The Threat of Flooding Continues

by Monterey County Farm Bureau

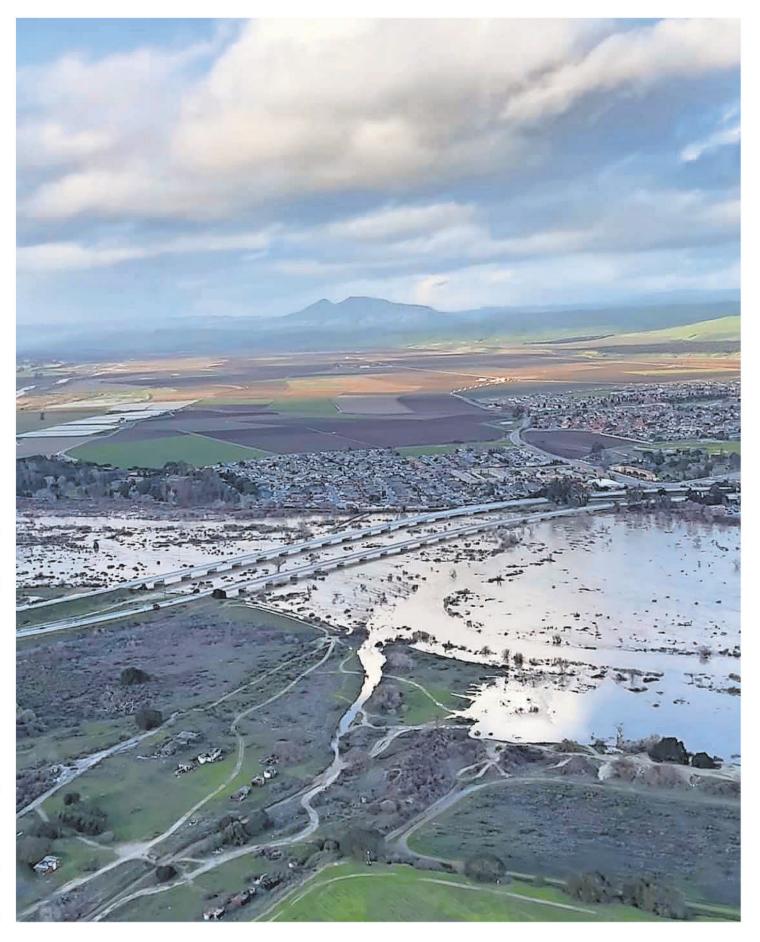
uring the atmospheric rivers that hit California in January and March of 2023, Monterey County farmland encountered extensive flooding that had not been experienced since 1995. The flood patterns were somewhat similar when compared, even though the actual rainfall amount was nearly 2/3 less than what fell in March 1995.

The damage was extensive; over 20,000 acres of cropland, ranchland, and vineyards went under water, sometimes for weeks before waters could recede off the land and back into the river channel. Damage estimates to crops and agricultural infrastructure exceeded \$600 million, and another \$400 million was spent cleaning up debris, reshaping farmland, rebuilding levees, and replacing damaged infrastructure and buildings. Overall, an impact of over \$1 billion without any meaningful state or federal rescue aid.

Our County suffered over \$50 million in damages due to bridge washouts, roadway flooding, and drainage culverts needing replacement. Highway 101, our main arterial roadway through the County, was flooded and caused roadway damage and traffic nightmares. And our local municipalities suffered damage to their water reclamation systems that provide critical water quality operations for our communities.

What caused all this damage is a diminished flow capacity of the Salinas River after decades of limited maintenance of sediment, sandbars, vegetation, and levee integrity. After the 1995 flood event, landowners were given permission to complete substantial maintenance work in the channel

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to improve capacity flow and direct water away from vulnerable levee systems; this avoided a repeat of the flooding event when 1998 brought another substantial rainfall to our river system. Channel maintenance was proven to be effective in removing most of the flooding risk to farmland and vineyards, as well as protecting vital public infrastructure.

In the successive decades, multiple state and federal agencies have curtailed permit scope for river channel work in the Salinas River watershed region. This has caused an excess of native and non-native vegetation to gain control of the river channel, diverting water flow away from the main flow channel and into secondary channels that may not have existed previously. Additionally, the scouring of the river channel for sediment has been diminished due in part to the excessive vegetation and lack of maintenance in the main flow channel.

Part of the complexity of permitting work in the river channel is that the Salinas River is privately owned and is not a water of the state or federal government. Multiple landowners need to participate in the expensive permitting process each year to obtain permission to work on their own land to protect their farms adjacent to the river channel.

After the winter flooding events, Monterey County Farm Bureau on behalf of the landowners, farm operations, vineyards, and ranches along the river channel, approached all agencies with jurisdiction over the Salinas River watershed. We hoped an open and collaborative process would bring the multiple agency objectives congruent to allow for more concerted work to improve the river channel capacity flow, eliminate the non-native vegetation creating water dams, and remove significant amounts of sediment and sandbars in the main flow channel that cause diversion into secondary channels.

There was some initial recognition by the multiple agencies involved that

the channel and levee systems were inadequate but permitting restrictions stood in the way; mainly, access to do work in the low flow channel was prohibited in all permits.

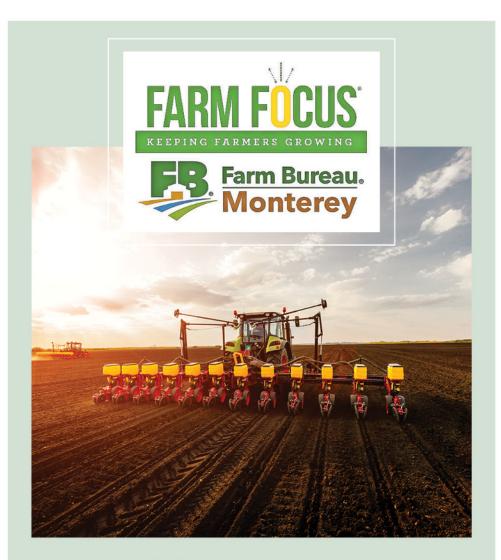
Then, Governor Newsom issued an executive order that allowed state agencies more flexibility for flood mitigation work in those rivers that experienced catastrophic flooding. This helped somewhat ease the permitting restrictions by state agencies, but not the federal agencies. We asked those federal agencies to match the Governor's executive order strategy and were turned down flatly; the existing permits would stay in place, prohibiting work in the most critical part of the river channel for flow capacity.

If federal permits for channel work were to be expanded, a new river survey was needed, hydrologic analysis of flow capacity had to be studied, and each individual parcel (ownership) of the river channel would need to provide detailed work plans and environmental impacts to the river channel. Clearly, this would take years to complete and with a predicted El Niño event coming this winter, not in time to save our farm, ranch, and vineyard lands from further flood risk and exposure.

This all demonstrates that government agency objectives come first before protecting vital food production from flood exposure, and that our public infrastructure remains at risk simply because the river channel cannot be maintained for proper flow capacity.

We are certainly not advocating for environmental destruction of our river channel to improve flow capacity; indeed, our work calls for enhancing the channel for fish passage, native habitat, and a reasonable balance between flood mitigation and a healthy river system. Landowners and farm operations are willing to pay for this maintenance work, not impacting any public dollars or budgets.

Too bad the agencies involved cannot see the bigger picture and would rather mandate that flood recovery prevails over prevention efforts.



Did You Know?

During the month December, local farm fields will not be producing lettuce but not for the reason you may think! In order to break the cycles of pests and diseases, mainly in the soils, all farmers agree to not grow lettuce for most of December. Fields will sit idle, allowing the soil to rest and absorb moisture from precipitation; come spring, when new crops are planted, there will be less exposure to diseases and pests that impact lettuce quality and yields.

During the winter months, lettuce is grown in southeast California and southwestern Arizona, where the climate is favorable for cooler season production. Lettuce production will resume in the Salinas Valley in early spring 2024.

Why our Brand of Agriculture is Essential

By Norm Groot, Monterey County Farm Bureau

he Salinas Valley is known as the Salad Bowl of the World — mainly because we produce much of the fresh food items that the consuming public puts on their dinner tables each night. A healthy diet includes the fresh veggies, leafy greens, and berries produced nearly year-round here in Monterey County.

Our farmers and ranchers know how to adapt. We've seen how farming in Monterey County has evolved considerably from the days of the rancho haciendas; what we produce here barely compares with where commercial farming started over 150 years ago with grain crops, dairies, and then sugar beets. The crop types grown have endured constant change, adapting to both new agronomics as well as market conditions.

Improved irrigation technologies and infrastructure, as well as better agronomics for producing quick-turn crops such as lettuce, broccoli, and spinach, have driven that change. Advances in vineyard production technology have yielded better wine grapes while utilizing less resources, such as water. We are similarly known for our outstanding berry production fields and the bounty of strawberries produced locally each year. And we have taken food safety practices to a higher level, becoming the model for the rest of our nation, ensuring a safe fresh food supply.

All this change takes innovation on the part of our farmers and ranchers, as well as those who support us with research and field trials. We are constantly moving forward with sustainability practices that profoundly improve efficiency and yield; farmers care for the resources in our working environment. And now, innovation is taking many of our farms into regenerative practices.

We call this our brand of intensive

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agriculture because we can produce nearly year-round with the resources of soil, water, and climate that makes the Salinas Valley a high-value food production region.

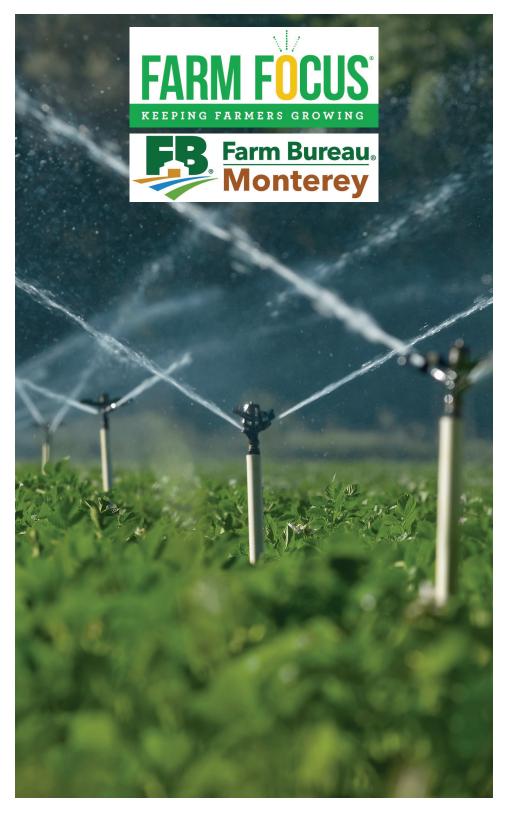
We harvest almost continuously due to crop rotations and market supply demands. It takes a lot of hands to harvest those fresh food items, simply because it is difficult to develop robotic harvesting tools that replace skilled hand-eye coordination. Farmworkers are treated with dignity and respect and many earn well above the minimum wage level due to their skills and endurance in physical labor situations. Farm employers are the only sector building workforce housing in Monterey County with a significant number of units.

Resources are important also — farmers reduced irrigation water use from groundwater by nearly 20% in the last 25 years, mainly due to technology improvements. Farm fields produce abundant harvests each season due to farm practices that enhance soil health. Future investments in our water resources will ensure that farming can continue here.

Having a working environment is the reality where farmers have been managing their resources for 150 years in a manner that allows continued production on the same fields with decreasing inputs and scientifically based agronomics — meaning we continue producing more with less.

As we consider our food security in the coming decade, and the importance of a reliable, safe, and affordable domestic food supply chain, let us not overlook the great accomplishments of our farmers and ranchers each year. Our brand of intensive agriculture is what puts fresh food on our table each and every day.

This makes our brand of agriculture unique, but also essential.



Overtime for Farmworkers: What Happened After AB 1066?

By Norm Groot, Monterey County Farm Bureau

or many decades, farmworkers have been vital to the harvesting of food crops in the Salinas Valley and other parts of Monterey County. Much has been stated about the wage levels of farmworkers, and particularly, the hours worked when harvesting seasonal crops.

With the well-being of farmworkers in mind, the California Legislature passed AB 1066 that extended overtime hours to farmworkers after 8 hours of work each day, or 40 hours each week. AB 1066 mandated overtime pay for farmworkers at the same as most other employees in other economic sectors (previously, overtime in agriculture was after 10 hours a day due to accommodate seasonal harvesting hours).

A recent study report from Giannini Foundation of Agricultural Economics, University of California, authored by Alexandra E. Hill, determined that overtime pay for farmworkers did not result in the intended result.

"Overtime regulations are intended as worker-protection policies aimed at improving worker well-being by requiring higher pay for working long hours. However, there is little ana-lytical evidence on their impacts and there are a variety of potential out-comes," writes Hill in her study report. "For example, at one extreme, if individual worker hours and wages remain unchanged after the laws are implemented, workers would benefit from higher incomes for the same time at work. At another extreme, if employers reduce hours to remain below the new thresholds, worker incomes could fall, making workers who value the extra income more than additional leisure time worse off. In this case, employers would also need to hire additional workers, invest in labor-saving or labor-augmenting technology, or make larger business changes like switching

to less labor-in-tensive crops."

What seems to have occurred is the latter scenario, where farm employers have reduced hours to maintain a non-overtime pay situation for farmworkers. This results in lower income each paycheck, as hours have been reduced to meet the new overtime standard. Relying on worker-reported federal data, the research found that farmworkers in the state worked 15.000 to 45.000 fewer hours in 2019 and 2020 while making \$6 million to \$9 million less per week than they would have if the farming industry had continued to use the existing 10-hour workday exemption.

"In 2019 and 2020, the two years follow¬ing the phase-in of California's new overtime standards for agricultural workers, the average California crop worker experienced reduced hours and earnings," states Hill.

Of particular note is that labor unions, including the United Farm Workers, supported the passage of AB 1066 as a way to increase farmworker earnings each paycheck. Contrary to the bill's intent, civil rights icon Dolores Huerta, co-founder of the United Farm Workers labor union, stated the change in earnings may result from global warming's negative impact on local agricultural production; she added that, given how strenuous farm labor is, fewer hours spent working may be its own benefit.

The unintended consequence of this legislation has led to reduced hours for farmworkers by farm employers, to avoid additional costs for labor (the most significant cost in crop production), and to maintain a balanced bottom line each year.

Many farm employers already pay significantly higher wages than the current California minimum wage of \$16 per hour, plus benefits such as healthcare and retirement programs, because of the competition for farmworkers in a diminishing labor pool. Additional costs for overtime hours appear to be a threshold that farm employers are not willing to cross. Too bad that farm employers were not heard in opposition to AB 1066 when considered; farmworker pay would have remained at least the same.









Finding the Positive in Agriculture

By Norm Groot, Monterey County Farm Bureau

here is way too much rhetoric in the public domain about how farms and ranches operate, mainly about their impacts on the environment and resources uses, and the constant negative attitude towards the use of water to grow the food that ends up on dinner tables each night. With social media passing along constant criticism about our domestic food production, the avalanche of information is daunting for anyone to sort through, let alone understand.

It's a common thread that the American agriculture industry is poor at telling its story to the greater public. With less than 2% of the population raising food, fiber and flowers, the other 98% rarely realizes what it takes to get food into their local supermarkets — and the risks that farmers and ranchers face each day to make sure that product is safely produced and handled, fresh and

convenient, and still affordable.

Certainly, there are brighter informational items that can be shared on what is happening in the agricultural sector — some of this sizzle just isn't strong enough to make it into the mainstream media channels. Many in farming and ranching remain encouraged that the average food consumer will realize that domestic agriculture has a place in our society and those seeking to tear it apart need to be ignored, or at least marginalized.

Let's start with a resurgence in the local Young Farmers & Ranchers program; there is renewed interest in producing food by the younger generations! These are college-educated, articulate individuals who want to grow food responsibly, using newer agronomics and practices. The integration of technology into many facets of farming and ranching has changed the perception of agricultural production and offers an enticement

for more tech-savvy generations.

And while we're talking Ag technology, the Hartnell College Agricultural Technology program is blossoming (pardon the pun) with great new class offerings and technology trainings. In addition to diesel mechanics and welding, there are now programs focusing on food processing automation and other technologies related to harvesting. Food safety science is another area receiving increased instructional programs. A recent tour of the Hartnell College facilities displays an investment of nearly \$3 million in new equipment that students can train and learn from — yes, toys for our students to master for future careers here in the Salinas Valley.

This year's applications for Farm Bureau scholarships came with well-thought-out essays on how farmers and ranchers have been challenged to share their stories of success in managing their working environments with younger generations that have never seen a farm. This year's crop of college-bound students (again, pardon the pun) formulated some excellent strategies that best tell the Agricultural perspective and the importance of local food production within their generation, using social media and other forms of 'modern' communication. It is very impressive to read these insightful essays from those who desire to develop a career in local agricultural production.

There are many bright stories to tell in local agriculture that reflect positive benefits of farming and ranching in our community, well beyond the noise of the detractors. We, as a community, need to learn better how to tell our story and share the lifestyle of modern farming and ranching, dispelling those old stereotypes that persist because detractors continue to scream the loudest.

The Future of Water Uncertainty Isn't Just About Scarcity

By Norm Groot, Monterey County Farm Bureau

bout 10 years ago, the state enacted the Sustainable Groundwater Management Act, which requires all groundwater basins in California to be managed to equilibrium by 2042. What this essentially means is that all water extracted for all beneficial uses must be equal to water recharge in the same basin, thereby achieving equilibrium of groundwater use

This may seem like simple common sense, but it will be very difficult for many groundwater basins in the state to achieve this balance. Some very tough policy decisions will need to be made concerning how water is used, where it is used, and most importantly, how much will be available for food crop production.

Here in the Salinas Valley area, our water challenges are quite different than other parts of the state. We operate a "closed-loop" system, meaning that we capture our own water supply for our own use. Monterey County is solely dependent on its own water supplies; we don't import water from any other source or area, unlike most of the other regions of California.

That puts us solely in control of our own water supply each year, and how we achieve this equilibrium in our groundwater supplies is a decision of local policy makers and our farms, residents, and other businesses.

Yet, we do have many challenges on the pathway to sustainability. Our biggest threat is saltwater intrusion in the coastal zone area of the basin (west of Salinas); over the next 18 years we must make efforts to halt and even reverse the saltwater intrusion barrier line. We also have some sub-basin deficits that must



be resolved, which will address the distribution issue in our groundwater basin. We are fortunate to have a good, reliable, and well-managed water supply in our basin; we must figure out how to move that water around to solve sub-basin impacts in the Salinas area.

Our local economy is dependent on the success of farming and ranching each and every year — we are a rural county driven by an intensive agricultural sector. Impacts to farms and ranches if water use is curtailed could mean loss of jobs, reduced tax revenues and economic challenges for our local municipalities.

A few facts: over the past 26 years, irrigation water use has been

reduced by 20%, fully 115,000-acre feet of less water used to grow food crops. In that same time, there was an added 5% in irrigated acres and yields have increased each year. The agricultural sector has made dramatic strides to reduce groundwater use while producing more fresh food crops. Further reductions in irrigation water use will require more technology and be increasingly more expensive to implement.

While we must achieve groundwater sustainability, as required by state law, it will be quite costly for the local community to fund the various infrastructure projects to make this a reality. The numbers become quite large when considering these multiple projects (think mid-nine figures) and could stress the agricultural sector into financial instability. A cautious approach to the expenditures for these projects will be needed; spending a large sum of funding on water infrastructure projects could outstrip the ability of the community to pay for the sustainability mandate.

We all desire to have sufficient water supply for consumptive uses, including domestic water supplies. It is time we start looking for alternative solutions that involve not only creating additional water, but move that water into the right places to balance the groundwater basin. This will become a big lift for the community to manage as we seek to secure our water supply future.

When Nature Show Us Who is in Control

By Norm Groot, Monterey County Farm Bureau

ast year's heavy rainfall shows that nature and weather influence how much food farmers can produce.

In Monterey County, the 2023 Crop Report notes a decline in production value of nearly 7% due to weather conditions that growers faced throughout the year. While the value of crops produced exceeded \$4.35 billion in 2023, that's a decline of nearly \$300 million in crop production from 2022.

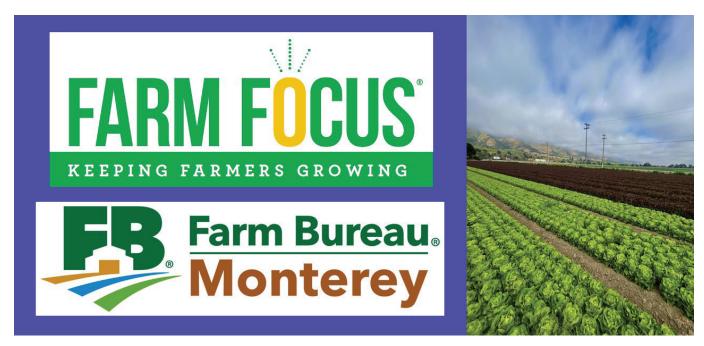
Yes, Mother Nature is indeed in control of what farms can produce each year (but all farmers know this risk).

Early in 2023, the Salinas Valley and the Pajaro Valley areas of our county experienced extensive flooding due to heavy rainfall events. Along the Salinas River, levee systems were overtopped, top soil washed away and trash and debris remained as waters receded. The Pajaro River levee system experienced a catastrophic failure, inundating the Pajaro community and flooding many acres of farmland (primarily strawberry fields).

When all was tallied up, over 20,000 acres of farmland went underwater during these flood events. Aging levee infrastructure was to blame for both river system failures, but the Salinas River also has a capacity issue due to a lack of channel maintenance for flood control.

Flooded fields needed remediation efforts, levees reconstructed, trash and debris removed, and pathogen testing for food safety compliance had to be completed before fields could be replanted. For many of these acres, growers lost their first crop of the season because of the extensive process needed to get fields back into production.

Then, the region experienced cooler spring and summer season weather, delaying crop growth and,



ultimately, harvest. In particular, the winegrape harvest season was delayed into October and November due to this cool weather pattern that persisted.

Overall, the decline in production impacted vegetables and leafy green crops the most. A majority of the top 10 crops lost production value in 2023 due to the uncooperative weather.

Added together, the weather assumed control of how much farmers could produce for much of the year. In addition to the reduction in crop value produced, this impacted the bottom line of many farming operations not only due to the loss of production but also the costs of clean-up and field remediation.

While local production supply for our nation's marketplace is important, Monterey County growers exported over 268 million pounds of products to countries as diverse as Taiwan and Saudi Arabia. Monterey County is a global marketplace that contends with multiple risks and market fluctuations each year.

What farmers and ranchers

experienced in 2023 was that perfect storm of weather-related challenges; the impacts of weather have always had control over production values, and when multiple weather disasters happen in one year the result is a wider economic impact.

It goes without saying that farmers cannot control the weather, but they can do their best to manage some of the risks involved in growing quick turn crops each season. Last year demonstrated that management of these risks can overwhelm the best of farm management practices.

The Monterey County Crop Report takes a theme of "Together We Rise" by highlighting the recent decade of challenges that farmers, ranchers, and viticulturalists have endured — drought, wildfires, flooding and the pandemic. But those are not the only challenges, as Sustainable Groundwater Management is forcing increasingly difficult conversations about water use, farming practices, land repurposing, and resource development projects; those costs and impacts have yet to be fully realized.

Let's not forget about the on-going battle with exotic pests and diseases that plague our crops each year — the bugs are winning! These damaging invaders are highlighted in the Crop Report by the number of pest detections conducted by the Ag Commissioner's office.

While our Crop Report shows a decline in production values, the resiliency of the farming community is evident in the continued optimism that the next year will always be better. Yes, farmers may be the eternal optimists, but part of that is based in the ability to adapt and change to the situations as they arise and be early adopters of new technology that enhances the agronomics of farming.

Local farms recovered from the flooding with little in state and federal aid programs, and continue to produce without much support from Farm Bill programs. This is the pride of specialty crop production and the ability to produce food products that enhance our daily diets and health.

But, yet, much of that control is in how the weather cooperates.

How Many Different Crops Are Grown Each Year?

By Norm Groot, Monterey County Farm Bureau

onterey County is widely known as the Salad Bowl of the World — we produce more lettuce, spinach, and other leafy greens than any other region of the country. Even one of our TV stations uses the call letters KSBW denoting the significance of the Salad Bowl of the World.

Salinas Valley is also known for strawberries, artichokes, and wine grapes — significant crops that contribute to our mix of fresh food products grown here locally.

Add in cauliflower, broccoli, and celery and that's already a good variety of crops. But it doesn't stop there. We have so many other crops produced in Monterey County that contribute to the agricultural economy each year.

Did you know farmers grow leeks, bok choy, chard, cilantro, and kale here? carrots, cabbage, fennel, and mushrooms? radishes, brusssels sprouts, garlic, and parsley? These are just some of the other vegetable crops that are planted in our fields each year.

How about the over 40 different varieties of wine grapes? Everyone enjoys our Chardonnay, Sauvignon Blanc, Pinot Noir, and Cabernet Sauvignon, but we also have unusual varieties such as Marsanne, Semillon, Charbano and Tannat. All these varieties contribute to a robust winegrape sector that produced nearly \$200 million in 2023.

Fruits and nuts include avocados, olives, lemons, blackberries, and walnuts, all grown here in Monterey County. There are also farms growing barley, beans, oats, and alfalfa.

Monterey County has honey production, nursery stock and cut flowers, seed production, and livestock (rangeland cattle). We also have a robust cannabis sector that increased production to \$360 million in 2023.

But our mainstay crop remains leafy greens, totaling nearly \$1.3 billion in 2023, including varieties of romaine, butter leaf, endive, green leaf, red leaf and spring mix — most of this ending up in value-add packages for consumer convenience.

All together, these crops add up to over 150 varieties of vegetables, berries, citrus and cattle produced each year, helping to meet market demand and consumer preference.

Our fields are almost always

planted because of confluence of weather, water and soils that make it possible to produce these fresh food crops. Each year the mix changes somewhat, mostly due to field rotations that enhance soil health and help to break the cycle of pests and diseases.

We are indeed fortunate to have such a diverse array of crops in production each year, balancing our economic stability and providing over 60,000 jobs for local residents.

And this variety is the very definition of intense agriculture.

You can check out the full 2023 Crop Report, learning more about the challenges that farmers and ranchers face each year, at the Monterey County Farm Bureau website atwww.montereycfb.com.

Monterey County Top Crops 2023

Strawberries: \$903 million

Leaf Lettuce: \$782 million

Head Lettuce: \$493 million

Broccoli: \$468 million

Wine Grapes: \$194 million

Cauliflower: \$188 million

Celery: \$173 million

Spinach: \$138 million

Nursery Stock & Flowers: \$128 million

Livestock & Poultry: \$115 million





Getty Images

Housing: Who is Building?

By Norm Groot, Monterey County Farm Bureau

reminded that there is a housing crisis in California, including here in Monterey County. Prices continue to increase each month, with minimal new housing units coming to market to aid in supply. It's hard not to see that all of California has worked itself into a situation where many simply cannot afford to buy into the American dream.

For many decades, Monterey County has lagged in producing new housing units, either single-family homes or apartment/multi-family units. The state has now stepped up and provided numbers of housing units that each city and county must build to "catch up" with the demand. These numbers are putting additional strain on communities as they struggle to get new projects approved and built.

We can be thankful of new housing developments in Marina, King City, and elsewhere, that have added to our supply of units. But a



majority of these units are priced at market value, with a small component of low-income units mixed into these projects. We should also thank CHISPA for their efforts to build family workforce housing around the county.

It is clear we need to do better, particularly for those who are priced out of the market as costs of living continue to increase each month.

Newly proposed neighborhoods in Salinas and Gonzles will add substantial number of units to our housing stock — but it is taking a long time to get approvals and permits in place for these larger projects.

And not everyone in the community agrees that these are the right

projects or the right places.

There is one success story that is helping ease the housing crunch: the construction of workforce housing for farmworkers by their farm employers. In the past six years there have been multiple employer-sponsored housing units built, primarily on their own land, to house farmworkers in apartment style settings. Indeed, the design and construction of these projects have won awards for their efforts.

Monterey County can now boast that over 5,000 new "beds" have been built by farm employers for their employees — but this goes much farther than just a bed. These housing units are designed in an apartment-style with full kitchens, living space, and amenities such as recreation rooms to convey a quality of life, rather than just a place to sleep.

This new style of housing for farmworkers helps to alleviate the housing crisis within our communities. By providing housing for our workforce, employers are demonstrating that their employees are valued by providing a safe, affordable, and convenient housing solution. This leads to employee loyalty and reduces the turnover rates each year.

These housing units are fast becoming the model for other agricultural employers in California, where farmworkers are needed to harvest crops seasonally, or in Monterey County, nearly yearround. Once again, Monterey County farm employers are leading the way in providing solutions to community issues.

We are fortunate that our Planning Commissions, City Councils, and Supervisors have supported these housing projects as they have been proposed. Many of these have received swift approvals as the need for equitable farmworker housing has been elevated in our planning processes.

So who is building the most housing these days? It's the farm employers who continue to elevate the supply of housing for their employees.



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Sustainable Groundwater Management: Progress is Happening

By Norm Groot, Monterey County Farm Bureau

ack in 2015, then-Governor Jerry Brown signed into law the Sustainable Groundwater Management Act, promoting a new era of water management in California. This legislation came about because of the impacts not only of drought but the overdrafting of groundwater in the Central Valley area. Sustainable supply when sourced from groundwater must be achieved by 2040 for the most impacted groundwater basins around the state.

While our groundwater story is quite different here in Monterey County, we still need to comply with the new law (referred to as SGMA). The prime groundwater basin is the Salinas Valley, which has more of a plumbing issue than a deficit, and a seawater intrusion problem in the coastal zone area. The community formed the Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA) to lead the efforts to comply with SGMA — in the short timeframe before 2040.

The first step in this process was to submit groundwater sustainability plans to the State Department of Water Resources (DWR); six plans were developed for the sub-basin areas of the larger groundwater basin, each with slightly different characteristics and program plans. Defined were thresholds for water levels, practices and projects that could be adopted, and pathways for community engagement in the process.



All six plans were approved by DWR and implementation began even before the approvals were received. It's been pointed out by many other groundwater basins that the Salinas Valley plans were a model of how to achieve the required sustainability.

As defined by SGMA, sustainability of groundwater basins means that what is extracted each year must equal what is recharged or replaced in the groundwater basin, a delicate balance on both sides of the equation. Fortunately, the Salinas Valley has resources to help with recharge and replacement with water storage facilities of Nacimiento and San Antonio reservoirs. These water resources help to maintain that balance by flowing water into the Salinas River for percolation during the irrigation season.

With some projects proposed for construction, to ease some of the plumbing distribution issues in the various sub-basins, we are looking to solve our balance equation by the deadline date — but it will be an expensive process to get there as these projects will cost hundreds of



millions to construct.

The more daunting project will be dealing with seawater intrusion in the coastal zone; pushing the brackish water "line" back to the goal of Highway 1 will be a very challenging task, and very expensive to achieve. A feasibility study is underway to determine how best to construct this project and where the best "bang for the buck" can be successful. It may take more decades to achieve the goal of retreat of seawater intrusion than just the next 15 years.

Already there are discussions about other implementation practices such as land repurposing, demand management during periods of drought, and alternating fallowing methods to manage areas where groundwater challenges are most intense. The farming community, along with others in our greater

Salinas Valley community, are engaging in these discussions that will have economic and environmental impacts that need to be assessed and mitigated.

Already we are seeing progress in irrigation water reductions. Over the past quarter-century, irrigation water extractions have been reduced by 20% while irrigated farmland has increase by 5% and crop values have increased over 40%. This has been achieved by a substantial investment in irrigation technology such as micro irrigation and computer aided models that help with evapotranspiration.

Water is indeed a finite resource that must be managed and the local farming community is stepping up to the plate to ensure that this resource is used efficiently to produce our fresh food items each season.