled to provide a credible estimate of the average repair or replacement cost per square foot.

Note that the estimate of this liability does not include claims for decreased property value. As of the valuation date, there is not enough data related to decreased property value to create an adjustment accounting for this factor. FEMA has expressed<sup>33</sup> that it would not become significant in the future due to the application of duplication of benefit considerations. HPCC compensation calculations generally exceed pre-fire market values. Additionally, the Line Item Content Guide<sup>34</sup> states that Claims Office “can only compensate claimants who have experienced realized property value losses”.

**The result in an estimated liability of \$719M. With the addition of the 7.26% sales tax, the liability is \$771M.**

**As of September 30th, 2024, the CLIP (claims) database contains approximately \$101.3M in paid claims for approximately 1,120 unique claimants.**

### D. Contents and Assets

To determine the estimate of this liability, we sampled<sup>35</sup> available claims to calculate the ratio of content and asset claim amounts to home and building amounts. This estimate also includes business-related content and assets. We have included this item within this category instead of Business Interruption (Ref. I) because the small number of claims from this sub-category alone cannot be used for a standalone estimate. However, when paired with other content and asset claims, we have included it within the forecast for this category through sampling.

**This results in an estimated liability of \$266M. With the addition of the 7.26% sales tax, the liability is \$286M.**

**As of September 30th, 2024, the CLIP (claims) database contains approximately \$29.5M million in paid claims for approximately 900 unique claimants.**

### E. Government Infrastructure and Projects

We were informed that there are several government infrastructure projects in progress that Claims Office has anticipated paying out in the future. For these claims, we either use what has already been paid or what we have been informed will be paid. The total maximum liability for these items includes:

- Water Treatment Facility (and associated reservoirs)<sup>36 37 38</sup> with a liability of \$140M
- Reforestation Center<sup>39</sup> with a liability of \$70M
- Emergency Response Resources<sup>40 41</sup> with a liability of \$63M

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This item is separate from non-government infrastructure that we have accounted for within Homes and Buildings in Ref. C. While there may be other government-related items within this category have not yet seen additional costs that would be material within the claims database.

Based on conversations with Claims Office<sup>42</sup>, we have been informed that the tax rate for the Water Treatment Facility project (GRT: Gross Receipts Tax) is 7.625%. Currently, we are assuming the same tax for the Reforestation Center but no taxes for the Emergency Response. The sales tax contributes to the max allowable for government projects, and because we anticipate the maximum payout for these projects, **we are estimating a liability of \$273M, which includes taxes.**

**As of September 30th, 2024, the CLIP (claims) database contains approximately \$107.4M in paid claims for approximately 30 unique claimants.**

### F. Claims Preparation Expenses

This is a line item introduced this year based on newly established reimbursement policies. Claims office will reimburse claimants a default percentage of 5.0% of the claimant's total paid claims. These claimant preparation fees are capped at \$25,000 per claimant<sup>43</sup>. By applying the fee rate and cap on the unique claimants that have no open claims, we estimate that claim preparation fee reimbursement will average 2.85%<sup>44</sup> of total claims.

To calculate this percentage, we took the average paid on closed claims per claimant with a non-zero positive payment. Then, we found the average paid for closed claims capped at \$500,000, which is the point at which the maximum Claim Preparation Expense of \$25,000 becomes effective ( $500k \times 5.0\% = 25k$ ). From this, we took the ratio of the two averages and multiplied it by the 5% assumption to arrive at the 2.85%.

Our total forecasted liability for all other categories is \$5B. **This estimate multiplied by the fee assumption results in a liability of \$143M.** Claim Preparation Fees do not have any associated taxes.

**As of September 30th, 2024, the CLIP (claims) database contains approximately \$5M in paid claims for approximately 300 unique claimants.** Based on our discussions with Claims Office, we understand that there is currently a pause on paying Claim Preparation Fees unless they have hit the \$25,000 cap and that claimants have primarily been paid only when they have hit the limit.

### G. NFIP Policies

In the prior annual report, we included a liability for "Underinsured FEMA Flood Policies". Based on our understanding of how the HPCC Claims Office will pay for claims outside of the Nov. 14, 2025 amended Notice of Loss deadline and discussions with FEMA NFIP flood actuaries<sup>45</sup>, we believe that the liability for "Underinsured FEMA Flood Policies" is now immaterial and have not included a liability for these policies in this report.

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The current liability in shown is for the premium cost of NFIP policies purchased by the HPCC Claims Office. We anticipate \$60M in claims to be paid out based on data<sup>46</sup> we have received from Claims Office. There may be additional claims that have not yet been filed but we currently do not anticipate additional liability on top of what has been paid out at this time and are **therefore setting the liability forecast to \$60M for this line**. As an additional note, there were 891 known NFIP requests submitted before May 31, 2024 that will be processed. Additionally, new NFIP requests are open through December 20, 2024<sup>47</sup>. We are not accounting for taxes for this category.

**As of September 30th, 2024, the CLIP (claims) database contains approximately \$5.5M in paid claims for approximately 1,660 unique claimants.**

### H. Risk Reduction

This line item was previously labeled as “Infrastructure Projects to Mitigate Effects of Future Fires and Floods”. Currently, limited information on mitigation projects and their reimbursement structure exists. To better understand the potential magnitude of mitigation projects, we referred to a reference document<sup>48</sup>:

“FEMA will reimburse claimants for the costs incurred to implement **reasonable** measures necessary to reduce risks from natural hazards heightened by the Hermit's Peak/Calf Canyon Fire to the level of risk prevailing before the Hermit's Peak/Calf Canyon Fire. Such measures may include, for example, risk reduction projects that reduce an increased risk from flooding, mudslides, and landslides in and around burn scars.”

We also considered chapter 6 of the “Hermit’s Peak/Calf Canyon Claims Program and Policy Guide”<sup>49</sup> which lists projects that the Claims Office is considering offering homeowners, with an understanding that claimants may propose other projects to pursue instead. This document assisted in understanding the types of claims that may be reported but does not provide information on what a typical mitigation claim may cost. Furthermore, Claims Office does not currently have guidance as to the magnitude of these costs as well.

Based on discussions with HPCC staff<sup>50</sup>, the administrative procedure for risk reduction is under review and pending revision, with no date set for the release of the new policy and reimbursement rates. Changes to the risk reduction administrative procedure may impact the future estimate of the liability. However, due to the lack of sufficient claims data upon which an assumption can be derived, we are unable to determine a set of reasonable assumptions to calculate this liability. Furthermore, we have not been instructed by FEMA on what data can be used when calculating this liability, so **a liability estimate for this category has not been developed yet**. Once we have received further direction on this item, we will be able to provide a more accurate estimate.

**As of September 30th, 2024, the CLIP (claims) database contains approximately \$0.51M in paid claims for approximately 60 unique claimants.**

### I. Business Interruption

Very little claims data to create a credible estimate for future liability of this line item is available. Furthermore, based on the current size of the claims within this category, we do not anticipate that future claims for business interruption will materially impact the total liability estimate. As such, we have set the estimated liability to current paid claims. We will continue to track this item to determine if an estimate of future claims is necessary and feasible.

**As of September 30th, 2024, the CLIP (claims) database contains approximately \$1.2M in paid claims, which is the current liability, for approximately 70 unique claimants.**

### J. Vehicles and Equipment

Like Ref. I, not enough data exists to create a credible estimate for future liability. Based on the current size of the claims within this category, we do not anticipate that future claims for this line item will materially impact the total liability estimate. As such, we have set the estimated liability to current paid claims. We will continue to track this item to determine if an estimate of future claims is necessary and feasible. As a note, we have received guidance that vehicles have a 4% sales tax and boats have a 5% sales tax associated with such claims. We are not adjusting our estimate for the taxes as we are basing this category on actuals, which already includes taxes.

**As of September 30th, 2024, the CLIP (claims) database contains approximately \$2.7M in paid claims, which is the current liability, for approximately 180 unique claimants.**

### K. Evacuation and Relocation Expenses

The estimate<sup>51</sup> for these expenses is based on multiplying the exposure within the smoke plume area eligible for the expedited smoke cleaning reimbursement by the average claim per unit.

To calculate the exposure, which refers to the number of eligible households in the smoke plume area, we used the method described in the “Determination of Exposed Area and Population” section to arrive at an estimate of 11,850 households. We utilized the smoke area in lieu of the burn perimeter since many of the evacuation claims were tied to claims with smoke and ash damage. At this time, we are unable to determine the exact exposure area for evacuation and relocation expenses only but will continue to track claims to see if we can revise this exposure in the future.

To calculate the average cost of an evacuation-related claim per household, we randomly sampled the available claims data. Based on our professional judgement, we believe that enough claims have been sampled to provide a credible estimate of the average evacuation claim per household. This average cost amounted to \$6,305.

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**This results in an estimated liability of \$75M. We are not accounting for taxes for this category at this time.**

**As of September 30th, 2024, the CLIP (claims) database contains approximately \$13.4M in paid claims for approximately 2,600 unique claimants.**

### **L. Personal**

Like Ref. I and J, there is insufficient claims data for personal claims to create a credible estimate for future liability. Based on the current size of the claims within this category, we do not anticipate that future claims for this line item will materially impact the total liability estimate. As such, we have set the estimated liability to current paid claims. We are not accounting for taxes for this category currently.

Line items that fall within this category include: “Lost Wages / Personal Income (Not Injury Related)”, “Medical Expenses”, and “Flood Insurance Private Policy Reimbursement”. We will continue to track this item to determine if a revised estimate of future claims is necessary and feasible.

**As of September 30th, 2024, the CLIP (claims) database contains approximately \$400K in paid claims, which is the current liability, for approximately 110 unique claimants.**

### **'Other' Claims**

The method in which we used to determine the category taxonomy results in losses that have been categorized as “Other” within the CLIP database. We have discussed this issue with HPCC Staff and currently do not believe there is a reasonable way to label these losses as anything besides “Other” due to how they are reported. However, given the significant number of payments in this category, we have looked in deeper detail as to what these losses are for. Ultimately, our research indicates that the losses labeled as “Other” fall into one of the previous categories. When performing our sampling for the previous categories, we have allocated the “Other” claims into the appropriate category. As such, we have not included a separate liability for these types of claims.

### Future Liability Not Yet Accounted For

The method for determining the future liability in this report requires enough claims be available to calculate a credible estimate. As such, for categories in which there are not enough claims or for categories where there is not yet a formal reimbursement procedure, we are not able to determine a liability for those categories beyond what has already been paid. As previously discussed in Ref. C, this report does not contain an estimate for reduced property value claims which may ultimately become material.

Furthermore, the current liability estimate may be impacted by changes to current administrative procedures. As mentioned in Ref. H, Risk Reduction is under review and changes to the Risk Reduction administrative procedure may materially impact our estimate of that liability.

### Discounting of Unpaid Claim Estimates

The unpaid claim estimate in this report is not discounted to reflect the time value of money of future payments. Since current claims are paid on a rolling basis and we are unaware of when future payments will be made, an estimate to account for discounting cannot be calculated.

### Assessment of CLIP (Claims) Database

The CLIP (claims) database is FEMA's data management tool for managing the submission of claims by the victims of the HPCC fire. The CLIP (claims) database does not yet contain sufficient credible data to calculate an actuarial claim liability based solely on the data alone. However, there is enough information at this time to create credible estimates for certain line items using sampled data from the CLIP database in conjunction with available information related to population demographics, claims office policy work, and available map data.

Note the term "credible" is not pointing at the accuracy of the data itself. The term "credible" speaks to the amount of data required to form an actuarial estimate that is consistent with the attributes of the data and enables the actuary to perform accurate forecast estimates based on the data collected.

For the Actuary to assess the quality and usability of the data for performing actuarial work, they must refer to Actuarial Standard of Practice (ASOP) Number 23, "Data Quality", which identifies principles on which the Actuary should base his/her assessment of the data. To make this determination the actuary considers: (1) If the data is of acceptable quality to perform the analysis; and (2) If the data is so inadequate the data cannot be used to satisfy the purpose of the assignment.

In addition, we have considered the limitations of the dataset, whether the data is reasonably consistent, and the process of data collection to help us in this determination. We have also called upon different sources within Claims Office to assist us with increasing our confidence in the usefulness of the data. After review of the data set, we have determined that the data can be used within our to reach our estimate.

We have referred to ASOP 25, “Credibility Procedures”, to determine whether the data provided can be expected to produce reasonable results. By using the subject experience, the CLIP data, and identifying what is considered relevant, which includes the claims and payment patterns, we have utilized the available data in our studies.

### Assessment of Development Trends

We have referred to ASOP 13, “Trending Procedures in Property/Casualty Insurance”, to determine if we have the relevant pieces of information needed to create a trend model. The exposure period being studied in this liability occurred over a single duration. Since the period of data reported is too short, we are unable to create an estimate of future values based on analyzing changes between exposure periods.

We have also considered the possibility of using “development” trends, which estimates changes over time in losses within a given exposure period. To create a liability estimate based on development trends, we would also need an estimate of the final number of claims that will be submitted as well as other more data to determine the credibility of current trends. However, the period to submit initial claims remains open and the upcoming closure of the initial submission period may result in a change in the pattern of submitted claims. As a result, we do not believe that it is feasible at this time to create a liability estimate based on development trends.

### Assessment of Other Sources of Information to Develop Estimates

We have considered the possibility of using other sources of information to determine a set of assumptions upon which a liability can be derived.

Our understanding is that the only analogous program FEMA has experience in is the Cerro Grande fire which occurred more than two decades ago. Furthermore, our understanding is that the Cerro Grande Fire was significantly smaller and in an area consisting of different demographics of structures, businesses, and people. Due to the gap in time, different government policies put into place, and a lack of similarities between the Cerro Grande program and HPCC, we believe that we cannot rely on the Cerro Grande fire data to determine a reasonable set of assumption for this liability estimate.

Additionally, we have not found comparable models that can be utilized in our studies at this time. Accordingly, we believe that we cannot rely on outside claims developments to determine a reasonable set of assumptions for this liability estimate. The reliance of our sources does not go past the information we have received from FEMA and Claims Office as well as the claims data itself.

### Subrogation Data

STi has received the following data<sup>52</sup> regarding subrogation claims made by insurance companies<sup>53</sup> for damage suffered by their policyholders:

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- For San Miguel County –
  - Currently there are 22,789 insurance policies in effect
  - 1,038 (4%) filed a claim for the damages caused by the fire
  - 189 of those claims were reportedly a total loss (100% loss)
  - The total amount paid by insurance carriers to date is \$68,178,671
- For Mora County –
  - Currently there are 4,996 insurance policies in effect
  - 560 (11%) filed a claim for the damages caused by the fire
  - 64 of those claims were reportedly a total loss
  - The total amount paid by insurance carriers to date is \$23,970,241
- The total amount of claims paid by insurance in the two counties is approximately \$92M.

These numbers have not changed since our report last year after reviewing what was recently sent to us by Claims Office. Our estimates are gross of subrogation claims and are reflected within Table 1. We will continue to track this data to ensure accuracy of our forecast and if these claims will materially impact it. The subrogation data will also be used as a tool to prevent claimants from being reimbursed twice by cross-checking claims filed by victims against the subrogation data.

### SBA Loan Repayment

The estimates in Table 1 account for these claims within STi's estimated total actuarial liability.

### Uncollectable Recoveries

Currently, our estimate does not have sufficient information to include or exclude these dollars. We are not aware of any material recoveries, nor do we know of any significant counterparty disputes.

### Risk Factors

The material risk factors associated with this estimate include that there are significantly more claims and higher mitigation costs than originally estimated. As of today, STi has limited data on which to base its estimates. More claim data will be available in the future, which will modify STi's estimates and allow for greater accuracy in the actuarial liability estimate for claims.

We have noted the possibility of process risk, parameter risk, and model risk within our estimates. We have not included an explicit risk margin within our figures but do have implicit margins within the individual categories.

### Disclosures

This report was written based on discussions, documents, and data provided by FEMA. The assumptions for calculations based on estimates using available data have been detailed above. The report will be



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updated as more claims are processed by FEMA and if we are able to perform more sampling and modeling as a result.

In accordance with ASOP 41, "Actuarial Communications", this report is only to be relied upon by the principal, "FEMA", at this time. We have relied upon communication with the FEMA Claims Office as well as the CLIP database as the source of the development of our assumptions and estimates. The report has changed significantly from the report issued in the prior year due to the change in methodologies, new policies, and availability of data. As such, the previously issued report is no longer a valid estimate of the forecasted liability of the HPCC event.

Additionally, from ASOP 36, "Statements of Actuarial Opinion Regarding Property/Casualty Loss, Loss Adjustment Expense, or Other Reserves", we have noted that the liability we are estimating is not discounted for time value of money, do not include recoveries, and do not include any claim adjustment expenses.

We have also consulted ASOP 43, "Property/Casualty Unpaid Claim Estimates" during the compilation of this report to correctly establish an unpaid claims estimate using the CLIP database. Within this report, we have used the high estimate liability and specified whether this estimate includes recoveries, the type of claims to be paid, associated risks, as well as the assumptions and models we have used to reach this number.

We have documented the reports we have relied upon for our study in the Appendix and our Documentation Index. Additionally, we have included our models and studies that support our estimate.



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October 16<sup>th</sup>, 2024

## Appendix

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- <sup>1</sup> [NR- 043 Congress Extends Deadline to Dec. 20 for Starting a Notice of Loss with FEMA Claims Office.pdf](#)
- <sup>2</sup> [Category Index.xlsx](#)
- <sup>3</sup> [Tax Rates 2024.07.31.pdf](#)
- <sup>4</sup> [Tax Rates by County.xlsx](#)
- <sup>5</sup> [DR4652NM HPCC ZCTA SA Area 240917.xls](#)
- <sup>6</sup> [DR4652NM HPCC ZCTA WF Area 240917.xls](#)
- <sup>7</sup> [H1: HOUSING UNITS - Census Bureau Table](#)
- <sup>8</sup> [P2: URBAN AND RURAL - Census Bureau Table](#)
- <sup>9</sup> [H9: HOUSEHOLD SIZE - Census Bureau Table](#)
- <sup>10</sup> [CB2100CBP: All Sectors: County ... - Census Bureau Table](#)
- <sup>11</sup> [GEOINFO: Annual Geographic ... - Census Bureau Table](#)
- <sup>12</sup> [About Geographic Areas \(census.gov\)](#)
- <sup>13</sup> [ZIP Code Tabulation Areas \(ZCTAs\) \(census.gov\)](#)
- <sup>14</sup> [\[https://www2.census.gov/geo/docs/reference/ua/2020\\\_Census\\\_ua\\\_st\\\_list\\\_all.xlsx\]\(https://www2.census.gov/geo/docs/reference/ua/2020\_Census\_ua\_st\_list\_all.xlsx\)](#)
- <sup>15</sup> [Zip Code Census Work.xlsx](#)
- <sup>16</sup> [Actuals Sept 2024.xlsx](#)
- <sup>17</sup> [Claims Loss Triangles as of Sept 2024 - 09302024 Deliv.xlsx](#)
- <sup>18</sup> [A. Hermits Peak/Calf Canyon Claims Office Compensation for Reforestation and Revegetation.pdf](#)
- <sup>19</sup> [A. hpcc\\_phase1\\_sbs\\_36x48\\_portrait.jpg](#)
- <sup>20</sup> [A. hpcc\\_phase2\\_sbs\\_36x48\\_portrait.jpg](#)
- <sup>21</sup> [A. hpcc\\_phase3\\_pio-map.jpg](#)
- <sup>22</sup> [Nmsnf Hermits Peak And Calf Canyon Baer Incident Maps | InciWeb \(nwcg.gov\)](#)
- <sup>23</sup> [NRCS Data Sampling for Reforestation.xlsx](#)
- <sup>24</sup> [A. New Fencing Rate.msg](#)
- <sup>25</sup> [Hermit's Peak/Calf Canyon Claims Office Compensation for Reforestation and Revegetation | FEMA.gov](#)
- <sup>26</sup> [NRCS Data Sampling for Reforestation.xlsx](#)
- <sup>27</sup> [B. Standard Rate Calculator for Smoke.xlsx](#)
- <sup>28</sup> [B. Expedited Smoke and Ash Cleaning Process READY FOR RELEASE.pdf](#)
- <sup>29</sup> [Various Sampling Analysis.xlsx](#)
- <sup>30</sup> [Zip Code Census Work.xlsx](#)
- <sup>31</sup> [Various Sampling Analysis.xlsx](#)
- <sup>32</sup> [C. GSDA\\_USAStructuresTable.xlsx](#)
- <sup>33</sup> [C. RE Questions to Claims Processes.msg](#)
- <sup>34</sup> [Line Item Content Guide 2024.08.29.pdf](#)
- <sup>35</sup> [Various Sampling Analysis.xlsx](#)
- <sup>36</sup> [00005869 | Case | Salesforce](#)
- <sup>37</sup> [E. RE\\_Rep\\_Leger Fernandez Follow-up Questions from Mora Meeting Apr 23 2024.msg](#)

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- <sup>38</sup> [E. BILLS-117hr2617enr.pdf](#)
- <sup>39</sup> [00018822 | Case | Salesforce](#)
- <sup>40</sup> [00019842 | Case | Salesforce](#)
- <sup>41</sup> [E. National Guard Scope of Work.pdf](#)
- <sup>42</sup> [E. Sales Tax for Government Projects.msg](#)
- <sup>43</sup> [F. Claims Preparation Expenses 5% Process.docx](#)
- <sup>44</sup> [Claim Expense Calc Sept 2024.xlsx](#)
- <sup>45</sup> [G. RE HPCC Claims Office Actuarial Forecast - NFIP Data.msg](#)
- <sup>46</sup> [G. August 2024 HP Financial Report.xlsx](#)
- <sup>47</sup> [G. RE Category Forecast with data thru Aug 2024.msg](#)
- <sup>48</sup> [H. Confirmation of risk reduction revision.msg](#)
- <sup>49</sup> [Hermits Peak Program Policy Guide 2024.pdf](#)
- <sup>50</sup> [H. Confirmation of risk reduction revision.msg](#)
- <sup>51</sup> [Various Sampling Analysis.xlsx](#)
- <sup>52</sup> [Subrogation Email.msg](#)
- <sup>53</sup> [Subrogation Guidance\\_READY FOR RELEASE.pdf](#)