

**2021 - 2022
Ventura County Grand Jury**



Final Report

**Cybersecurity of Water Providers
in Ventura County**

May 11, 2022

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Cybersecurity of Water Providers in Ventura County

SUMMARY

Cyber-attacks are a serious threat to the public drinking water supply. Recent cyber-attacks around the United States have resulted in community water supplies being poisoned or their suppliers' business operations being held hostage by ransomware. In recognition of this critical threat, the 2021-2022 Ventura County Grand Jury (Grand Jury) investigated the cybersecurity of Ventura County public water providers.

The Grand Jury investigated two primary areas of cyber vulnerability in the water sector: the Information Technology (IT) used to bill consumers and record usage, and the Operational Technology (OT) used to control and monitor treatment and delivery of the water supply. Malicious actors can take advantage of network vulnerabilities and/or weak user access controls in either IT or OT to disrupt the business and the water service, and potentially degrade public safety.

The Grand Jury found that Ventura County relies on a complex network of public and private water wholesalers and retailers. The investigation encompassed those public water providers who supply 76% of Ventura County water users and concluded that there is considerable opportunity for improvement of cybersecurity policies and procedures.

The Grand Jury recommends that Ventura County water providers seek out and utilize free Federal and State expert support for implementing cybersecurity best practices, such as regular vulnerability assessments and cyber training for all employees. The Grand Jury further recommends that water providers utilize forums such as water agency associations to share information concerning cybersecurity threats, attacks, protections and remedies.

The Grand Jury recommendations can serve as a model to strengthen the cybersecurity of all Ventura County water providers.

METHODOLOGY

The Grand Jury obtained information from the following:

- Environmental Protection Agency (EPA) website
- Cybersecurity & Infrastructure Security Agency (CISA) website
- American Water Works Association (AWWA) website
- Water Information Sharing and Analysis Center (WaterISAC) website
- Internet research to gather information from a variety of authoritative sources
- Audio-visual presentation entitled "Water Supply Conditions and Drought Update" to the Simi Valley City Council, October 11, 2021
- Interviews with officials who have knowledge of the IT and OT of the community water systems in Ventura County

BACKGROUND

The Cyber Threat

In 2021, there were two well-publicized attempts by malicious actors to poison water supplies in Oldmar, Florida and the San Francisco Bay area. (Ref-01, Ref-02) In March 2019, a hacker gained unauthorized access to a public water plant in Kansas. (Ref-03) Ransomware attacks against water providers occurred in various locales, including Nevada, Maine, New Jersey, and California between September 2020 and August 2021. (Ref-04) These cyber-attacks involved the IT systems supporting the providers, such as customer account information and billing, as well as the OT systems that operate the water provider's physical plant. (Ref-01, Ref-04, Ref-05) The Grand Jury investigation addressed the vulnerability of Ventura County water providers to similar cyber-attacks, which could disrupt clean water availability and/or provider business operations, potentially threatening public health and safety. (Ref-02)

In 2019, the AWWA declared that "[c]yber risk is the top threat facing business and critical infrastructure in the United States." They also reported that "given the very real threat and significant consequences, it is critical that organizations prioritize cybersecurity and take reasonable steps to prevent, detect and respond to cyber incidents." The AWWA further observed that "optimistic reliance on sovereign immunity defenses or insurance policies, or an unconfirmed expectation that someone else within the organization is 'handling' cybersecurity issues, are not sufficient to protect an organization or its leaders from the repercussions of a cyber-attack...." (Ref-06) In response, CISA has published best practices for enhancing cybersecurity, including but not limited to risk assessments, user training, data backup and multi-factor authentication for remote access. (Ref-07)

In January 2022, the Biden-Harris Administration announced a new Water Sector Action Plan to secure water systems from cyberattacks. (Ref-08) The action plan, sponsored by the EPA and its federal partners, encourages the water sector to adopt technology which will enable early detection of cyber threats. (Ref-09) The plan will also boost information sharing about cyber threats between water utilities and the federal government. (Ref-08, Ref-09)

Ventura County Water Infrastructure

According to EPA's Water Systems Summary for Quarter 4 2021, there are 64 community water systems that supply drinking water to the residents of Ventura County. (Ref-10) About 98% of the county water is supplied by the 25 largest systems. The Grand Jury investigation focused on public water providers, as almost 80% of the county water agencies are operated by the County, its cities, and special districts. The Grand Jury investigation addressed 95% of these community water systems, corresponding to 76% of Ventura County water users. (Att-01)

More than half of the water delivered to Southern California homes and businesses is imported from Northern California by the Metropolitan Water District of Southern California (MWD) through the State Water Project and from the Colorado River. (Ref-11) The MWD allocates a portion of this water to Ventura County. (Ref-05) As shown on the Ventura County Water Purveyors map, two wholesale water

providers, Calleguas Municipal Water District and United Water Conservation District, are primarily responsible for distribution of this imported water to Ventura County communities. As shown on the Ventura County Water Purveyors map, these water districts provide water to every city in Ventura County except the City of Ojai, which is served by Casitas Municipal Water District. (Att-02) The water that comes from the MWD is already filtered and treated; the water from local sources is filtered and treated locally. (Ref-05, Ref-12, Ref-13) Some imported water is re-treated if it has been stored for any length of time prior to its delivery to the end user. (Ref-05) Each of these points of distribution and treatment is a potential target of a cyber-attack. (Ref-04, Ref-05)

Limitations to Scope

In many cases, the IT support for municipal water systems was housed within the respective city IT division rather than dedicated to the water department. As the cybersecurity of the cities' IT divisions was addressed in a recent Grand Jury report, the 2021-2022 Grand Jury elected not to make it our primary focus. (Ref-14) Although the Grand Jury did not interview all of Ventura County water providers, the Grand Jury recommendations could serve as a model to strengthen the cybersecurity of all.

The Grand Jury also considered that this report's findings and recommendations could potentially provide useful information to a malicious actor, as could the responses of the various water providers to this report. Therefore, this report does not make overly specific assertions of vulnerabilities or recommended remedies.

DISCUSSION

For each water provider, the chemical treatment, filtration, storage and distribution of water are controlled by OT, which is remotely accessed and managed by an industrial control system identified as the Supervisory Control and Data Acquisition (SCADA) system. (Ref-05, Ref-15) Hereafter this report will focus on SCADA as the cyber vulnerable component of OT. SCADA operators are trained in manual operation of pumps, valves and other equipment as backup in the event of SCADA failure or interruption. Additionally, each provider employs enterprise IT systems that support their workforce and provide customer interface, including usage tracking and billing for services rendered. Both the IT and SCADA systems have inherent cyber vulnerabilities, being dependent upon computer networking, remote access and user and operator awareness. SCADA administrators interviewed represented their systems to be less vulnerable due to fewer authorized users. (Ref-05) However, any cyber-attack on SCADA "...could result in devastating physical consequences to such things as critical infrastructure and services, the environment, and even human life." (Ref-16)

Seven of the 14 water providers interviewed by the Grand Jury have experienced some form of cyber-attack within the last five years, ranging from successful phishing attacks to ransomware. (Ref-05) These attacks exploited cyber vulnerabilities such as an attacker's familiarity with the network, vulnerability of connected devices, or poor access controls. (Ref-05, Ref-17) The AWWA website provides tools and a robust suite of guidance to support cybersecurity assessments,

including review of security weaknesses. (Ref-18) CISA offers a variety of exercises simulating cyber-attacks, many levels of cyber awareness training, and detailed vulnerability assessments, all of which are free to the recipient. Additionally, CISA offers resources to address vulnerabilities identified by their assessments. (Ref-19) The California State Water Resource Control Board also offers information to assist water agencies in becoming more cyber aware and cyber resilient. (Ref-20) Only three of the water providers interviewed have pursued available state or federal assistance to improve cybersecurity. (Ref-05)

The Grand Jury investigation revealed that all Ventura County public water providers interviewed have some level of cybersecurity for their IT and SCADA. Ten of 14 water providers interviewed have recently conducted cyber vulnerability assessments, however the complexity level and frequency vary among those assessments. (Ref-05) Cybersecurity experts recommend that a robust cyber security program includes firewalls, backups, controlled VPN access for mobile devices and multi-factor authentication. (Ref-21, Ref-22) All the water providers interviewed utilize remotely accessible IT and SCADA systems. Thirteen of 14 water providers interviewed employ firewalls, VPN access and/or multi-factor authentication to protect against unauthorized access. The water providers also employ various forms of data backup; some utilize the Cloud, while others utilize remote servers. (Ref-05)

Per the America's Water Infrastructure Act of 2018, every drinking water utility that serves at least 3,300 citizens was required to submit a Risk and Resilience Assessment by June 30, 2021 and update it at least every five years. (Ref-23) These assessments specifically address SCADA vulnerability. All Ventura County water providers interviewed by the Grand Jury are aware of this requirement, and 12 of 14 have completed the assessment. (Ref-05)

The Biden-Harris Administration's Water Sector Action Plan and CISA recommend raising the awareness of cyber risks and lessons learned from past incidents in the water and wastewater sector through cybersecurity training and information sharing. (Ref-08, Ref-21) Twelve of 14 Ventura County water providers interviewed by the Grand Jury have recently conducted cyber training in addition to the operator training required to achieve and maintain operational certification. All water providers interviewed are members of professional water associations such as the Association of Water Agencies Ventura County (AWAVC), the Association of California Water Agencies (ACWA) and AWWA; however, none have shared information with other local providers regarding cyber-attacks. (Ref-05)

The AWWA encourages member agencies to ensure their business recovery plans identify potentially disruptive events including cyber-attack, estimate their impact, and implement mitigation strategies. (Ref-24) Thirteen of 14 Ventura County water providers interviewed by the Grand Jury confirmed that their agencies had some form of business recovery plan, but not all addressed recovery from cyber incidents. (Ref-05) CISA directs that all cyber incidents must be reported to Department of Homeland Security (DHS) and the Federal Bureau of Investigation (FBI) in addition to local law enforcement. (Ref-21) All water providers interviewed agreed that cyber incidents should be reported, however only five of 14 identified FBI or DHS as report recipients. (Ref-05)

FINDINGS

- F-01.** The Grand Jury finds that cybersecurity of both IT and SCADA systems is essential to safe and effective delivery of water.
- F-02.** The Grand Jury finds inconsistent levels of cybersecurity for IT systems among the investigated water providers.
- F-03.** The Grand Jury finds inconsistent levels of cybersecurity for SCADA systems among the investigated water providers.
- F-04.** The Grand Jury finds that the level of training on cybersecurity is inconsistent among the investigated water providers.
- F-05.** The Grand Jury finds that the level and frequency of cybersecurity assessments are inconsistent among the investigated water providers.
- F-06.** The Grand Jury finds that knowledge of cyber incident reporting requirements is inadequate among the investigated water providers.
- F-07.** The Grand Jury finds that there is insufficient information exchange among the interviewed water providers regarding cybersecurity threats, attacks, protections and remedies.
- F-08.** The Grand Jury finds that there is insufficient awareness among public water providers of available government expert cybersecurity services and support for water provider systems.
- F-09.** The Grand Jury finds that not all the investigated water providers' business recovery plans addressed recovery from a cyber incident.

RECOMMENDATIONS

- R-01.** The Grand Jury recommends that the investigated public water providers regularly assess their cybersecurity, addressing both IT and SCADA, consistent with EPA and CISA recommended best practices. (F-01, F-02, F-03, F-05)
- R-02.** The Grand Jury recommends that the investigated public water providers regularly share and exchange information regarding cybersecurity threats, attacks, protections and remedies, and provide training, using such forums as the AWAVC. (F-01, F-02, F-03, F-04, F-06, F-07)
- R-03.** The Grand Jury recommends that the investigated public water providers use free federal and state expert assistance to enhance cybersecurity. (F-01, F-02, F-03, F-05, F-06, F-07, F-08)

- R-04.** The Grand Jury recommends that the investigated public water providers regularly conduct cybersecurity awareness training. (F-01, F-02, F-03, F-04)
- R-05.** The Grand Jury recommends that the investigated public water providers address recovery from cybersecurity incidents in their business recovery plans. (F-01, F-02, F-03, F-09)
- R-06.** The Grand Jury recommends that each investigated public water provider establish a CISA-compliant internal protocol for reporting cyber incidents. (F-01, F-02, F-03, F-06)

RESPONSES

Responses required from:

The following agencies within 90 days:

Calleguas Municipal Water District (F-01, F-02, F-03, F-04, F-05, F-06, F-07, F-08, F-09) (R-01, R-02, R-03, R-04, R-05, R-06)

Camrosa Water District (F-01, F-02, F-03, F-04, F-05, F-06, F-07, F-08, F-09) (R-01, R-02, R-03, R-04, R-05, R-06)

Casitas Municipal Water District (F-01, F-02, F-03, F-04, F-05, F-06, F-07, F-08, F-09) (R-01, R-02, R-03, R-04, R-05, R-06)

Triunfo Water District (F-01, F-02, F-03, F-04, F-05, F-06, F-07, F-08, F-09) (R-01, R-02, R-03, R-04, R-05, R-06)

United Water Conservation District (F-01, F-02, F-03, F-04, F-05, F-06, F-07, F-08, F-09) (R-01, R-02, R-03, R-04, R-05, R-06)

Ventura County Public Works Agency (F-01, F-02, F-03, F-04, F-05, F-06, F-07, F-08, F-09) (R-01, R-02, R-03, R-04, R-05, R-06)

City of Camarillo Department of Public Works (F-01, F-02, F-03, F-04, F-05, F-06, F-07, F-08, F-09) (R-01, R-02, R-03, R-04, R-05, R-06)

City of Fillmore Public Works Department (F-01, F-02, F-03, F-04, F-05, F-06, F-07, F-08, F-09) (R-01, R-02, R-03, R-04, R-05, R-06)

City of Oxnard Public Works Department (F-01, F-02, F-03, F-04, F-05, F-06, F-07, F-08, F-09) (R-01, R-02, R-03, R-04, R-05, R-06)

City of Port Hueneme Public Works Department (F-01, F-02, F-03, F-04, F-05, F-06, F-07, F-08, F-09) (R-01, R-02, R-03, R-04, R-05, R-06)

City of Santa Paula Public Works Department (F-01, F-02, F-03, F-04, F-05, F-06, F-07, F-08, F-09) (R-01, R-02, R-03, R-04, R-05, R-06)

City of Simi Valley Public Works Department (F-01, F-02, F-03, F-04, F-05, F-06, F-07, F-08, F-09) (R-01, R-02, R-03, R-04, R-05, R-06)

City of Thousand Oaks Public Works Department (F-01, F-02, F-03, F-04, F-05, F-06, F-07, F-08, F-09) (R-01, R-02, R-03, R-04, R-05, R-06)

City of Ventura, Ventura Water (F-01, F-02, F-03, F-04, F-05, F-06, F-07, F-08, F-09) (R-01, R-02, R-03, R-04, R-05, R-06)

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ATTACHMENTS

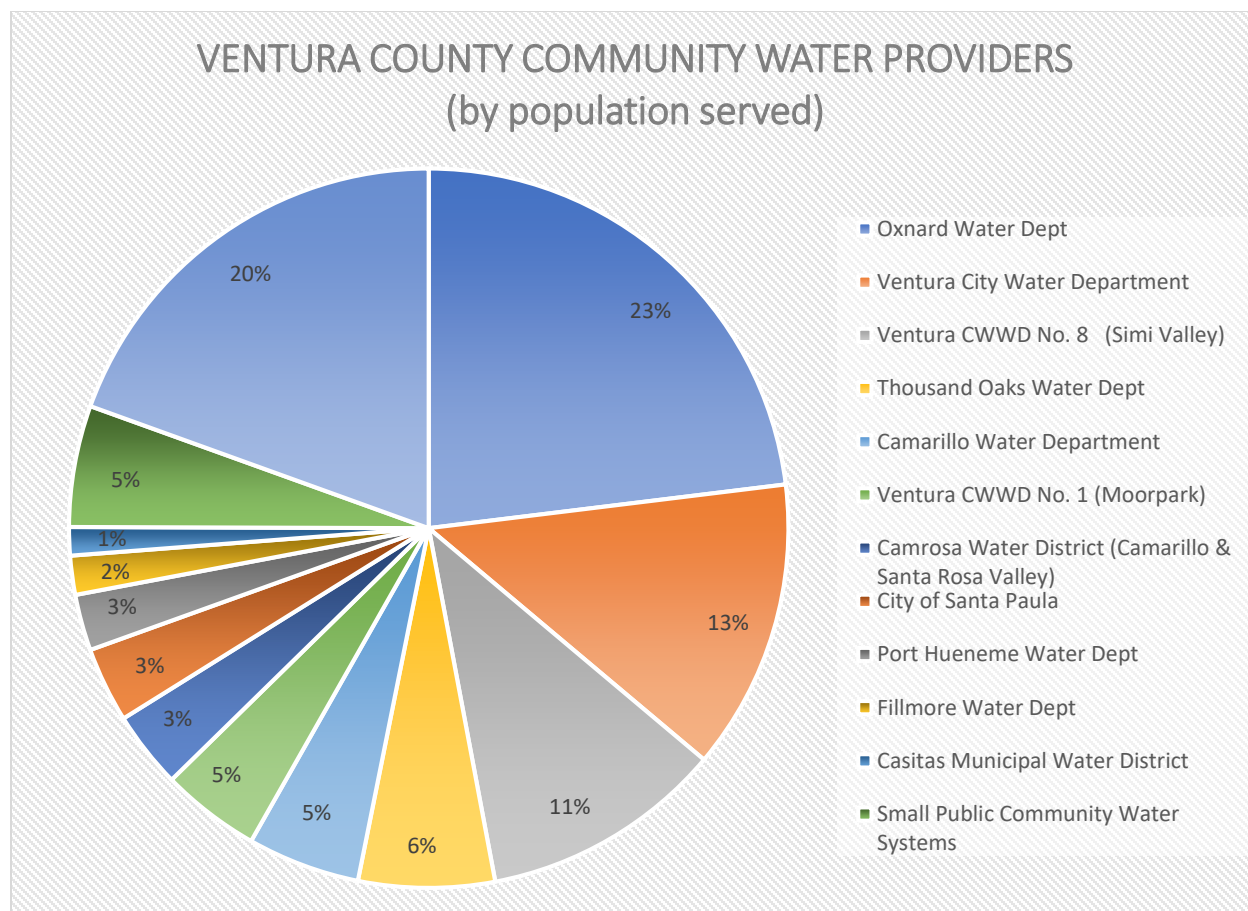
- Att-01.** Ventura County Water Providers by Population Served
- Att-02.** Map of Ventura County Water Purveyors

GLOSSARY

<u>TERM</u>	<u>DEFINITION</u>
ACWA	Association of California Water Agencies
AWAVC	Association of Water Agencies Ventura County
AWWA	American Water Works Association
CISA	Cybersecurity & Infrastructure Security Agency
CWS	Community Water Systems
DHS	Department of Homeland Security
EPA	Environmental Protection Agency
FBI	Federal Bureau of Investigation
IT	Information Technology
OT	Operational Technology
SCADA	Supervisory Control and Data Acquisition
VPN	Virtual Private Network
Water ISAC	Water Information Sharing and Analysis Center

Attachment-01

Ventura County Waster Providers by Population Served



The Grand Jury developed this pie chart and the following table with data from EPA Safe Drinking Water Information Service Federal Reports Search. (Ref-10)

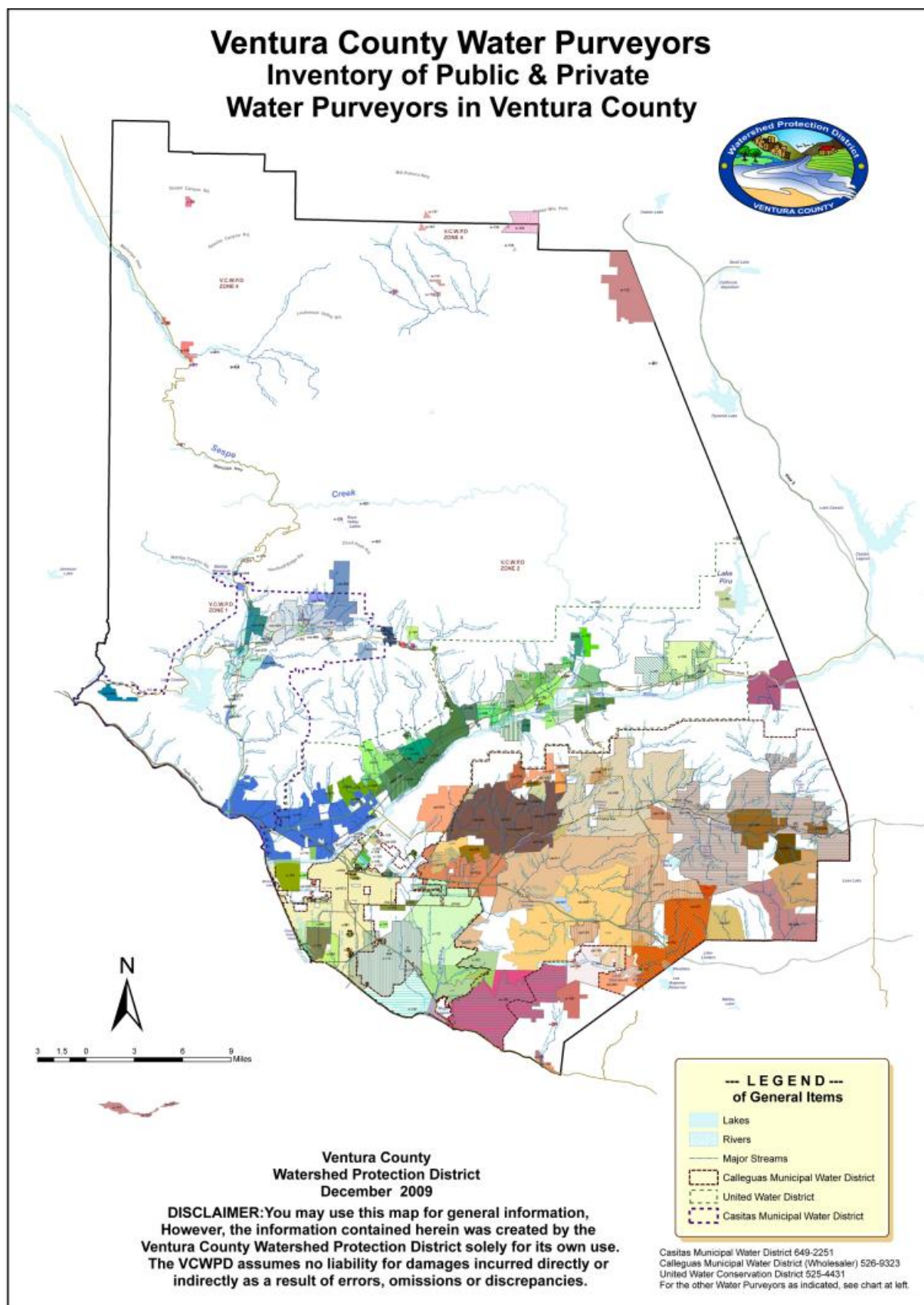
COMMUNITY WATER PROVIDERS	POPULATION SERVED
Oxnard Water Department	200,232
(City of) Ventura Water	113,500
Ventura CWWD No. 8 - Simi Valley	94,738
Cal American Water Company	69,828
Thousand Oaks Water Department	53,157
Golden State Water Company - Simi Valley	43,934
Camarillo Water Department	40,481
Ventura CWWD NO. 1 - Moorpark	38,703
Camrosa Water District	30,000
City of Santa Paula	29,321
Port Hueneme Water Department	21,926
California Water Service Company - Westlake	19,477
Fillmore Water Department	15,222
Oak Park Water Service (now Triunfo)	12,200
Casitas Municipal Water District	11,042

COMMUNITY WATER PROVIDERS (CONTINUED)	POPULATION SERVED
Ojai Water System	6,712
Ventura River Water District	5,700
Channel Islands Beach CSD	5,180
Pleasant Valley Mutual Water Company	5,000
Meiners Oaks CWD	4,200
Naval Base Ventura County, Port Hueneme	3,500
Ventura CWWD No. 19 - Somis	3,275
Warring Water Service Inc.	2,100
Cal American Water Company - Las Posas Estates	2,049
Ventura CWWD No. 17 - Bell Canyon	2,049
Crestview Mutual Water Company	2,040
Vineyard Avenue Acres MWC	1,820
Cal American Water Company - Rio Plaza	1,716
Naval Base Ventura County, Point Mugu	1,700
Ventura CWWD No. 38 - Lake Sherwood	1,527
Vineyard Ave Estates MWC	1,200
Dempsey Road Mutual Water Company	990
Rio Manor Mutual Water Company	983
Nyeland Acres Mutual Water Company	915
Garden Acres Mutual Water Company	840
Limoneira Ranch #1	832
Senior Canyon Mutual Water Company	800
Yerba Buena Water Company	690
Rancho Sespe Workers Imp Association	600
Cloverdale Mutual Water Company	455
Strickland Acres	429
Saviers Road Mutual Water Company	368
Fillmore Irrigation Company	353
Sisar Mutual Water Company	340
Siete Robles Mutual Water Company	323
Casitas Mutual Water Company	238
Cypress Mutual Water Company Inc.	228
Del Norte Mutual Water Company	211
Saticoy Club (Ventura Water)	196
U.S.N., San Nicolas Island	187
Glenview Mobile Park	160
Navalair Mobile Home Park	160
Elkins Ranch	150
Middle Road Mutual Water Company	134
Solano Verde Mutual Water Company	100

COMMUNITY WATER PROVIDERS (CONTINUED)	POPULATION SERVED
Fillmore West Mobile Home Park	99
Tico Mutual Water Company	70
South Mountain Mutual Water Company	58
Community Mutual Water Company	53
Esterina Properties	50
San Cayetano Mutual Water Company	46
Krotona Institute	31
Rincon Water & Road Works	25
Waters Road Domestic Users Group	25

Attachment-02

Map of Ventura County Water Purveyors



**2021 - 2022
Ventura County Grand Jury**



Final Report

**Mental Health Services and
Wellness Centers in Ventura
County Schools**

June 2, 2022

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Mental Health Services and Wellness Centers in Ventura County Schools

SUMMARY

Across America, school-aged children are experiencing an unprecedented mental health crisis. One in three high school students report persistent feelings of sadness or hopelessness. From 2017 to 2019 one of six Ventura County students in grades 7, 9, and 11 considered suicide. Half of all mental illness presents itself by age 14, yet few children get the services they need. Despite the one time COVID stimulus funds, there remains a shortage of resources addressing mental health concerns among school-aged youth.

The 2021-2022 Ventura County Grand Jury (Grand Jury) investigated the resources used by the Ventura County Office of Education (VCOE), five Ventura County public school districts, and Ventura County Behavioral Health (VCBH) to meet the mental health needs of school-aged youth.

The Grand Jury found that the school setting is an effective venue to provide mental health services and early mental health intervention. The Grand Jury also found that on-campus Wellness Centers improve access to mental health services while promoting the well-being of students.

The Grand Jury found that funding is not adequate for the long-term sustainability of school-based mental health services. The Grand Jury found that Medi-Cal is underutilized as a funding source for mental health services by VCOE and Ventura County school districts. While barriers exist to claim Medi-Cal matching funds, the Grand Jury found that other California counties have successfully claimed these funds to finance sustainable school-based mental health services.

Based on the initial success of a joint VCOE and VCBH sponsored Wellness Center pilot program, the Grand Jury recommends that Wellness Centers be expanded to all Ventura County public high schools, and that VCOE and VCBH develop a strategy to expand the Wellness Center pilot program into Ventura County public middle schools.

The Grand Jury recommends that VCOE, Conejo Valley Unified School District (CVUSD), Simi Valley Unified School District, Oxnard Union High School District (OUHSD), and Ventura Unified School District, seek and obtain sustainable funding from public and private sources, and create an infrastructure to claim Mental Health Medi-Cal Administrative Activities (MH MAA) funds for Wellness Centers.

Recommendations from the Grand Jury can serve as a model for other Ventura County school districts to strengthen the mental health services accessible to their students.

METHODOLOGY

The Grand Jury reviewed information from the following:

- California law related to mental health for children
- Internet research to gather relevant information from a variety of authoritative sources
- Relevant documents provided by education and mental health administrators
- Interviews with Ventura County and Alameda County officials who have knowledge of the current mental health programs in each County and schools

BACKGROUND

Youth Mental Health Crisis

The American Academy of Pediatrics, the American Academy of Child & Adolescent Psychiatry and the Children's Hospital Association jointly declared in late 2021 a National State of Emergency in Children's Mental Health in light of "soaring rates of depression, anxiety, trauma, loneliness, and suicidality with lasting impacts on [young people], their families and their communities." The joint declaration further stated that "the pandemic intensified the youth mental health crisis: across the country we have witnessed dramatic increases in Emergency Department visits for all mental health emergencies including suspected suicide attempts. This...crisis in child and adolescent mental health...represents an acceleration of trends observed prior to 2020." (Ref-01) "Nearly 1 in 3 parents say their children's mental health is worse now than it was before the pandemic," according to a Kaiser Family Foundation poll. (Ref-02)

The U.S. Surgeon General's 2021 Advisory *Protecting Youth Mental Health* points out that "...young people have shown alarming increases in the prevalence of certain mental health challenges – in 2019, one in three high school students and half of female students reported persistent feelings of sadness or hopelessness...." This Advisory defines mental health as "emotional, psychological, and social wellbeing," and notes that the "challenges today's generation of young people face are unprecedented.... And the effect these challenges have had on their mental health is devastating." (Ref-03)

The 2017-2019 California Healthy Kids Survey (CHKS) revealed that 30% of California grade 7 students, 33% of grade 9 students and 37% of grade 11 students reported experiencing chronic sadness. (Ref-04) The CHKS survey also indicated that 30% of Ventura County grade 9 students and 36% of grade 11 students reported chronic sadness. (Ref-05) Statewide, 15% of grade 7, 16% of grade 9, and 16% of grade 11 students considered suicide between 2017 and 2019. (Ref-04) In Ventura County, 16% of grade 7, 16% of grade 9, and 17% of grade 11 students considered suicide. (Ref-06) In 2019, suicide was the second leading cause of death in California among youth ages 15 to 24. (Ref-07)

According to the North Carolina Medical Journal (March 2020), "[a]ny comprehensive understanding of contemporary adolescents' mental health requires

a consideration of the role of social media.” (Ref-08) The Pew Research Center points out that “[r]oughly eight-in-ten teens’ ages 13 to 17 (81%) say social media makes them feel more connected to what’s going on in their friends’ lives.” (Ref-09) However, the February 2020 Canadian Medical Association Journal reported “[h]igh proportions of youth engage in heavy smartphone use and media multitasking, with resultant chronic sleep deprivation, and negative effects on cognitive control, academic performance and socioemotional functioning.” “Evidence from a variety of...studies implicate smartphone and social media use in the increase of mental distress, self-injurious behavior and suicidality among youth....” (Ref-10)

Long-Term Consequences of Unaddressed Mental Health

“Half of all mental illness presents itself by age 14, yet few children get the services they need,” according to the America’s School Mental Health 2022 Report Card. (Ref-11) The California Children’s Trust report, *Reimagining Child Well Being in Santa Clara County*, states that “[s]tudents with unaddressed needs are more likely to experience difficulties in school, including:

- Higher rates of tardiness and absenteeism
- Higher rates of suspension, expulsion, and high school drop-out
- Lower grades and test scores
- Disruptive behavior in classrooms and hallways
- Perpetrating or being the victim of frequent bullying as victim
- Using alcohol and other drugs on campus” (Ref-12)

A study in the Journal of the American Academy of Child & Adolescent Psychiatry shows “[a]ny childhood/adolescent depression was associated with higher levels of adult anxiety and illicit drug disorders and also with worse health, criminal, and social functioning...” into adulthood. (Ref-13)

The U.S. Surgeon General’s 2021 Advisory recognizes that the “prevalence of mental health challenges varies across subpopulations;” for example, “socioeconomically disadvantaged children...are two to three times more likely to develop mental health conditions than peers with higher socioeconomic status.” (Ref-03) Those at risk include children of families in crisis, children in poverty, LGBTQ+ children, and victims of violence, sexual abuse, racism or bullying. These risk factors combine with pervasive stigma and shame about mental health needs within families and communities to further hinder individuals from seeking and accepting mental health services. (Ref-14, Ref-15)

Legislative Efforts to Address the Youth Mental Health Crisis

Federal, state and local agencies have recognized the decline of mental well-being in American children and the significance of devoting resources at public schools to improve positive mental health. (Ref-15, Ref-16, Ref-17, Ref-18) The U.S. Surgeon General’s 2021 Advisory recommends the expansion of mental health programs and the hiring of more mental health staff in schools (Ref-03). The California Mental Health Services Act (MHSA) establishes criteria for awarding funds to all school

districts and county offices of education. Funds are directed to programs preventing mental illness from becoming severe, improving access to underserved populations such as foster youth, LGBTQ+ or expelled/suspended students, and outreach to families to recognize potentially severe mental illness. The Act targets mental health services for children and includes campus-based mental health services. The Act charges the California Mental Health Services Oversight & Accountability Commission (MHSOAC) to target secondary students with trauma prevention and early intervention programs. (Ref-19, Ref-20) California's "...Children and Youth Behavioral Health Initiative was announced in July 2021 with a \$4.4B investment to enhance, expand and redesign the system that supports behavioral health for children and youth." This initiative "will be designed and implemented in partnership with [California Health & Human Services Agency] CalHHS departments, education stakeholders from early childhood, K-12 and higher education...." (Ref-21)

Mental Health Services at School

The 2021 data collected by Mental Health America shows that 66% of California youth with major depression did not receive any mental health treatment, ranking California 45th out of 50 states and the District of Columbia in providing this mental health treatment. (Ref-22) A 2019 University of Maryland School of Medicine report states that "children and adolescents are more likely to receive needed mental health care in their school than in any other setting. Of children and adolescents who receive mental health services, 70%-80% receive them in school. Schools offer a more accessible, less stigmatizing environment than traditional community-based mental health settings...." (Ref-23) In the school setting teachers, counselors and other staff are situated and trained to identify mental health issues. (Ref-15) The 2019 report also states "[y]outh are 6 times more likely to complete evidence-based treatment when offered in schools than in other community settings." (Ref-23)

School Climate

According to a 2020 MHSOAC report, "[a] positive school climate is a major factor in student experiences and success." It "...benefits all students, especially those at risk." This report further cites "[f]our aspects of school climate are associated with mental health and wellbeing: 1) positive social connections and relationships; 2) school safety; 3) school connectedness; and, 4) academic environment. Students who feel that their schools have these characteristics report better psychosocial wellbeing, more positive and pro-social behaviors, fewer mental health issues, and fewer delinquent or risk behaviors." (Ref-14)

Strategies for Mental Health Intervention in Schools

Mental health service providers, researchers and educators utilize a 3-tier framework in the delivery of mental health services to school children. Fig-01 is a commonly used representation of the 3-tier framework. Tier 1 refers to schoolwide preventive efforts for general healthy living and learning (core instruction), which applies to 75-90% of students. Tier 2 includes short-term targeted interventions for counseling, support or referral, which are applied to 10-15% of students. Tier 3

impacts less than 10% of students who "...have significant challenges that do not respond to intervention and support in Tier 1 or Tier 2." (Fig-01) (Ref-14, Ref-24)

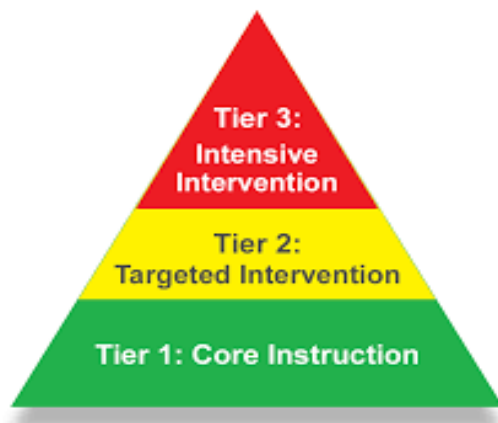


Fig-01 - Multi-Tier System of Supports (Ref-25)

Wellness Centers and School-Based Health Centers

The Wellness Center is an on-campus model that delivers primarily Tier 1 and some Tier 2 services while referring Tier 3 services to off-campus mental health providers. This model focuses on providing a safe, supportive environment where students can discuss concerns and needs in a confidential, non-judgmental space. (Ref-15, Ref-26) Wellness Center services include "mental health screening, intervention, counseling, education, and referrals; crisis intervention; linkages to a vast network of counseling and mental health treatment; coordination with health, educational, and other community services; suicide prevention; drop-out prevention; and outreach to high-risk youth." (Ref-27)

The school-based health center model provides a full range of on-campus medical services in addition to mental health resources provided in a Wellness Center. (Ref-28) The American Journal of Public Health notes that "[s]tudies have shown a significant decline in depression among students who received school health center mental health services and a reduced likelihood of suicide ideation among students attending schools with school health centers." (Ref-29)

Ventura County School Districts

Ventura County has 20 public school districts, each accountable to its own school board. There are approximately 140,000 students in 190 schools including 32 public high schools and 40 public middle schools. (Ref-30, Ref-31) The Ventura County Office of Education (VCOE) "collaborates with [these 20] local districts to provide a coordinated and coherent system of support." Training, workshops, professional learning and coaching are available as well as administrative and fiscal supports to these districts. (Ref-32) The Grand Jury interviewed officials from five public school districts representing 60% of Ventura County's student population.

DISCUSSION

Youth Mental Health in Ventura County

Experts consider school to be the “bedrock of the community and the place where children spend most of their time outside of their homes,” and “central to promoting wellness, and accurately identifying and quickly responding to trauma and emerging mental health needs.” (Ref-14) Ventura County school districts have implemented an array of mental health services and programs for their students ranging from traditional counseling to various referral programs. In partnership with Ventura County Behavioral Health (VCBH), there are 72 mental health clinicians assigned throughout county schools. (Ref-15)

School districts have also partnered with VCBH or VCOE on a number of programs involving referrals to contracted off-campus entities. Logrando Bienestar helps Latinx students overcome stigma and navigate mental health services. (Ref-33) Care Solace connects youth to mental health services. (Ref-34) Rainbow Umbrella provides education, support and stigma reduction for LGBTQ+ youth through community groups and meetings. (Ref-35) Building Resilience and Inclusion Through Engagement (BRITE) promotes well-being and helps youth with substance abuse problems. (Ref-36) For special education students, VCOE partners with VCBH to provide intensive home-based mental health intervention to students and their families through the Collaborative Educational Services (COEDS) program. (Ref-37) Interface Children & Family Services is a comprehensive provider of mental health and trauma treatment. (Ref-38)

The Ventura County Supervisors approved funding for an independent assessment of the County’s mental health system in February 2022. The assessment will examine the entire system and where intersections with other agencies exist, including education, hospital systems, law enforcement, and other social services. The assessment is expected to take 18 months, beginning in mid-2022. (Ref-39)

Wellness Centers

A 2020 MHSOAC report “identified common barriers to promoting student wellness and addressing the signs and symptoms of mental health needs when they first arise, including the following:

- The education system’s priority focus on learning and academic achievement...
- Schools lack of on-campus resources, including sufficient numbers of school-based mental health professionals...
- The complexity of family needs...
- Mental health services and supports for children and their families are often poorly organized...
- Stigma and shame about mental health needs are pervasive in families and communities.” (Ref-14)

Some Ventura County school districts have utilized Wellness Centers, physically located on school campuses, to address the mental health needs of youth. Wellness Centers place an emphasis on Tier 1 services. (Ref-15)

"The goals of Wellness Centers include:

- Prevent mental illness from becoming severe and disabling
- Reduce risk factors negatively affecting mental health and academic success
- Improve access to mental health services
- Create a safe and supportive environment to confidentially discuss concerns, free from stigma or shame
- Provide a space for helpful interaction with peers" (Ref-27)

Conejo Valley Unified School District Wellness Centers

In 2020, CVUSD established Wellness Centers at all five of its high schools with a staff of five licensed or near-licensed clinicians. Ventura County is experiencing a severe shortage of qualified mental health counselors, social workers, and therapists. In response, the district enhanced mental health staffing capacity by utilizing 13 college student interns. Hours of operation on school days are before, during and after school. Each center has a separate physical space with couches, and private rooms for in-person counseling. The start-up cost for establishing the Wellness Centers was funded by the Conejo Schools Foundation (10%), a California MHSA grant (30-40%) and the remainder by one-time COVID stimulus funds. Feedback from "students, teachers, counselors, and parents throughout the district is overwhelmingly positive." (Ref-15)

Ventura County Office of Education Wellness Center Pilot Program

In 2021, VCOE collaborated with VCBH to obtain a MHSA grant for \$6.6 million over five years to set up Wellness Centers on eight high school campuses within Ventura County: four in Oxnard, and one each in Fillmore, Moorpark, Santa Paula, and Ventura. However, there are no Wellness Centers in Ventura County public middle schools. On school days, each center is staffed with a half-time coordinator, limiting service hours to half days. These Wellness Centers opened in the fall of 2021. A joint VCOE and VCBH Wellness Center Administrative Team meets regularly to monitor and refine services. (Ref-15)

Oxnard Union High School District Wellness Centers

OUHSD's administration and its school board decided to expand the four VCOE and VCBH pilot program Wellness Centers to serve all its students and reallocated funds from its budget to pay for five additional centers. The expansion included funding for a director to manage the Centers, two full-time wellness specialists, and one guidance technician for each center. Centers are open before, during and after school and include some Saturday hours. Ten to twelve trained student peers, under the direction of an adult specialist at each campus, manage wellness communications for the entire student body. These communications include social

media/TV platform, school announcements, peer visits to classrooms, "Kindness Weeks" and other mental health awareness campaigns. (Ref-15)

Other Examples of School-Based Health Centers or Wellness Centers

Alameda County has had school-based health centers providing mental health services in addition to medical services since 1996. Its 2020-21 preliminary evaluation of the centers reviewed clinical data, surveyed program participants (students), quarterly reports and activity logs. The evaluation identified 36% of visits were for behavioral health issues. Data from those surveyed showed 93% of students felt the centers helped them "deal with stress/anxiety better," as well as helped them "stay out of trouble." When asked if they agree or strongly agree how they feel because of Health Centers, 95% reported they "do better in school," 93% reported "feeling better about my future" and 90% reported "feeling safer at my school." (Ref-15, Ref-40)

Sacramento County, in 2020, launched an "initiative to establish schools as 'centers of wellness' with access to mental health clinicians on every school campus. The initiative, a partnership between the Sacramento County Office of Education and the Sacramento County Department of Health Care Services establishes a systemwide, continuum of care for mental health and wellness sustained on Medi-Cal funding, and with an emphasis on prevention and social and emotional learning." (Ref-41)

Funding Sources for School-Based Mental Health Services

California's Local Control Funding Formula (LCFF), along with funding from federal and local sources, constitute each district's total operating budget annually. To fund ongoing mental health services, districts must either tap into their budgets or seek other public or private sources. (Ref-15) Public sources include MHSA grants and Medi-Cal. (Ref-42)

Alameda County implemented its health centers with start-up funding from a bond approved 0.5% sales tax increase along with reallocation of tobacco settlement funds and MHSA grant monies. Sustainable funding for the ongoing operation of the centers has been partly achieved through the MH MAA program. Alameda County claims these matching funds utilizing a team of three to four full-time employees. In 2020, those reimbursements for qualifying mental health activities amounted to over \$24 million. (Ref-15) Activities qualifying as MH MAA-eligible for reimbursement include outreach and enrollment, care coordination and monitoring, transportation, referral, eligibility determination, program planning, policy development, and interagency coordination. (Ref-43)

Ventura County school districts have opted not to participate in Medi-Cal reimbursement programs based on challenges associated with the claiming process. (Ref-15) These challenges center on administrative or process complexities, onerous auditing, limited resources, staffing, and knowledge. (Ref-44) The California Children's Trust asserts that while "the administrative barriers to Medi-Cal funds are real...given the rapidly growing number of students eligible for Medi-Cal, we strongly encourage education leaders to take...steps to set up...Medi-Cal

programs as a strategy to improve social, emotional, and mental health support to students.” (Ref-45)

In October 2021, the California Department of Education, California Department of Health Care Services, California Health and Human Services Agency, and the Medi-Cal for Students Workgroup made the following recommendations to the California State Legislature and Department of Finance:

- Implement programs to maximize reimbursement on school-based expenditures
- Facilitate Medi-Cal billing and claiming audit process
- Identify options for expanding access to school-based preventive health, mental health, and substance abuse services (Ref-44)

FINDINGS

- F-01.** The Grand Jury finds that mental health problems among youth are widespread, severe and have long-term repercussions.
- F-02.** The Grand Jury finds that mental health issues can begin in childhood and, if left unaddressed, can continue into adulthood.
- F-03.** The Grand Jury finds that the school setting is an effective venue to provide mental health services and early mental health intervention.
- F-04.** The Grand Jury finds that the well-being of students affects their academic performance and success in school.
- F-05.** The Grand Jury finds that Wellness Centers reduce stress and anxiety, increase feelings of safety and improve academic performance in students.
- F-06.** The Grand Jury finds that school-based Wellness Centers improve children's access to mental health services.
- F-07.** The Grand Jury finds that Ventura County has a shortage of mental health professionals at schools.
- F-08.** The Grand Jury finds that Oxnard Union High School District has established a Wellness Center in each of its nine high schools.
- F-09.** The Grand Jury finds that there are Wellness Centers in 18 out of 32 Ventura County public high schools.
- F-10.** The Grand Jury finds that there are no Wellness Centers in Ventura County public middle schools.
- F-11.** The Grand Jury finds that CVUSD’s utilization of college-level mental health interns is a method for supplementing mental health staff at each of its five high schools.

- F-12.** The Grand Jury finds that Ventura County school districts have obtained time-limited funding for initial establishment of Wellness Centers.
- F-13.** The Grand Jury finds that current funding for Wellness Centers in Ventura County schools is not adequate for long-term sustainability.
- F-14.** The Grand Jury finds that school districts in other California counties have successfully claimed Medi-Cal MH MAA matching funds to finance school-based mental health services.
- F-15.** The Grand Jury finds that Medi-Cal MH MAA is under-utilized as a funding source for mental health services by Ventura County school districts.

RECOMMENDATIONS

- R-01.** The Grand Jury recommends that by June 30, 2024, VCBH in collaboration with VCOE, expand the Wellness Center pilot program into all Ventura County public high schools. (F-01, F-02, F-03, F-04, F-05, F-06, F-09)
- R-02.** The Grand Jury recommends that by June 30, 2025, VCBH in collaboration with VCOE, develop a strategy to expand the Wellness Center pilot program into Ventura County public middle schools. (F-01, F-02, F-03, F-04, F-05, F-06, F-12)
- R-03.** The Grand Jury recommends that pursuant to Wellness Center continuity and expansion VCOE, Conejo Valley Unified School District, Simi Valley Unified School District, and Ventura Unified School District seek and obtain sustainable funding from public and private sources. (F-12, F-13, F-14, F-15)
- R-04.** The Grand Jury recommends that pursuant to Wellness Center continuity and expansion, VCOE, Conejo Valley Unified School District, Simi Valley Unified School District, and Ventura Unified School District create an infrastructure to claim Medi-Cal MH MAA funds for Wellness Centers. (F-12, F-13, F-14, F-15)

RESPONSES

Responses required from:

The following elected officer within 60 days:

Ventura County Superintendent of Schools (F-01, F-02, F-03, F-04, F-05, F-06, F-09, F-12, F-13, F-14, F-15) (R-01, R-02, R-03, R-04)

The following governing bodies within 90 days:

Ventura County Behavioral Health/Board of Supervisors (F-01, F-02, F-03, F-04, F-05, F-06, F-09, F-10) (R-01, R-02)

Conejo Valley Unified School District (F-01, F-02, F-03, F-04, F-05, F-06, F-10, F-12, F-13, F-14, F-15) (R-02, R-03, R-04)

Oxnard Union High School District (F-12, F-13, F-14, F-15) (R-03, R-04)

Simi Valley Unified School District (F-01, F-02, F-03, F-04, F-05, F-06, F-09, F-10, F-12, F-13, F-14, F-15) (R-01, R-02, R-03, R-04)

Ventura Unified School District (F-01, F-02, F-03, F-04, F-05, F-06, F-09, F-10, F-12, F-13, F-14, F-15) (R-01, R-02, R-03, R-04)

COMMENDATIONS

The Grand Jury commends Conejo Valley Unified School District's leadership and school board for locating private funding sources, developing college-intern staffing and establishing Wellness Centers at its five high schools. (F-07, F-11)

The Grand Jury commends Oxnard Union High School District's leadership and school board for expanding its Wellness Centers to all nine of its schools and for expanding the level of services at those centers beyond the VCOE and VCBH "pilot" funding levels. (F-08, F-09)

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GLOSSARY

<u>TERM</u>	<u>DEFINITION</u>
BHAB	Behavioral Health Advisory Board
BRITE	Building Resilience and Inclusion Through Engagement
CalHHS	California Health & Human Services Agency
CHKS	California Healthy Kids Survey
COEDS	Collaborative Educational Services
CVUSD	Conejo Valley Unified School District
LCFF	Local Control Funding Formula
LGBTQ+	Lesbian, gay, bisexual and transgender, queer (or questioning), all of the gender identities and sexual orientations that are not specifically covered by the other five initials
MH MAA	Mental Health Medi-Cal Administrative Activities
MHSOAC	Mental Health Services Oversight & Accountability Commission
MHSA	Mental Health Services Act
MTSS	Multi-Tier System of Supports
OUHSD	Oxnard Union High School District