

Outcome and Process Evaluation for Four Pilot Projects for the Statewide Notification System

Background of Pilot Projects and Evaluation

The statewide pesticide notification system seeks to provide advance, accessible, and transparent information to the public about pesticide applications to complement the state's existing pesticide regulatory system that is designed to protect human health and the environment. Four County Agricultural Commissioners (CACs), in Riverside, Santa Cruz, Stanislaus, and Ventura counties, in conjunction with the Department of Pesticide Regulation (DPR), launched pilot projects to gather feedback from community members and growers to inform the design and implementation of the statewide notification system. The county-led pilot projects are one part of DPR's effort to develop and implement a statewide pesticide notification system for which the 2021-2022 state budget allocated \$10 million over four years for system development. Appendix A provides descriptions of the four pilot projects along with their timelines.

To gather lessons learned from the pilot projects and inform the design of a successful statewide notification system, DPR contracted with researchers from the University of California Davis' (UC Davis) Center for Regional Change (CRC) to independently develop and conduct an evaluation of the four pilot projects. To do this, CRC researchers spoke with local residents, grower representatives, community groups, and CACs in each of the four pilot project areas – Eastern Coachella Valley in Riverside County, Senior Village Community, Watsonville in Santa Cruz County, Grayson Community in Stanislaus County, and Nyeland Acres Community in Ventura County. CRC researchers also collected anonymized IT data from DPR, written feedback, and surveys collected at a series of public workshops held in November 2022. The evaluation was focused on both the outcomes of the pilots as well as the process of implementing them. By looking at both outcomes and processes, CRC researchers were able to examine whether the pilot projects achieved the broader goals of the notification system while also identifying both facilitators and barriers to implementing the pilot projects.

The evaluation assessed the extent to which pilot projects were being implemented as they were designed, whether the pilot projects were accessible to the target population, and whether they were effective in accomplishing their goal of providing an accessible and effective public information system. Importantly, the goal of this evaluation was to assess the different approaches and systems tested in the pilot projects to inform DPR in the development of the statewide notification system. This evaluation included collecting feedback from a wide range of stakeholders to ensure that a variety of voices and experiences were integrated into this feedback process.

Executive Summary

This executive summary provides key takeaways from analysis of these materials, followed by recommendations based on this evaluation.

Summary of Key Lessons

Clarity & Usability

- One strength and limitation of the pilot projects was the use of “Notices of Intent” (NOIs). NOIs are notices that must be provided to CACs of planned restricted materials applications, and include information such as which pesticide is used, date of NOI submission, and site number. The use of NOIs was viewed as a strength because it enabled the notification system and supported buy-in from growers. It was viewed as a limitation in that only certain information is collected in the NOI and thus can be used in the notification and it is used only for restricted materials.
- An application of a restricted material with an approved NOI may not take place due to a variety of factors, including weather. Thus, there may be NOIs that are filed and notifications that go out and then no application may occur. Some residents may see an application but did not receive notification because the application was of a pesticide not classified as a restricted material. Moreover, although CACs estimate that the majority of NOIs took place within 24-72 hours of approval, growers have longer to complete the application. These aspects of the restricted material permitting process may make it difficult to have a notification system that builds and maintains trust in the notification system’s information accuracy with residents.
- It is paramount that what information is included in the NOI and what the NOI means is clearly explained. Part of these challenges led some CACs to worry that there would be notification without applications causing confusion and distrust among the public in the notification system.
- The reported efficacy of the pilot projects by community stakeholders seemed to hinge on two primary factors: the usability of the notification interface and the usefulness of the information provided.
- Members of the public may have struggled to understand the precautions they should take when they receive a notification or how to access the notification. Recipients frequently reported having to do their own independent research to understand what the pesticide is, the risks it poses, and the precautions that should be taken.
- Community groups emphasized that the lack of use of notification sign-ups is not indicative of a lack of interest on the part of community members but rather a lack of awareness, ease of use, or usefulness of information provided in the notification.

Communication & Outreach

- Multiple challenges with accessing the notifications resulted in perceptions from the public that the pilot project systems were difficult to use.
- Productive community and grower outreach is essential for buy-in into the statewide notification system. Such engagement requires resources and a mandate to support these efforts. Regulators should not just rely on a “if you build it, they will come” approach.

Timing

- There was some concern that the timeframe for notification beyond 24 hours would mean CAC offices would have to review and approve notifications very quickly in order to provide the NOI information to the notification system and have it posted in time. Changing the restricted materials permitting process might be needed to extend the timeframe for notification to provide CAC offices more time to review and approve NOIs. At the same time, residents relayed that they needed enough advanced notice to take precautionary actions.

Distance

- There were concerns about the distance of notification. Growers expressed concern for a radius less than one mile, which they believed would hinder their privacy. They expressed a

concern for public safety if people showed up to the pesticide application site. Residents expressed they needed to know the precise location of an application so they could take precautionary measures and that it mattered whether an application was on one side of a field or the other for knowing whether or how to take precautions, for instance, if they needed to close windows or stop running AC during the application. Residents also said that they had not nor would not go to an application site since they wanted notification in order to take precautionary measures. General interest was also expressed in being able to search for applications across a larger area.

Restricted Material Permitting Process Impacts: Pros & Cons

- The relationship between the notification system and state’s restricted materials permitting process has both pros and cons.
- Pros:
 - The pilot projects were made possible by leveraging the existing restricted materials permitting process, which includes the filing of a “Notice of Intent” (NOI) that identifies the date of a planned application of a restricted material pesticide.
 - Building the notification system using NOIs provides a basis for information, regulation, and familiarity.
- Cons:
 - There is concern that changing the restricted materials permitting process to impact the entire restricted materials permitting process will have multiple unintended impacts, including a concern that changes could result in a reduction of compliance with the requirements for NOIs.
 - At the same time, the NOI includes limited information that can be inputted into notification which may impact the timeframe for delivering notification, of which community groups wanted both more information or different kinds of information along with longer time periods for receiving this information so they could adequately prepare for the pesticide application. NOIs are also only of restricted materials applications and community groups expressed an interest in notification for all pesticide applications.

Recommendations Based on This Evaluation by CRC Researchers

Based on the data and analysis conducted in this evaluation of the four pilot projects, CRC researchers developed several key recommendations to inform DPR’s design, development, and implementation of the statewide notification system. The major goal of this evaluation was to take lessons learned from the pilot projects and provide them to DPR. These recommendations are not exhaustive and are intended to serve in conjunction with the other forms of community outreach and engagement DPR has undertaken and the feedback it has received. While CRC researchers acknowledge there may be resource constraints and launch timing may limit incorporation of these recommendations at launch, the following recommendations should be considered.

Clarity & Usability

- Developing a user-friendly web-based and mobile system with actionable information and outreach to residents, growers, and community groups will improve the likelihood that the system is widely used.
- Resources are needed to support current and ongoing stakeholder outreach, which is necessary for the design, implementation, and use of the notification system.
- Notification should be accessible for all communities and especially those with high pesticide use. Notification should be translated into multiple languages including, but not limited to, Spanish, Tagalog, Hmong, and a range of Indigenous languages, such as

Zapotec, Triqui, Mixtec, and Maya. To ensure accessibility and for languages that do not have a written form, there could be audio information with a phone number to a hotline that can be called to gather more information (similar to the Ventura County pilot project). Notifications can also be voice recorded so that people can hear the information.

- The notification system should provide clarity about the type of pesticide being applied and appropriate precautions to take to help ensure the public is accurately and meaningfully informed.

Communication & Outreach

- The notification system should have a way of accessing information through a search function that does not require giving contact information, including an option providing nearby addresses in case a person does not want to input their own address. There should also be an option for the user to provide contact information including email and/or phone numbers for push-notifications.
- A list of frequently asked questions (FAQs) about the notification system, (similar to that of the Stanislaus pilot project), should be included.
- Once the notification system is developed, it is recommended that there is a clear process for receiving input and considering and implementing potential modifications.
- Education of pesticide use, the regulatory structure, DPR's role, and impacts from pesticide use is needed statewide.

Timing

- Given the range of timeframes for notification that were suggested in conducting this evaluation (i.e., 12-72 hours), CRC researchers are unable to provide a recommendation on timing. CRC researchers can say that 24-36 hours is the middle range of the timeframes suggested during this evaluation. In addition to working with stakeholders on this issue, it may be advantageous to look into the precautionary measures residents would take and plan on a timeframe that reasonably matches the precautionary measures. Some timeframes may require additional rules or regulatory changes. DPR may want to examine and consider potential impacts to growers and residents if additional rules or regulatory changes are needed.

Distance

- Regarding distance, CRC researchers heard a range of distances for notification, though specific distances were not discussed as much as concerns surrounding distances, (i.e., privacy, actionable information), and are unable to provide a recommendation on specific distances. In addition to working with stakeholders on this issue, CRC researchers suggest looking into the precautionary measures residents would take and plan on a distance that reasonably matches the precautionary measures. Some distances may require additional rules or regulatory changes. DPR may want to examine and consider potential impacts to growers and residents if additional rules or regulatory changes are needed.

Restricted Material Permitting Process Impacts

- It should be clear what the notification is and is not. The notification is based on information from the NOI and built leveraging the current regulatory structure and specifically the restricted materials permitting process.
- There could be standard language on every notification that provides this information with a link to more information on the restricted materials permitting process from DPR's website.

- Similarly, only some pesticides require a NOI. It needs to be clear that not all pesticide applications will trigger a notification. Such details must be clearly and frequently repeated in order to build trust in notification.

Evaluation Goals & Questions

Evaluation Goals

To provide a substantive and informative evaluation, this evaluation addresses the following:

1. Determine whether stated goals of the pilot projects were achieved;
2. Analyze the positive and negative impacts of the pilot projects;
3. Identify facilitators and barriers of pilot project implementation;
4. Develop recommendations for the statewide notification system.

Evaluation Questions

The evaluation seeks to answer the following:

- Which aspects of the pilot projects were more effective? Which aspects of the pilot projects were less effective? This includes effectiveness related to:
 - Public engagement
 - Communication of pesticide application information
 - Ease of access to information
 - Scope of information provided
 - Timeframe for notification
 - Opportunity or guidance for possible precautions taken as a result of notification
- Which of the pilot project design aspects that worked are scalable? How could they be scaled?
- Which aspects of the pilot projects worked for which stakeholders – including community members, growers, and CACs?
- What were the impacts to community members, CACs, and growers of the pilot projects?
- How did the public use the notifications?
- How was public participation used in refining the pilot projects?
- What are the purposes of notification?
- Have adjustments been made to pilot projects in response to feedback? How have they adjusted? What kind of feedback?

Data Collection and Assessment

Data on the four pilot projects— Eastern Coachella Valley in Riverside County, Senior Village Community, Watsonville in Santa Cruz County, Grayson Community in Stanislaus County, and Nyeland Acres Community in Ventura County—were collected through multiple, different sources. The first and primary source of data was a series of semi-structured interviews with stakeholder groups in the four pilot project counties. CRC researchers began the outreach process by contacting County Agricultural Commissioners (CACs) to schedule interviews. Additional participants were recruited via referrals from both CACs and DPR. The goal of this sampling method was to ensure that a range of perspectives were represented in the interview data and to make connections with stakeholders that CRC researchers may not have been aware of. Appendix A provides descriptions of the four pilot projects along with their timelines. Examples of information provided in notifications in both English and Spanish for each of the four pilot projects is provided in Appendix B.

CRC researchers interviewed all four CACs, with some additional CAC staff present in the interviews. CRC researchers also spoke with representatives from community groups representing residents, and agricultural groups representing growers (8 people were interviewed

in total). Interviews with these stakeholders lasted between 30 to 90 minutes. It was not possible to address every question during the interviews and therefore CRC researchers focused on areas in which stakeholders may have the greatest insight (e.g., Farm Bureau’s insights into how the pilot projects affected growers). CRC researchers also adjusted according to what interviewees seemed most concerned with in order to capture the extent of impact to that particular stakeholder. Below, results are organized by interview questions.

Interviews were complemented by additional data sources, including review of online materials provided by CAC offices, IT data available through DPR’s Information Technology department, feedback surveys distributed and collected during DPR’s fall 2022 public workshops, along with verbal and written feedback in response to the November 2022 workshop and pilot projects.

Data Analysis

Data from the interviews were analyzed using a thematic analysis process. CRC researchers reviewed notes from all interviews and coded responses that pertained to each of the evaluation questions outlined above. Responses were then summarized across all interviews to produce detailed information on the results for each evaluation question. In addition to the summaries for each evaluation question, broader themes were broken down into categories that spanned multiple questions.

Online Materials Review

CRC researchers collected online outreach and informational materials about the pilot projects. These materials were then reviewed and evaluated for the type of information provided, how information was provided (e.g., in what format, in what languages), and whether the information was easily accessed. Information collected included FAQ pages and documents, publicly available maps of the pilot area, outreach flyers, and news articles. Table 1 below shows the type of material available online for each county that was available as of Fall 2022. Some information was taken down after the pilot project concluded and therefore was not captured in this evaluation. The table represents information that was available during the time of data collection.

Table 1. Online materials provided by CAC offices.

Riverside CAC	Santa Cruz CAC	Stanislaus CAC	Ventura CAC
<ul style="list-style-type: none"> • Login page • Notification resources • Log of notifications provided in the system • Press announcement 	<ul style="list-style-type: none"> • About/home page • FAQs • Pilot map • Press release • Login page 	<ul style="list-style-type: none"> • About/home page • Informational videos in English and Spanish • User Manual in English and Spanish • Pilot map • Community meeting invitation 	<ul style="list-style-type: none"> • About/home page • FAQs • Pesticide Information page • Survey for pilot users in English and Spanish • Pilot map • Community meeting invitation • Login page

Relevant webpages¹:

- DPR's notification webpage: www.cdpr.ca.gov/docs/pesticide_notification_network/
- Riverside's notification webpage: www.rivcoawm.org/pesticide-notification
- Stanislaus' notification webpage: www.stanag-ext.org/noi/
- Santa Cruz's notification webpages:
www.agdept.com/AgriculturalCommissioner/PesticideNotificationPilot.aspx
pilots.cdpr.ca.gov/santacruz
- Ventura's notification webpage: pilots.cdpr.ca.gov/ventura/

Workshop Feedback

In November 2022, DPR held three public workshops with the intention of collecting feedback on the four pilot projects and the proposed statewide system and providing an update on the notification system development. The workshops were held in Oxnard in Ventura County on November 7th, Orsi in Tulare County on November 9th, and an online workshop was held on November 10th. During the in-person workshops, attendees had the opportunity to provide verbal feedback and written feedback in the form of surveys and notes for an anonymous drop box. A total of 69 surveys were collected, along with 50 pages of anonymous notes, and 14 pages of summary notes from across the three workshops. DPR also received 370 written comments after the workshops that were analyzed and included below.

This feedback was collected anonymously and then shared directly with the evaluation team. The evaluation team analyzed the feedback from the workshops, incorporated it into the *Recommendations* section, and provided summaries in the results section below. Workshops collected feedback on both the pilot projects and the statewide notification system design. While not all participants in the workshops were residents of the pilot project areas, their feedback does help inform this evaluation as a tool for developing the statewide notification system.

Weekly Subscriptions and Web Searches

DPR's IT team provided CRC researchers with anonymous data of the weekly number of email and SMS subscribers and the number of anonymous web searches that occurred from May 2022 to January 2023 for the pilot projects in Santa Cruz and Ventura counties. Because Santa Cruz and Ventura counties used DPR's notification technology, the DPR IT team was able to provide these data for this evaluation. Both Santa Cruz and Ventura counties had the most subscriber sign-ups and the greatest number of searches at the start of their respective pilots with the Santa Cruz pilot beginning in July 2022 and ending in December 2022, and the Ventura pilot beginning in May 2022 and is ongoing at the time of this evaluation. For example, from May 1 to July 24, the Santa Cruz pilot project had 95 new email subscribers, 88 new SMS subscribers, 4 web searches, and 0 estimated number of NOIs. During the same time period, the Ventura pilot project had 35 new email subscribers, 39 new SMS subscribers, 0 web searches, and 2 estimated number of NOIs.

Note the number of NOIs are an estimate by the DPR IT team based on the site number, date, and time that were uploaded to the pilot IT systems by CAC offices. This is an estimate since information was uploaded without an NOI identification number. NOIs are used as a measure of the number of unique notifications that went out per planned application. Weekly data from these pilot projects, from July 25th, 2022, to Jan 22nd, 2023, are presented in *Table 2*. New subscriptions and web searches continued throughout the fall and winter. For the Santa Cruz pilot project, there were a total of 121 new email subscribers, 114 new SMS subscribers, 722 web searches, and 24 estimated number of NOIs. For the Ventura pilot project, there were a

¹ Please note that some of these webpages may not still be active as pilot projects end.

total of 49 new email subscribers, 53 new SMS subscribers, 212 web searches, and 15 estimated number of NOIs.

Table 2. Weekly new email and SMS subscriptions and web searches for pilot projects in Santa Cruz and Ventura counties from July 25th, 2022 to Jan 22nd, 2022. Please note these data do not represent the unique number of subscribers as people may subscribe by both email and SMS.

Week	Pilot site	Number of new email subscribers	Number of new SMS subscribers	Number of new Web searches	Estimated number of new NOIs
Jul 25 - July 31	Santa Cruz	3	4	0	0
	Ventura	0	0	3	1
Aug 1 – Aug 7	Santa Cruz	2	2	2	0
	Ventura	0	0	4	0
Aug 8 – Aug 14	Santa Cruz	1	2	2	0
	Ventura	0	0	16	0
Aug 15 – Aug 21	Santa Cruz	2	2	4	0
	Ventura	0	0	11	3
Aug 22 – Aug 28	Santa Cruz	5	5	102	2
	Ventura	1	1	7	1
Aug 29 – Sept 4	Santa Cruz	5	4	188	6
	Ventura	0	0	12	3
Sept 5 – Sept 11	Santa Cruz	1	1	100	4
	Ventura	2	2	17	1
Sept 12 – Sept 18	Santa Cruz	1	1	62	3
	Ventura	4	4	22	2
Sept 19 – Sept 25	Santa Cruz	1	1	96	5
	Ventura	1	1	15	1
Sept 26 – Oct 2	Santa Cruz	0	0	50	1
	Ventura	1	1	10	1
Oct 3 – Oct 9	Santa Cruz	0	0	44	3
	Ventura	1	1	13	0

Oct 10 – Oct 16	Santa Cruz	4	4	17	0
	Ventura	1	1	9	0
Oct 17 – Oct 23	Santa Cruz	0	0	7	0
	Ventura	0	0	7	0
Oct 24 – Oct 30	Santa Cruz	0	0	13	0
	Ventura	1	1	8	0
Oct 31 – Nov 6	Santa Cruz	0	0	11	0
	Ventura	0	0	15	0
Nov 7 – Nov 13	Santa Cruz	0	0	4	0
	Ventura	2	0	8	0
Nov 14 – Nov 20	Santa Cruz	0	0	3	0
	Ventura	0	0	3	0
Nov 21 – Nov 27	Santa Cruz	1	1	3	0
	Ventura	0	0	0	0
Nov 28 – Dec 4	Santa Cruz	0	0	1	0
	Ventura	0	0	5	0
Dec 5 – Dec 11	Santa Cruz	NA	NA	2*	NA
	Ventura	0	0	2	0
Dec 12 – Dec 18	Santa Cruz	NA	NA	3*	NA
	Ventura	0	0	2	0
Dec 19 – Dec 25	Santa Cruz	NA	NA	3*	NA
	Ventura	0	0	0	0
Dec 26 – Jan 1	Santa Cruz	NA	NA	1*	NA
	Ventura	0	0	6	0
Jan 2 – Jan 8	Santa Cruz	NA	NA	0*	NA
	Ventura	0	0	8	0
Jan 9 – Jan 15	Santa Cruz	NA	NA	0*	NA

	Ventura	0	0	6	0
Jan 16 – Jan 22	Santa Cruz	NA	NA	0*	NA
	Ventura	0	0	3	0
TOTALS	Santa Cruz	26	26	718	24
	Ventura	14	14	212	13

NA denotes that the Santa Cruz pilot ended December 1, 2022. New searches were conducted after the pilot project ended and are thus included in this table with an asterisk (*).

The Stanislaus County Agricultural Commissioner’s office provided the number of new logins to the system, 36, and new sign-ups, 46, through August 3rd. The Stanislaus pilot began in April 2022 and is ongoing at the time of this report. Data were not available for CRC researchers for the Riverside pilot project, which ran from March 2022 to July 2022.

Interview Results

This section is organized into summaries and analyses of the interviews conducted for this evaluation. It is organized by the guiding evaluation questions that were asked (see above), followed by the themes that emerged in response to these questions. Brief summaries and analyses are presented first, followed by recommendations informed by this process. The interviews focus on the four pilot project areas – Eastern Coachella Valley in Riverside County, Senior Village Community, Watsonville in Santa Cruz County, Grayson Community in Stanislaus County, and Nyeland Acres Community in Ventura County.

General concerns shared in this evaluation by stakeholders align with what has been heard during public workshops and feedback sessions throughout the development of the statewide notification system. Whereas some groups working closely with community members within the pilot project areas would like to see an increase in the detail, advanced timing, and accessibility of the information provided in the notification, other groups, mainly those associated with growers, are concerned that providing this information would put their safety and economic wellbeing at risk. Many groups, both those working with community members and those representing growers, are concerned about public understanding of the purpose of the pilot projects. Generally, it was felt by all groups that clarity of purpose and ease of use for all parties should be priorities for a statewide notification system.

Which aspects of the pilot projects were more effective? Which aspects of the pilot projects were less effective?

How and what information is provided

The reported efficacy of the pilot projects for community members seemed to hinge on two primary factors: the usability of the notification interface and the usefulness of the information provided. For pilot projects that were more effective, the notification interface was more usable for the public, for growers submitting notices of intent to apply (NOI), and for CAC offices. Usability for the public was improved through multiple points of entry to receive information while usability for growers was achieved by using the restricted materials permitting process, including the NOI, that already existed.

For example, the Stanislaus CAC office was praised by multiple interviewees for the use of text messages, emails, and website updates so that there were multiple ways for members of the

public to receive notifications whether they were signed up for a subscription or not. Stanislaus also increased usability for members of the public who may be uncomfortable sharing their personal address by allowing people to sign up for notifications based on a pre-established list of places throughout the pilot project area. This meant that people could receive notifications of pesticide applications near their homes without sharing their personal addresses. Stanislaus was also praised for its outreach efforts, the details of which are outlined in greater detail below. Similarly, community groups expressed appreciation for the Ventura County model in which a user can choose multiple locations from an existing list of places that doesn't require the user to identify their home address to receive notifications. The Riverside County model provided a way to use Google translate to translate the website and notification into Spanish.

Connecting with and considering the needs of growers was also a valuable process for both CAC staff and the growers themselves. For example, the Santa Cruz CAC office received positive feedback for their work to connect with growers through targeted outreach that ensured growers understood the purpose of the pilot systems and the impacts that the CAC anticipated for growers. By targeting outreach events to specific sub-groups of the public, CACs such as in Santa Cruz were able to have more intentional discussions about the pilot projects. This resulted in higher quality feedback from these groups and more buy-in during the pilot project's implementation.

Voices being heard

CACs reported concerns about the feedback not being representative of all community members and that community members themselves were potentially not heard from as much as both growers and community groups. As explained by one CAC, the CAC was "hearing some voices more loudly than others or not hearing from some groups at all." This comment accompanied reports of a sense of unease at public engagement meetings, including disagreements between stakeholders that created a feeling of unease for a diverse array of participants representing different points of view. Lastly, CACs were concerned that the feedback that was being received during the pilot project period may be coming from outside of the pilot project area or the county itself. For example, the Ventura CAC office reported the feedback they had received may have come from outside the county. It is difficult to ascertain in this report outside versus inside a pilot project area because our tools for discerning location was frequently done through the interviews themselves. CRC researchers do not have access to identifying location data so are unable to assess what might constitute inside and outside a pilot project area.

Sign-ups for notifications

Many CACs reported that there were fewer sign-ups than they expected for the notification system. Of those who did sign up, there was concern from CACs that the sign-ups were not made up of members of the public from their county but rather primarily from public agencies or community groups. It is important to note that CRC researchers do not have the means for identifying or verifying whether sign-ups were from the general public, public agencies, or community groups. Additional information about this concern is described in sections below but it should be noted that community groups emphasize that a lack of sign-ups does not indicate a lack of public interest, but may be indicative of the pilot projects, themselves. For instance, CRC researchers heard from some that it was the lack of meaningful information, such as more precise location of the application or what the potential risks of the pesticide applied could be, being presented in the notification that discouraged residents from signing up for the notification system. Additionally, some residents expressed that they did not want to give their email or phone number or both, so they would check the website for notifications rather than sign-up for the system. This raises an important point that there is a lack of trust in giving out phone

numbers and emails necessitating that the statewide notification system must be accessible online without requiring sign-ups. Additionally, given the positive feedback for suggestions of local addresses that can be used in lieu of one's personal address mentioned above, it could be useful to include such a list of addresses in the statewide notification system to build trust and support with residents who do not want to input their personal address into the system. Alternatively, as part of the FAQs for the statewide notification system there can be an opportunity to provide a suggestion that people can input a local address near the area of concern (e.g., where they are traveling to or near where a person may live) and it does not have to be their personal address.

Return on investment (workload versus engagement)

Across multiple stakeholders there was concern that the amount of time and energy it takes to implement the project and conduct community outreach is disproportionate to the pay-off of the project. For some, this is because the project does not go far enough in effectively notifying people about pesticide applications. For others, this is because the value of notifying community members about applications is unclear. Actual staff time required differed depending on the CAC office, with one CAC office estimating that for the pilot project it took them roughly 50 minutes to complete one notification to send to the public. This estimated time includes inputting the NOI information into the pilot notification system, checking it, and posting it. That workload also increased if notifications resulted in calls from the public with additional concerns about the application that CACs needed to address. If additional work is passed onto growers during the notification process, there is worry that compliance with the restricted materials permitting process may decrease.

Additionally, the amount of effort required to conduct effective community outreach regarding the pilot project was a concern for CACs. Some reported that the amount of time and resources spent on community engagement did not manifest in the hoped-for levels of interaction with the notification system. This was echoed by community groups who noted that the lack of interaction may have been because of the kind of outreach regarding the pilot project, lack of awareness of the pilot project, or insufficient ease of use of the system itself. CAC offices explained that the metrics they were often using to assess the effectiveness of the pilot project were the number of people who signed up versus the actual rate of participation. Though there was no specific measure of participation across the four pilot projects, based on IT data from DPR for the Ventura and Santa Cruz pilots (see Table 2), there were a number of web searches over several months during the pilot projects and that web searches tended to go up when estimated NOIs were filed. It is also important to note that this evaluation does not have data on the size of the communities in the pilot project areas nor those who may have been impacted by pesticide applications making it difficult to report on the rate of participation.

Technological challenges

For both growers and community members, lack of access to and knowledge of technological components can be a barrier to receiving information through the notification system. These challenges included a lack of internet access, smart phones, or technological skills needed to navigate the online systems. For growers, there were similar concerns regarding submitting NOIs, but these concerns were mitigated using the existing restricted materials permitting process, including the existing process to submit an NOI electronically using CalAgPermits.

Information Provided

The type of information provided in the notification was a consistent and substantial point of concern and disagreement among stakeholders. These disagreements were centered on diverging viewpoints about how much the public should be informed of the timing, pesticide

type, and location of applications as well as a lack of information about the precautions that community members should take for various types of applications. For some community groups, it was important that precise locations be provided in the notifications so that residents can understand how close they are to the application and to inform what precautionary measures they would take. Additionally, many community groups felt that it was important to provide more advanced notice than is currently required within the existing restricted materials permitting process. Timing preferences to receive notification across all stakeholders ranged from 12 to 72 hours, with community groups preferring more advance notice than groups representing growers' interests. CAC offices and community groups both noted that the information that is provided in the notification is taken from the NOIs, which themselves have only certain kinds of information, so if residents want information about an application that are not provided in the NOI, then it is not available in the notification system. The NOI submission step in the restricted material permitting process also informed the time-delivery of when the notification could be reasonably posted by the CAC offices. For instance, some NOIs are submitted on paper, while others are submitted electronically. The format of NOI submission may impact the amount of time it takes to input information from the NOI into a notification. Growers submit NOI applications in different formats for varying reasons such as detailed paper maps that need to be marked or lack of technological know-how or lack of infrastructure to support an online NOI application. These differences varied both within and across counties, though primarily across them.

It was also noted by multiple CAC offices that NOIs indicate intent to apply and that an application may not take place due to a variety of factors including weather. There may be situations where an NOI is filed and approved, and a notification is issued, but the application does not take place. Moreover, although CACs estimated that the majority of applications following the NOI approval take place within 24-72 hours of approval, growers can take longer to complete the application. These aspects of the existing restricted materials permitting process and NOI submission make it difficult to have a notification system that develops and maintains trust in the notification system's accuracy of information with residents. It is paramount that what information is included in the notification is clearly explained. There is also concern that there may be confusion because only restricted material pesticides are included in notification and some residents may wonder why an application is occurring, but they did not receive a notification about it. Part of these challenges led some CACs to worry that there would be notification without applications causing confusion and distrust among the public in the notification system.

Challenges with the information provided in the pilot projects also include language and translation issues, ease of access to information, and fear that a lack of information may lead community members to seek out their own information and end up not well informed. Given the breadth of languages spoken in California's agricultural communities, there was consistent feedback across all groups about the lack of translation into needed languages as well as concerns about the accuracy of translations. Language needs not being met included Tagalog, Hmong, and a range of Indigenous languages. Each pilot project provided notification in both English and Spanish. For instance, the Riverside pilot project provided a link to Google Translate in Spanish so that it would be easier for residents to access the pilot project in Spanish. The Stanislaus pilot project also enabled a google translate feature that made it possible for residents to translate the pilot into 140 languages. The Ventura CAC office also produced an outreach video in Mixteco on how to sign-up for notification in their pilot project. The Ventura CAC office partnered with the county's Farmworker Resource Program, who has individuals who speak the five most prominent Indigenous languages in the area and could serve as a resource for those accessing the notification.

Community groups also felt there was a lack of valuable information provided in the notifications. For example, information about the specific pesticides being used, their potential health risks, and the types of appropriate precautions was not consistently available across all pilot projects. Growers and associated groups were concerned that providing intensively detailed information would lead to disruptions to the application and heightened fear of the legal use of pesticides. On the other hand, some groups expressed that a lack of information about the pesticides themselves may lead notification recipients to seek out their own information. As pointed out by community groups, people often do not have the time to seek out information on their own and the information that does exist online can have poor user interfaces or inaccurate or outdated information. Community groups reported that improving clarity about the type of pesticide and the appropriate precautions within the notification would help ensure the public is accurately informed. Lastly, the length of time that information was available was a point of concern for multiple groups. Some may be interested in accessing information post-application.

Of the aspects of the pilot projects that worked, which are scalable? How could they be scaled?

Entry Systems

Many CACs felt that the workload requirements of the notification entry systems were not scalable. The initial workload required to get the systems running was intensive but appeared to settle once the system was developed. One CAC office estimated that it took an average of 50 minutes for CAC employees to enter notifications into the system. Even if the workload was manageable, there was concern that as the pilot project systems are scaled up, other standard services and work activities may suffer. If the timeline for notifications is increased to 48 hours, CACs expressed concern that workload management may be even more difficult because of the need to chase down deadlines and the potential need to deal with noncompliance issues.

CAC offices and community groups working with growers had recommendations about the need to automate the system. Many expressed a need for automation and electronic systems that takes the workload off CAC staff members and make the process more efficient. One interviewee expressed that it was inevitable that the burden for entry would need to be passed, to some degree, onto the grower. It was suggested that a mandate from DPR to automate the system may be more effective than CAC offices attempting to piecemeal policy across the state.

Funding

CACs recommended having an estimate from DPR of the costs of running the project, including staff time and the needed funding for outreach so that other CACs throughout the state can plan accordingly. CACs also expressed a need for DPR to provide the funding itself to update the notification systems.

Public Engagement

The increase in information being provided to the public sometimes led to an increase in communication with CAC offices and a need for staff to respond to that communication through in-person visits or phone calls. For example, one CAC reported that if applications occurred that were not part of the notifications (likely because they were not restricted materials), members of the public occasionally called in to report that an application was happening, and they had not been notified. In part, the CAC relayed that because only some types of pesticides require a NOI and thus a notification, there are likely applications for which there will not be notifications. Working within the current regulations, the point that not all pesticide applications would get notifications is important to communicate in public outreach for the statewide notification system in order to build trust and understanding of the system that is being developed. The outreach process required a lot of time in order to ensure that the public was aware of the pilot project, the notification systems, and how to access them. This will likely become even greater as the

pilot projects are scaled to entire counties and to every county in the state. At the same time, the pilot project provided an opportunity for CAC offices to do outreach with diverse stakeholders and local residents, connecting with them and explaining the role of the CAC as well as the notification system. This presents an opportunity to communicate to the public the regulatory structure of pesticide use enforcement in California, the role of DPR, as well as the notification itself.

Which aspects of the pilot projects worked for which stakeholders – including community members, growers, and CACs?

Distance Radius of Notification

Growers were concerned that a radius less than a mile may make it easier to pinpoint the exact location of the application and impact grower privacy. There were concerns from agricultural groups that individuals may show up to the application to protest it, which may put people at risk. There was also a viewpoint that knowing the exact location of an application would not impact the precautions someone might take in response to the application. However, community groups felt that the one-mile radius did not communicate the potential impact of the application. Some residents noted that knowing the exact location, particularly which side of the field an application was on, could help them know whether they would need to take precautionary measures, such as closing windows or not running AC or driving their kids to school rather than walking with them. Residents and community groups noted that they had not and would not show up to an application site because they wanted the information to help protect against exposure to applications, not to get closer to them.

Timeframe of Notification

Pilot projects provided notification between 7- and 36-hours' notice. The Ventura pilot project provided 7 hours' notice, while both Riverside and Stanislaus pilot projects provided 12 hours, and Santa Cruz provided 36 hours. Generally, community groups felt that the timeframes for each of the pilot projects were insufficient. They expressed a need for between 36-72 hours' notice. Growers generally had positive feedback about the timeframe. This was likely the result of the CAC offices intentional effort building on the current restricted materials permitting process and to ensure that the timing did not impact the growers normal process of submitting an NOI. For example, the Stanislaus pilot project was specifically designed to leverage the existing restricted materials permitting process requirement for the NOI to be filed 24-hours in advance of the planned pesticide application and allow CAC staff 12 hours to provide that information to the public in advance of a potential application. This meant that CAC staff had 12 hours to look over the NOI, approve it, and post it to the notification system. This could prove challenging if a NOI is submitted at the end of one workday, necessitating that it be processed first thing the following morning to ensure the 12-hour window. There was concern that increasing this timeframe and passing on that burden to growers will decrease compliance with the restricted materials permitting process. During public outreach and throughout the pilot project, CAC offices reported they did not have any complaints from community members about the timing. However, community groups expressed that in their own outreach efforts, community members were concerned that there was not enough time to take necessary precautions with the timeframe provided.

What were the impacts to community members, CAC offices, and growers of the four pilot projects?

This question focuses on the impacts to community members, CAC offices, and growers in the four pilot project areas – Eastern Coachella Valley in Riverside County, Senior Village Community, Watsonville in Santa Cruz County, Grayson Community in Stanislaus County, and Nyeland Acres Community in Ventura County.

Impact to Community members

Community members and advocacy groups did not feel that there was a significant impact, positive or negative, as a result of the pilot projects. Reasons for the lack of impact are addressed in other sections of this report.

Impact to CAC Offices

The impacts to CAC offices are reported throughout this evaluation. Some CAC offices experienced increased workloads and increased outreach to residents and growers to inform or receive feedback on the pilot project.

Impacts to Growers

Most CAC offices worked with growers to limit the impact that the pilot project would have on growers' normal operations. CACs felt that this was vital to the success of the pilot project because it would ensure that compliance with existing restricted materials permitting process was maintained at its current high levels. Communicating with growers reportedly helped mitigate any possible impact by helping growers be aware of and prepare for the pilot project. While some growers were unhappy with the existence of the pilot project at all, there were no reports of grower impacts as a result of notifications. It is important to note that pilot projects did not come with changes to regulation on NOI submissions or other reporting requirements, so CACs worked within existing systems.

Impacts to the existing restricted materials permitting process

There were no documented impacts to the existing restricted materials permitting process. There are concerns about how a statewide notification system may impact the process and compliance with it in the future. These concerns are discussed throughout this report.

How did the public use the notifications?

Complexities of Public Engagement and Use

The data from DPR's IT system and responses from the interviews indicate that there may be limited sign-ups to the pilot project notification systems across all the participating counties. The pilot project areas were small communities, and it is difficult to ascertain the number of people in these communities who were aware or not of the pilot project and who may have been affected. It was difficult for some pilot projects to track use of their notification system. Riverside County did not include a way to opt-in to receiving notifications and instead information was only received if people sought it out from the pilot project website postings. The website-only posting was poorly received by community groups as it required members of the public to make an active and time-consuming effort to check the website every day and then seek out additional information about the applications and precautions they should take. However, one community group noted that having the option to NOT opt-in was beneficial for residents who may have privacy concerns and be uncomfortable providing information to government agencies.

Multiple challenges with accessing the notifications resulted in perceptions from the public that the pilot project systems were difficult to use. Members of the public may have struggled to understand the precautions they should take when they received a notification or were unsure of how to access the notification. Community groups and some residents reported that the systems often required recipients to do a lot of independent research to understand what the pesticide is, the risks it poses, and the precautions that should be taken. Advocacy groups emphasized that the lack of use is not indicative of a lack of interest on the part of community members but rather a lack of awareness, ease of use, or usefulness of information provided in the notification.

How was public participation used in refining the pilot projects? Have adjustments been made to pilot projects in response to feedback? How have they adjusted? What kind of feedback?

Feedback Prior to Pilot Implementation

Responses indicate that the most effective mode of feedback occurred prior to the start of the pilot project so that feedback could be considered as it was developed rather than as it was occurring. CAC offices were generally unable to address feedback as the pilot projects were occurring due to capacity limitations though several CAC offices did make changes to the pilot project based on feedback (see below). The Stanislaus CAC office received positive praise from community groups for their work to gather public input prior to the start of the pilot project. This was aided by longstanding positive relationships with the public and community groups. One way that the Stanislaus pilot project was improved through feedback was the quality of materials about the pesticides. Respondents indicated that this was likely because of public outreach done in previous years by the CAC office to address concerns about pesticides.

Feedback During Pilot Implementation

As noted above, most CACs were unable to address feedback as the pilot projects were occurring. Riverside CAC offered a disclaimer on their website that the pilot project was being developed and that public input was welcome. Additionally, the Riverside CAC office responded to feedback from advocacy groups by noting that the pilot project was intended to take a different approach from other county's pilot projects so that DPR would have different kinds of models and strategies to draw on in developing the statewide notification system. This led to a response requesting that the CAC adjust the information about the chemical components of pesticides being applied and then translate that information into Spanish using Google Translate. Google Translate was linked to the website so that users could see the notification in Spanish. However, many community groups noted that the methods for public input were unclear and that there was no clear information on what feedback was received and how it was used by the CAC office.

Other examples of real-time response to feedback included the Stanislaus CAC office which put out an FAQ to address common questions and concerns from community members. Additionally, the Stanislaus CAC office received praise for updating the notification system based on feedback, such as indicating the last time the system had been updated at the bottom of the search screen. This was a suggestion by a local community group so that people could tell if the system was up to date. The CAC office was able to make this change and update the website accordingly.

Similarly, the Ventura CAC office made changes to the pilot project during implementation. They clarified the notification website by adding a disclaimer on the search page indicating no registration was required, adding clearer text regarding the search function, and if the search yielded no results they included language indicating there were no applications pending at that time. The Ventura CAC office also updated the interface to make it easier to unsubscribe if someone had signed up to receive notifications.

Feedback About Public Engagement Process

In contrast to the difficulties with responding to feedback about the pilot systems themselves, CACs were able to respond most to feedback on the public engagement process. For example, both the Santa Cruz and Ventura CAC offices facilitated separate meetings across stakeholder groups so participants could be more open without fear of pushback or response from other stakeholders. A focus on local engagement with members of the public living within the pilot communities themselves helped CAC offices better understand the needs of their local community.

Feedback Survey Results

Feedback collected during the DPR November 2022 workshops showed similar concerns to those expressed during the pilot project interviews. Specifically, workshop participants were concerned about the notification system's accessibility and ease of use, language barriers, the nature of information contained in the notifications, and community outreach. Additional information about these concerns is outlined below.

Accessibility and Ease of Use

Participants in the workshops were concerned that the registration process for the notification system will be exclusionary to residents with limited access to the internet, limited technological abilities, as well as being too arduous for the typical person to use. For example, there were concerns that the process of logging in and needing to check a website every day in order to see the notifications may be unrealistic for most people. Additionally, the quality of the user interface can interfere with the likelihood of someone successfully signing up for notifications, even if the notifications themselves are sent automatically. Participants suggested that DPR ensure that the system itself is easy to use, only requires limited or infrequent access to a login page, and that the notifications are delivered via text message to those who opt into that service.

Language Needs

One of the most frequently discussed concerns of workshop participants was that of the language availability for the notifications. Of greatest concern was the availability of notifications and the sign-up system in languages beyond Spanish and English. Zapotec, Triqui, Mixtec, and Maya were some of the Indigenous languages mentioned in the feedback. The need for Tagalog and Hmong translations was also mentioned by survey respondents.

Scope of Information

The scope of information provided, as well as the way that information is delivered, was discussed extensively in the feedback from workshop participants. Some participants urged DPR to ensure that more information was shared about the health impacts of the pesticides applied. Similarly, some participants felt that DPR has a role to play in educating communities on the impacts of pesticides as well as the distinctions between regulated materials and those that are covered by the notification system. Others expressed concern that providing certain kinds of information may lead to increased fear or worry from community members about the impacts of these pesticides and they stressed the importance of providing context about the information provided. The surveys conducted during the workshop asked participants to note which information they would like to see provided within notifications. Most common responses were the date of application, the product and chemical names, any associated health impacts, and the application method.

As has been mentioned previously, there were mixed responses regarding the time and distance of the notifications. Some participants expressed that the 24-hour notice was sufficient for making preparations, whereas others were concerned that this notice did not provide enough time for residents to take precautionary measures. The same was true for the spatial scale of notifications as well, with some participants concerned that additional specificity about where the pesticides were being applied would lead to negative impacts on the growers, and others were concerned that the current radius was too broad to be useful for residents to take precautions.

Community Outreach

DPR's role in the community outreach process was mentioned a number of times during the workshops. This includes concerns that DPR should be playing a larger role in education on pesticide impacts, as well as concerns that DPR was not providing adequate resources for County Agricultural Commissioners to do public outreach on their own. Some respondents feel that this lack of resources was reflected in the low levels of registration for the pilot projects. As mentioned in the interview response data, some members of community groups are concerned that the low numbers may not represent the actual interest in receiving notifications. These respondents felt that greater public outreach and engagement would increase the level of enrollment in future notification pilot projects.

Written Feedback Responding to November Workshops and Pilot Projects

In response to the workshops and to the pilot project itself, DPR received 370 written comments. This feedback included concerns from community groups, agricultural groups, individual farmers, and individual residents both within and outside of the pilot project areas. Some of this feedback was in the form of co-signed letters to DPR representing the viewpoints of multiple community and/or agricultural groups, while other feedback was relayed via short emails with bullet points of questions and concerns. The content of the feedback was similar in nature to that collected through other processes, such as evaluation interviews and workshops, but provided additional insights into the concerns of the wide-ranging community members and groups represented in this written feedback. The feedback is summarized and organized into themes below.

Purpose of Notification

One of the key findings in the written feedback regards the perceived purpose of the notification system itself. For some commenters, the implementation of notification system represents the State of California's belief that the public has a "Right to Know" about pesticide use both within their communities and across the state. Other commenters indicated that the system serves a more limited purpose and is intended only to notify those who are most likely to reside in areas of impact and that allowing broader access to these notifications puts landowners and agricultural workers at risk.

Information Provided to the Public

As has been reiterated throughout the evaluation process and report, stakeholders expressed concern about the information that would be provided to the public through notification. These range from a concern that there is too much information being provided to the public to concerns that there is not enough information being provided in the notification. Where there seems to be some agreement among stakeholder groups is the importance of scientifically backed information about pesticides being readily available to the public. Many individual respondents were concerned about the possible health impacts resulting from pesticide use and relayed stories of impacts to themselves or community members. Additionally, there was concern that the public is not generally aware of pesticides, pesticide regulation and application. Diverse groups of commenters echoed the recommendation that more be done to educate communities about what the various levels of pesticide classes mean and how they impact public health. There is a lot of disagreement from commenters about the specifics of the public health impacts, but generally most commenters indicate that it is important that the public receive basic education on the types of pesticides used in agriculture, whether they are included in the notifications or not; what various levels of classifications mean (e.g., hazardous versus restricted); and the existing restrictions and regulations on pesticide use in California.

Suggestions for including information in the notification to address the lack of understanding discussed above include links to manufacturer safety data, recommended precautions, and

definitions of the restriction levels. Groups most concerned about the health impacts of pesticide applications reiterated that this information should be included in the notifications themselves. More detailed feedback about access to this information is discussed below in the sections on *Access to Information* and *The Role of DPR*.

Geographic Scope of Notifications

Agricultural groups emphasized their concern about expanding the geographic scope of notifications to outside the possible range of immediate impact, such as a resident living near the application area. These groups cited data from the pilot projects that suggested few people within the pilot project areas relative to the number of people in the pilot project area signed up for notification. There may be a number of reasons for the limited number of sign-ups that are included elsewhere in this report. These groups expressed concern that notifications could be used by people and groups not impacted by the applications to protest the use of pesticides statewide or in some way impact the safety of the application or growers. What constituted impact was not described in this feedback. Concern about potential impacts from sharing the precise address or location of applications was the most frequently cited issue raised by agricultural groups in the written feedback.

Many groups concerned about pesticide applications discussed the reasons why access to notifications for people residing outside of the impact area may still be important. For example, some commenters were concerned about the need to monitor applications on behalf of senior citizens or family members who struggle to access online notifications. Some people may not reside in the area but need to travel to there and could benefit from notification. There was also a concern that the distance from the application site is important for determining the precautions that community members should take in response to the applications. This point was rooted in a concern that a mile radius is too broad a distance to understand the impact of the application on a person's health. A number of commenters were also concerned about the impacts on vulnerable groups such as children heading to schools and senior citizen communities. These respondents suggested that special notification procedures should be in place to ensure that these more vulnerable groups were protected and highly aware of notifications. Lastly, community members and groups concerned about pesticide use also noted that a map showing active notifications would be helpful for visualizing the areas impacted by applications.

Access to information

The process of accessing information was another area of high concern for many commenters. One area of agreement across groups was that general information about pesticides and their potential public health impacts was vital for ensuring that the public was able to take precautions. Many commenters wrote that including this information about pesticides in notifications would increase accessibility and effectiveness of the notifications. Many community groups and individual commenters wrote that having both the option to receive notifications directly, or to access them via a website broadly available to the public, was key to ensuring public awareness of pesticide applications. These groups expressed concern that if people do not have the option to "opt-in" to direct notifications, they may not be aware of applications unless they are checking the website every day. Conversely, exclusively notifying via direct messages that require community members to input their own or nearby addresses may dissuade those most impacted (e.g., farm workers or undocumented immigrants) from accessing notifications. Lastly, in other feedback received (e.g., workshops), there were concern about language access for the notifications.

Role of DPR

Several commenters provided feedback regarding the role of DPR in the notification process. Specifically, multiple groups representing the interests and viewpoints of a range of commenters indicated a need for DPR to provide funding for the development and implementation of the statewide notification system. This was especially true for commenters with agricultural interests because of the concern that there would be a potential increase in cost and time needed to provide NOIs to CAC offices if the restricted pesticide permitting process regulations were changed. Community groups also emphasized the importance of increased funding available for community engagement and outreach regarding notification. These commenters indicated that DPR should be responsible for assisting with the costs of these efforts. Nearly, all groups and commenters emphasized the importance of DPR's role in educating the public about pesticides, including the regulation of pesticides and potential public health impacts.

Groups and commenters concerned about pesticide use also provided recommendations about how DPR should implement the future notification system. Specifically, commenters called for a steering or environmental justice committee to guide the development and implementation of the system. This guidance may include protocols on community engagement standards. Additionally, these groups were concerned about the timeline of the notification system and expressed that the timeline should be moved up from the intended 2024 start date.

Recommendations Based on This Evaluation by CRC Researchers

Based on the data and analysis conducted in this evaluation of the four pilot projects, CRC researchers developed several key recommendations to inform DPR's design, development, and implementation of the statewide notification system. The major goal of this evaluation was to take lessons learned from the pilot projects and provide them to DPR. These recommendations are not exhaustive and are intended to serve in conjunction with the other forms of community outreach and engagement DPR has undertaken and the feedback it has received. While CRC researchers acknowledge there may be resource constraints and launch timing may limit incorporation of these recommendations at launch, the following recommendations should be considered.

Clarity & Usability

- Developing a user-friendly web-based and mobile system with actionable information and outreach to residents, growers, and community groups will improve the likelihood that the system is widely used.
- Resources are needed to support current and ongoing stakeholder outreach, which is necessary for the design, implementation, and use of the notification system.
- Notification should be accessible for all communities and especially those with high pesticide use. Notification should be translated into multiple languages including, but not limited to, Spanish, Tagalog, Hmong, and a range of Indigenous languages, such as Zapotec, Triqui, Mixtec, and Maya. To ensure accessibility and for languages that do not have a written form, there could be audio information with a phone number to a hotline that can be called to gather more information (similar to the Ventura County pilot project). Notifications can also be voice recorded so that people can hear the information.
- The notification system should provide clarity about the type of pesticide being applied and appropriate precautions to take to help ensure the public is accurately and meaningfully informed.

Communication & Outreach

- The notification system should have a way of accessing information through a search function that does not require giving contact information, including an option providing nearby addresses in case a person does not want to input their own address. There should

also be an option for the user to provide contact information including email and/or phone numbers for push-notifications.

- A list of frequently asked questions (FAQs) about the notification system, (similar to that of the Stanislaus pilot project), should be included.
- Once the notification system is developed, it is recommended that there is a clear process for receiving input and considering and implementing potential modifications.
- Education of pesticide use, the regulatory structure, DPR's role, and impacts from pesticide use is needed statewide.

Timing

- Given the range of timeframes for notification that were suggested in conducting this evaluation (i.e., 12-72 hours), CRC researchers are unable to provide a recommendation on timing. CRC researchers can say that 24-36 hours is the middle range of the timeframes suggested during this evaluation. In addition to working with stakeholders on this issue, it may be advantageous to look into the precautionary measures residents would take and plan on a timeframe that reasonably matches the precautionary measures. Some timeframes may require additional rules or regulatory changes. DPR may want to examine and consider potential impacts to growers and residents if additional rules or regulatory changes are needed.

Distance

- Regarding distance, CRC researchers heard a range of distances for notification, though specific distances were not discussed as much as concerns surrounding distances, (i.e., privacy, actionable information), and are unable to provide a recommendation on specific distances. In addition to working with stakeholders on this issue, CRC researchers suggest looking into the precautionary measures residents would take and plan on a distance that reasonably matches the precautionary measures. Some distances may require additional rules or regulatory changes. DPR may want to examine and consider potential impacts to growers and residents if additional rules or regulatory changes are needed.

Restricted Material Permitting Process Impacts

- It should be clear what the notification is and is not. The notification is based on information from the NOI and built leveraging the current regulatory structure and specifically the restricted materials permitting process.
- There could be standard language on every notification that provides this information with a link to more information on the restricted materials permitting process from DPR's website.
- Similarly, only some pesticides require a NOI. It needs to be clear that not all pesticide applications will trigger a notification. Such details must be clearly and frequently repeated in order to build trust in notification.

Appendix A - Notification Pilot Project Details, which can be found online [here](#).

Note: Advanced notice is given based on the date (and time, if available) listed on the Notice of Intent (NOI). An application can begin within 4 days following the date listed on the NOI. The four project areas are Eastern Coachella Valley (Riverside County); Senior Village Community, Watsonville (Santa Cruz County); Grayson Community (Stanislaus County); and Nyeland Acres Community (Ventura County).

	Riverside Pilot	Santa Cruz Pilot	Stanislaus Pilot	Ventura Pilot	Statewide
Logistics					
Location	Eastern Coachella Valley (Mecca & North Shore)	Watsonville (Senior Village Community)	Grayson	Oxnard (Nyeland Acres Community)	California
Duration	March 2022 – July 2022	July 2022 – December 2022	April 2022 – ongoing	May 2022 – ongoing	2024 Anticipated Implementation
Technology	County developed	DPR developed	County developed	DPR developed	DPR working to develop state IT system
Accessibility					
Can I search the system anonymously?	✓	✓		✓	✓
Can I sign up to receive notification for multiple locations?	Anonymous web search only; no sign-up option	✓	✓	✓	✓
Information in Spanish and English?	✓	✓	✓	✓	✓
Information provided in other languages?			Yes, Google Translate with 140+ languages	Yes, call in support for Mixteco	
Resources provided for users?	map, project information	map, FAQs, county agriculture information	map, video guide, user manuals	map, FAQs	Seeking feedback
Notification Details					
Which pesticides are included?	All permitted restricted materials	Fumigants	All permitted restricted materials	All permitted restricted materials	All permitted restricted materials
At what distance from an address will I get notified?	Within 5 miles	Within 1 mile	Within 2 miles	Within 1 mile	Within 2 miles

How far in advance of a scheduled application is the notification available?	12 hours	36 hours	12 hours	7 hours	24 hours
What type of information is included in the notice?	Date, time, pesticide name (active ingredient), application rate	Date, time, pesticide name (product name), EPA Reg. No., treated acres, application rate and method	Date, time, pesticide name (product name)	Date, time, pesticide name (product name), EPA Reg. No., treated acres, application rate and method	Seeking feedback

Appendix B – Notification information provided in English and Spanish for the four pilot projects in Riverside, Santa Cruz, Stanislaus, and Ventura Counties, provided by DPR.

Riverside Notification



**RIVERSIDE COUNTY
AGRICULTURAL
COMMISSIONER'S OFFICE**

DELIA JIMENEZ, CIOC
ASSISTANT AGRICULTURAL COMMISSIONER / SEALER
DANIEL DELGADO
DEPUTY AGRICULTURAL COMMISSIONER / SEALER
ERIK DOWNS
DEPUTY AGRICULTURAL COMMISSIONER / SEALER
MISAEEL MARTINEZ
DEPUTY AGRICULTURAL COMMISSIONER / SEALER

RUBEN J. ARROYO
AGRICULTURAL COMMISSIONER
SEALER OF WEIGHTS AND MEASURES

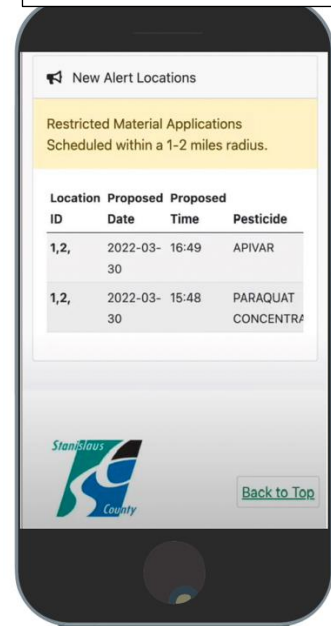
**Notification List
(Lista de Notificación)**

(This notice is valid four days after the initial notification)
(Este aviso es válido cuatro días después del aviso inicial)

Proposed Application Date (Fecha Propuesta de Aplicación)	Region (Región)	*Estimated Time of Application (Hora Estimada de Aplicación)	Active Ingredient (Ingrediente Activo)	Rate (Dosis)
4-Mar	Mecca	Within 12 to 24 hours		65 gallons/acre
4-Mar	Mecca	Within 12 to 24 hours		52 gallons / acre
4-Mar	Mecca	Within 12 to 24 hours		52 gallons / acre
4-Mar	Mecca	Within 12 to 24 hours		64 ounces/acre
4-Mar	Mecca	Within 12 to 24 hours		1.7 pints/acre
7-Mar	Mecca	Within 12 to 24 hours		64 ounces/acre
7-Mar	Mecca	Within 12 to 24 hours		1.7 pints/acre
7-Mar	Mecca	Within 12 to 24 hours		2.7 pints/acre
8-Mar	Mecca	Within 12 to 24 hours		1.7 pints/acre
8-Mar	Mecca	Within 12 to 24 hours		1.7 pints / acre
8-Mar	Mecca	Within 12 to 24 hours		1.7 pints / acre
8-Mar	Mecca	Within 12 to 24 hours		1.7 pints / acre
9-Mar	Mecca	Within 12 to 24 hours		1.7 pints / acre
9-Mar	Mecca	Within 12 to 24 hours		1.7 pints / acre
14-Mar	Mecca	Within 12 to 24 hours		1.7 pints / acre
15-Mar	Mecca	Within 12 to 24 hours		2.7 pints / acre
15-Mar	Mecca	Within 12 to 24 hours		1.7 pints / acre
19-Mar	Mecca	Within 12 to 24 hours		1.7 pints / acre
19-Mar	Mecca	Within 12 to 24 hours		1.7 pints / acre
19-Mar	Mecca	Within 12 to 24 hours		1.7 pints / acre
19-Mar	Mecca	Within 12 to 24 hours		1.7 pints / acre

3403 10th STREET, SUITE 701 – RIVERSIDE, CA 92501 – PHONE (951) 955-3045 – FAX (951) 955-3047

Stanislaus Notification



Santa Cruz Notification

Aviso de notificación de intención

 StatewideNotification@cdpr.ca.gov
To: QAppDev@CDPR

 Reply  Reply All  Forward  

Tue 10/25/2022 9:59 AM

Una aplicación de FIRAGA, DU PONT LANNATE SP INSECTICIDE, DU PONT LANNATE SP INSECTICIDE, un pesticida de agroquímicos restringidos está programada para el 08/20/2022 aproximadamente a una milla de Santa Cruz. Más información disponible en <http://dev-appsnet/StatewideNotification/santacruz/SearchNoticeOfIntent/Index?subscriptionId=6>.

¿Preguntas? Comuníquese con el Comisionado de agricultura del condado de Santa Cruz en nuestra oficina al (805) 388-4222.

Notice of Intent Notification

 StatewideNotification@cdpr.ca.gov
To: QAppDev@CDPR

  Reply  Reply All  Forward  

Tue 10/25/2022 9:57 AM

An application of FIRAGA, DU PONT LANNATE SP INSECTICIDE, DU PONT LANNATE SP INSECTICIDE, a restricted material pesticide, is scheduled on 08/20/2022 approximately one mile from Santa Cruz. More information available at <http://dev-appsnet/StatewideNotification/santacruz/SearchNoticeOfIntent/Index?subscriptionId=5>.

Questions? Contact the Santa Cruz County Agricultural Commissioner at 831-763-8080

Ventura Search for Notification

Search for Pesticides

The Ventura County Pesticide Pilot Notification Project is providing pesticide application information for the community of Nyeland Acres. Other addresses in Ventura County will not populate information. More information on the status of the statewide notification system can be found on the [Frequently Asked Questions](#) page of this website.

No Registration Required.

Address

Enter and select an address

Search

Results

- Address: 2225 2nd St
- City: Oxnard
- Zipcode: 93036

Export Show 10 entries

Product Name	EPA Reg No	Application Date (Scheduled)	Application Time (Scheduled)	Treated Amount	Treated Units	Application Method
No applications pending at this time						

Showing 0 to 0 of 0 entries Previous Next