

**MAY 2023**

## **Disaster Response: The Planada Flood, Federal Policy Gaps, and Unmet Community Needs**

### **SUMMARY**

Over seven hundred Planada households experienced economic losses following a major flood disaster on January 9, 2023. These losses ranged from property damage inside the home (e.g. furniture, boiler, electrical wiring, foundation) to outside of the home (e.g. vehicles for going to work), and the loss of work.

A UC Merced Community and Labor Center analysis examines data from the Planada Community Needs Assessment Survey 2023. It finds that most (83%) Planada households experienced at least one form of economic loss following the flood, whether through missed work or property damaged as a result of the flood. At the same time, it also finds that most households did not have access to key forms of disaster aid following the flood.

A large proportion of Planada is non-citizen and likely undocumented, and therefore may be ineligible for Unemployment Insurance and federal disaster aid. Survey results indicated that 57% of Planada households with one or more workers who experienced job loss were ineligible for Unemployment Insurance, and 64% of households with flood-damaged property were ineligible for federal disaster aid.

We utilize the survey findings to provide estimates of the number of households in need of home inspection, home remediation, vehicles for driving to work, and renters who have fallen behind on payments, as a direct result of the flood. We also provide cost estimates to inform a state-funded response addressing gaps in federal disaster response in Planada.

We conclude with policy recommendations for a statewide unemployment benefit system for undocumented immigrant workers, and state budgetary action to close disaster response policy gaps in Planada.

### **INTRODUCTION**

On April 15, 2023, several state and local public officials and community leaders met in the unincorporated community of Planada, in Merced County, California to discuss community needs stemming from economic losses resulting from a major flood disaster on January 9.

At the meeting, community leaders and residents articulated several outstanding needs, such as home inspections by third parties, aid for remediation, and protection against unlawful rent increases and evictions. Leaders shared the shortcomings of federal disaster response for a community characterized by high rates of undocumented residents (who face unique barriers in accessing federal aid), and against a backdrop of informal and out-of-compliance housing and labor markets. In turn, public officials requested well-informed ideas to support local residents affected by the floods.

Following the April 15 meeting, the UC Merced Community and Labor Center met with Planada community leaders Olivia Gomez (Planada Elementary School District) and Alicia Rodriguez, the director of a community organization serving Merced County (Sol Rivas,

**Table 1.1 Planada Household Characteristics**

	Planada Survey		ACS 2017-2021
	Unweighted	Weighted	Weighted
Total households	236	1,016	1,016
Households in primary unit	207	891	---
Households under another roof	29	125	---

Source: UC Merced Community and Labor Center analysis of Planada Flood Community Needs Assessment Survey 2023

Valley Onward), as well as the staff member of an environmental justice organization serving rural California (Madeline Harris, Leadership Counsel for Justice and Accountability). Community leaders articulated the need for improved coordination of data gathering to inform policymaking.

After meeting with Planada leaders, the center and community leaders developed and executed a Planada Community Needs Assessment Survey 2023 (the "Planada Survey"), a community-wide door-knocking effort to build on earlier information-gathering efforts.

**THE PLANADA SURVEY**

The Planada Survey was designed as a representative study, to provide data that could be generalized to all of Planada for the purposes of informing policymaking.

On Friday, April 21, the Community and Labor Center conducted a half-day survey training with Valley Onward and UC Merced staff at UC Merced. The Community and Labor Center generated a list of randomly generated household addresses. On Saturday, April 22 and Sunday, April 23, members from the two organizations conducted the survey by knocking on the doors of households on every street that appeared on the map.

The following week, the Community and Labor Center cleaned and analyzed the data, to provide informed community-level estimates concerning the need for aid in the community of Planada following the January 9 flood.

The Community and Labor Center then disseminated the results of the findings (included in this research and policy brief) to community members at an in-person convening in Planada, on the evening of Thursday, April 27. The presentation provided an overview of the findings, and estimates for budgetary action.

Following the presentation, community members participated in breakout groups, and provided input into which forms of aid they felt policymakers should prioritize in a proposed budgetary ask for Planada, and a collective letter was advanced with those priorities.

**A REPRESENTATIVE STUDY**

**Weighting Households.** The Planada Survey draws upon 207 responses collected from different households, and provides findings that can be used to generalize to the broader community of Planada.

According to the US Census Bureau's American Community Survey (ACS), which samples one out of every twenty households every five years and is the largest survey of its kind, there are an estimated 1,016 households in Planada. The ACS defines people living under different roofs as living in different households.

We enumerated the number of survey responses received (see table 1.1), in addition to those that claimed there were others living on their same property but under a different roof (garage, RV, etc). Of the 207 respondents, 29 (14%) claimed that there were others living under another roof, for a total of 236 census-defined households.

**Table 1.2 Planada Household Characteristics, by Property vs Census-Defined**

	Planada Survey		ACS 2017-2021		
	By Property	Census-defined	Estimate	Low	High
Households	891	1,016	1,016	893	1,139
Household size (mean)	4.5	3.9	3.7	3.3	4.1
Children aged 0-17 (mean)	1.5	1.3	1.1	0.8	1.5
Adults aged 66+ (mean)	0.5	0.4	0.5	0.3	0.8
% homeowner	50%	44%	38%	28%	48%

Note: All counts are weighted

Source: UC Merced Community and Labor Center analysis of Planada Flood Community Needs Assessment Survey 2023

Since the ACS 2017-2021 suggests there are 1,016 households in Planada, we "weight" the 236 households in the Planada Survey by multiplying by a factor of 4.305 to arrive at 1,016 total households in Planada (see table 1.1). All community-wide estimates for Planada in this brief have multiplied responses by 4.305.

**Comparing results.** The Planada Survey's characteristics closely match those of the ACS five-year data for the 2017-2021 period, and suggests that the Planada Survey has generalizability to the broader community of Planada.

The ACS 2017-2021 estimates that the percentage of households in Planada that are renters is 38.1%, with a 9.7% margin of error, and that there are 3.7 persons per household, with a margin of error of .4 (see table 1.2). In addition, the ACS estimates 1.1 children per household (with a margin of error between 0.8 and 1.5 children per household) and .4 adults aged over 65 (with a margin of error between .3 and .8 senior adults per household) (see table 1.2).

Applying census definitions for households, our survey provides similar results. In the Planada Survey, 43.6% of respondents were renters and there was an average of 3.9 persons per household, with 1.3 children and .8 elderly adults per household (see table 1.2). Each of these findings are close to (and within the margin of error) of ACS estimates.

These results suggest that our sample is representative in survey research design, that it is representative of what we know to be true of households in Planada, and that we can generalize our findings to the rest of the community that did not participate in the survey.

**Properties as the unit of analysis.** It is important to note that the additional units that constitute "households under another roof" may be out-of-code (e.g. a converted garage or RV) and not qualify for forms of federal disaster aid that rely upon a legitimate address. Given that the Planada Survey is focused on needs assessment following a disaster, the following findings aggregate all responses from different units (e.g. they add data on a household under another roof with the household in the primary unit) for one data point. As a result, the weighted number of households presented in this brief is 891 (see table 1.1).

## PLANADA WORK CHARACTERISTICS

**An active economy.** We asked respondents how many workers (e.g. "salary or wage earners") there were living on their property, and the results of the survey indicate that there are 1,580 workers in Planada, and that 86% (766) of Planada households have one or more workers (see table 1.3).

**Table 1.3 Planada Work Characteristics**

	Percent	Estimate
Total workers	100%	1,580
Workers paid by check	91%	1,436
Workers paid part or all in cash	9%	144
Total households	100%	891
Worker households	86%	766
Non-worker households	14%	125
Households w/ 0 workers paid cash	86%	659
Households w/ 1+ workers paid cash	14%	107

Source: UC Merced Community and Labor Center analysis of Planada Flood Community Needs Assessment Survey 2023

**An informal economy.** We also asked how many get paid in cash, and responses suggest that 9% (144 workers) get paid all or part in cash. The size of the informal economy indicates a lack of reliance on formal financial institutions, such as banks and credit lines (see later). It also suggests that insofar as federal disaster aid depends upon relationships with such institutions (e.g. taking out a loan to underwrite expected aid), in a region with a large informal economy there may be greater challenges in accessing or fully utilizing such disaster aid--apart from regular benefits, such as Unemployment Insurance.

Of particular concern, 14% (107) of households had at least one worker who got paid part or all in cash (see table 1.3), indicating issues with earnings being reported. In turn, such informal workers would have issues accessing safety net benefits dependent upon formal employment, such as Unemployment Insurance benefits, during a disaster.

## **ECONOMIC AND HOUSEHOLD ISSUES FOLLOWING THE JANUARY 9 FLOOD**

**Missed work and household property losses.** Most (83%) Planada households experienced at least one form of economic loss due to the flood.

The largest number of Planada households (41%, or 366) did not experience any loss of property (in the home or outside of the home), but did have at least one worker in the

household who missed one or more days of work as a result of the flood (see table 2.1).

Another one-third of Planada households (34%, or 301) had at least one worker who missed one or more days of work as a result of the flood, and also lost some form of property (e.g. household damage, damaged vehicle, furniture, etc). Another 8% (73) households lost property, but had no workers that missed any work as a result of the flood.

Lastly, only 17% (151) of Planada households did not lose any property or had any workers who missed work due to the flood.

The median number of days of work missed per household was 21 days and the mean was 64 days (analysis not shown). Given an average of two workers per worker household, this means the average Planada household was characterized by two workers each missing six (five day) weeks of work. Yet, not all workers had the same access to unemployment benefits.

**Lack of unemployment benefits.** Lack of access to Unemployment Insurance (UI) is a key feature of Planada's pre-existing inequities, and the challenges to effective disaster response.

Among 667 Planada worker households in which work was missed due to the flood, **most (57%, 383) did not have a single worker in the household eligible for UI (see table 2.2)**. Since only undocumented workers do not have access to unemployment insurance, this finding is consistent with broader studies that have found 59% of farmworkers to be undocumented, such as the UC Merced Farmworker Health Study. Given the 383 Planada households without UI missed an average of 43 work days (8.6 weeks), policy reform providing a \$300 weekly benefit rate for excluded workers would have generated \$1 million locally (analysis not shown).

In 43% (284) of Planada households where workers missed work but at least one worker was eligible for UI, an average of 1.6 workers were eligible for UI. Yet only 55% (155) of such households ended up receiving UI, consistent with general rates of UI uptake. The mean weekly UI benefit for these households (counting all workers) was \$497 per week.

**Table 2.1 Planada Household Property and Work Losses from January 9 Flood**

	<u>Percent</u>	<u>Estimate</u>
Missed 1+ days of work	41%	366
Missed 1+ days of work and lost property	34%	301
Did not miss work or lose property	17%	151
Lost property	8%	73
Total households	100%	891

Source: UC Merced Community and Labor Center analysis of Planada Flood Community Needs Assessment Survey 2023

**Table 2.2 (Lack of) Unemployment Benefits Following January 9 Flood**

	<u>Percent</u>	<u>Estimate</u>
Households w/ 0 Workers Eligible for UI	57%	383
Households w/ 1+ Workers Eligible for UI	43%	284
Workers per Household Eligible for UI	1.6	454
Percent of HH eligible receiving UI	55%	155
Mean weekly UI benefit, per household	\$497	155

Source: UC Merced Community and Labor Center analysis of Planada Flood Community Needs Assessment Survey 2023

**Table 2.3 Renter's Rights Issues Following January 9 Flood**

	<u>Percent</u>	<u>Estimate</u>
Without Flood Insurance	94%	417
Rent Increase and/or Eviction Threat	28%	125
Rent Increase (no eviction threat)		65
Eviction Threat (no rent increase)		34
Rent Increase & Eviction Threat		26
Total Renters		443

Source: UC Merced Community and Labor Center analysis of Planada Flood Community Needs Assessment Survey 2023

**Renter's rights issues.** Planada renters faced several issues related to their rights as renters following the flood. The Planada Survey suggests that half (50%, 445) of all properties in Planada are occupied by renters<sup>1</sup>, yet most renting households (94%, 417) did not have flood insurance at the time of the flood (see table 2.3).

The Planada Survey also indicates that more than one-fourth (28%, 125) of renting households experienced rent increase and/or threat of eviction. Despite the fact that rent increases and evictions were unlawful in the federally-designated disaster area, we estimate that sixty-five households experienced a rent increase with no eviction threat; thirty-four households experienced no rent increase but an eviction threat; and twenty-six households experienced both a rent increase and an eviction threat.

## FLOODED PROPERTY AND DAMAGE

**Flooded property and loss.** More than half (52%, 461 of 891) of Planada households reported property lost inside and outside of their home.

Of the 461 households that experienced flooding, 74% (340) lost property inside their home (see table 3.1). This included anything from furniture and beds to electrical wiring for lights or the foundation of the home. An additional 7% (30 households) did not lose property in their home, but still lost a vehicle. Only 20% (91) did not report any property losses in or outside of their home (see table 3.1).

When we asked specifically about their car, air conditioning, and heating systems, 46% (211) households reported losing at least one car, 21% (95) reported losing a heating system, and 23% (108) reported losing a cooling system—a critical item as the region approaches summer months with a significant number of anticipated excessive heat days (see table 3.2).

**Mold and Home Inspections.** We also asked about home inspections and mold before

and after January 10. Of the 461 total households that lost property, 56% (258) now have issues with mold in their house (see table 3.3). Of those, 7% (34) had existing mold issues, indicating that 49% (224) have new issues with mold as a result of the flood.

Most (63%, 172) households that experienced flooding received a home inspection from a third party, but a substantial number (37%, 172) did not (see table 3.4). We examine data indicating the need for home inspections in the next section.

## FLOOD COSTS AND DISASTER AID

### **The need for inspection and remediation.**

Among the 340 households that experienced property loss inside the home, the vast majority (89%, 302) did not use large industrial dehumidifiers to dry out the home (see table 4.1). This could present structural issues in such homes, as mold, rot or pests take hold or grow.

In homes that experienced flooding, particularly those in which flooding was so pronounced that items inside the house were damaged and lost, it will be necessary for inspections to prevent or address structural concerns caused by flooding.

In addition, remediation will be necessary for some homes to prevent or address emergent structural concerns caused by the flood. We estimate that 164 Planada homeowners received inspections, and that the average estimated remediation cost was \$34,518 per home (see table 4.1).

**Household disaster aid.** We asked households several questions about disaster aid: their eligibility, if they qualified, and their qualifying amount of aid. We also asked about household financial resources and potential economic barriers to rebuild homes.

Among the 375 homes with property damage, 59% (220) were eligible for at least one form of disaster aid (see table 4.2). Yet of those

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<sup>1</sup> The relevant figure would be 43.6% if counting multiple units on the same property as different households, as mentioned on page 3.

**Table 3.1 Planada Households with Flooded Property and Property Loss**

	Percent	Estimate
Lost property in home	74%	340
Lost 1+ vehicles (but no losses in home)	7%	30
No property loss	20%	91
Households with flooded property	100%	461

Source: UC Merced Community and Labor Center analysis of Planada Flood Community Needs Assessment Survey 2023

**Table 3.2 Planada Households with Flooded Property and Common Flood Losses**

	Percent	Estimate
Flood damaged vehicles driven to work	46%	211
Flood damaged heating system	21%	95
Flood damaged cooling system	23%	108
Households with flooded property	100%	461

Source: UC Merced Community and Labor Center analysis of Planada Flood Community Needs Assessment Survey 2023

**Table 3.3 Planada Households with Flooded Property, Mold Issues**

	Since Jan 10	
	No Mold	Mold Issues
Before Jan 10		
No Mold	39%	49%
Mold Issues	5%	7%
Households with flooded property	44%	56%

Source: UC Merced Community and Labor Center analysis of Planada Flood Community Needs Assessment Survey 2023

**Table 3.4 Planada Households with Flooded Property, Home Inspections**

	Percent	Estimate
Received home inspection	63%	289
Did not receive home inspection	37%	172
Households with flooded property	100%	461

Source: UC Merced Community and Labor Center analysis of Planada Flood Community Needs Assessment Survey 2023

**Table 4.1 Households that Lost Property in Home and Remediation Costs**

		<u>Estimate</u>
Households that lost property in home		340
Large industrial dehumidifiers not used	89%	302
Estimated remediation costs	\$34,518	164

Source: UC Merced Community and Labor Center analysis of Planada Flood Community Needs Assessment Survey 2023

**Table 4.2 Household Disaster Aid, among Households with Any Property Loss**

		<u>Estimate</u>
Eligible for 1+ forms of disaster aid	59%	220
Ineligible for 1+ forms of disaster aid	41%	155
Qualified for 1+ forms of disaster aid	36%	133
Average qualifying amount for aid	\$11,628	133
Did not qualify for any disaster aid	64%	242
Total households (with property loss)	100%	375

Source: UC Merced Community and Labor Center analysis of Planada Flood Community Needs Assessment Survey 2023

**Table 4.3 Financial Resources, among Households with Any Property Loss**

<i>Did one or more householders have:</i>	<u>Percent</u>	<u>Estimate</u>
Bank account	75%	280
Credit history	45%	168
Line of credit	38%	142

Source: UC Merced Community and Labor Center analysis of Planada Flood Community Needs Assessment Survey 2023

**Table 5.1 Households Fallen Behind on Bills, among Households with Work or Any Property Losses**

	<u>Percent</u>	<u>Estimate</u>
Not Fallen Behind	57%	422
Fallen Behind on Bills:		
Both Rent/Mortgage or Utilities	21%	155
Utilities	19%	138
Rent/Mortgage	4%	26
Households w/ losses from Jan 9 flood	100%	741
Amount Fell Behind on Bills (mean)	\$1,448	301

Source: UC Merced Community and Labor Center analysis of Planada Flood Community Needs Assessment Survey 2023



**Table 6.1 Cost Estimates for Unmet Disaster Needs**

Home inspection (172 homes x \$500)	\$86,000
Home remediation (340 homes x \$34,518)	\$11,736,120
Vehicles (211 vehicles x \$5,500)	\$1,160,500
Funding assistance for renters (301 households x \$1,448)	\$435,848
Infrastructure	\$5,000,000
Administrative fee @ 10%	\$1,841,847
Total	\$20,260,315

220 eligible homes, only 133 qualified for at least one form of disaster aid. **Thus, most (64%, 242) homes with flood-damaged property did not qualify for disaster aid.**

Among the 133 aid-qualifying homes, the average qualifying amount for aid was \$11,628 (see table 4.2).

**Financial resources.** Planada residents—many of whom are undocumented immigrants—struggled with economic challenges described earlier, including informal (e.g. cash) labor markets and the lack of access to UI; housing markets that compromised residents’ rights through unlawful rent increases and eviction threats; and a federal disaster response system that was less accessible to undocumented immigrants.

Planada residents also struggled with financial resources. Most Planada households lacked access to mainstream financial institutions. For the 375 households sustaining property damage, only 75% (280) had at least one household member with a bank account, only 45% (168) had credit history, and only 38% (142) had a line of credit (see table 4.3).

**Falling behind on bills.** As a result of the severity of the flood disaster on homes and workers, and UI and federal disaster prohibitions against undocumented immigrants, many Planada residents faced increased economic challenges.

Of the 741 households that experienced property loss (in or outside of the home) or loss of one or more days of work, 57% (422) did not report falling behind on bills. However, 21% (155) fell behind on both rent/mortgage or utilities; 19% (138) reported falling behind on

utilities; and 4% (26) fell behind on rent/mortgage (see table 5.1).

A total of 43% (319) of Planada households that had experienced some form of economic loss subsequently fell behind on bills.

**POLICY RECOMMENDATION: CLOSING DISASTER POLICY GAPS**

The Planada Survey finds that most Planada households (83%) experienced economic loss following the January 9 flood, either through loss of work due to the flood or property damaged as a result of the flood.

Strikingly, most Planada households did not have access to key forms of disaster aid following the flood. More than half (57%) of Planada households with one or more workers who experienced job loss due to the flood were ineligible for Unemployment Insurance. Nearly two-thirds (64%) of households with flood-damaged property were ineligible for federal disaster aid.

As a result, we recommend closing gaps in federal and disaster policies through state-level policy reform. The first of our recommended reforms is legislation to create an unemployment benefit system serving undocumented immigrants who have become unemployed. One example of such a reform is California Senate Bill 227.

The second of our recommended reforms is to close gaps in federal disaster response policy, by providing state-funded aid to affected communities. Below, we utilize findings from the Planada Survey to generate a reasonable estimate of funding necessary to

close federal disaster policy gaps and address the Planada flood disaster.

**Funding Assistance for Renters (\$435,848).** We estimate that 301 households fell behind on rent, mortgage or utilities, an average of \$1,448 per household. 29% of tenants also experienced either rental increases, threats of eviction, or both following the flooding disaster, and impacted residents raised the need for assistance finding temporary or permanent alternative housing as a result.

**Home Remediation (\$11,736,120).** Of flood-affected households, 74% (340) lost property inside their homes. Among an estimated 164 households that had received cost estimates for remediation of home damage, the mean cost estimate of remediation was \$34,518 per home. We apply this average to all 340 homes that lost property.

**Infrastructure (\$5,000,000).** Residents and experts have voiced concern that neglected infrastructure needs contributed to the Planada flood disaster, and that investments in local infrastructure will have to be made to ensure resilience in light of escalating climate crises. We recommend at least five million dollars in repairs for roads, community facilities, and related infrastructure.

**Vehicles (\$1,160,500).** Almost half (46% or 211) of flood-affected households lost at least one vehicle that was used to drive to work. (Previous research on the impact of floods on the insurance industry indicates an average cost of \$4,000-7,000 per vehicle lost to flood damage).

**Public Administration and Community Outreach (\$1,841,847).** Community-based organizations that have been working with Planada flood victims estimate that the total cost of implementation for the budget line items referenced above will be 10% of the fund, or \$1,841,846.80 for both public administration of the fund and for community-based organizations to conduct outreach.

**Home Inspection (\$86,000).** Of flood-affected households, more than one in three (37%), 172 households, did not receive a home inspection. (Home inspections for all flooded homes are warranted, given that, among the 340

households that lost property inside their home, 89%, or 302 households, did not use a large, industrial dehumidifier to dry their house.)

In support of the issues highlighted in this brief, community leaders convened with approximately sixty community residents to review the survey data and discuss the findings. The residents articulated funding priorities, through community voting, as presented above.

In conclusion, while a large proportion of Planada's population is non-citizen and likely undocumented—and therefore may be ineligible for Unemployment Insurance and federal disaster aid—state-level reforms addressing these two issues would go a long way in closing the gaps in existing federal disaster response.

## **Mission Statement**

The UC Merced Community and Labor Center conducts research and education on issues of community, labor and employment, in the San Joaquin Valley and beyond.