

2016

Annual Report

The California-Mexico Border Relations Council

A Summary of Council Activities Undertaken in 2016





Council Member Agencies

California Environmental Protection Agency

California Natural Resources Agency

California Department of Food & Agriculture

California Health & Human Services Agency

Business, Consumer Services and Housing Agency

California Governor's Office of Business & Economic Development

California State Transportation Agency

California Governor's Office of Emergency Services

Edmund G. Brown Jr.

Governor

Matthew Rodriguez

Secretary for Environmental Protection



The California-Mexico Border Relations Council is the central organizational body that coordinates interagency projects, programs, initiatives, and partnerships along the California-Mexico border. It also serves as a representative body of the State of California whose goal is to continue to develop and enhance cross-border relations between California and Mexico.

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Welcome

Dear Honorable Members of the Legislature:

I am pleased to present this annual report of the California-Mexico Border Relations Council, pursuant to Assembly Bill 3021 (Núñez, Chapter 621, Statutes of 2006), at a time when bilateral cooperation with Mexico is more important than ever. The economies, environments and societies of California and Mexico are inextricably linked, and a strong relationship between our regions is beneficial to both.

The Council is comprised of eight state secretaries or directors of state offices, appointed by the Governor. Collectively we are responsible for dealing with a large number of issues affecting the border, touching on such subjects as the environment, natural resources, transportation, human health, food and agriculture, emergency and consumer services, housing, and business and economic development. The Council meets twice a year to coordinate the activities of state agencies on California-Mexico border issues. Last year we added a non-voting federal representative to the Council.



In 2016, the Council continued to work closely with federal, state and local officials from Mexico and California to carry out the goals outlined in the various Memoranda of Understanding (MOUs) with the Mexican Government. The MOUs cover issues ranging from trade and investment to climate change, clean energy and the environment.

Through the year, the Council made progress in a number of areas, including air quality and waste and water issues. For instance, in Imperial County, a new air quality website provides public access to real-time local air quality data, air quality alerts, and health impacts. The Council's Solid Waste Working Group finalized the Solid Waste and Waste Tire Strategic Plan, which includes specific recommendations to address solid waste, waste tire, and sedimentation concerns at the border. In 2016, funds were appropriated to begin implementing the New River Improvement Project Strategic Plan.

As this report illustrates, the Council remains committed to protecting the environment, improving infrastructure, and ensuring the health and safety of residents and visitors along both sides of the California-Mexico border.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matthew Rodriguez', written over a horizontal line.

Matthew Rodriguez
Secretary, California Environmental Protection Agency
Chairman, California-Mexico Border Relations Council

Council Background

The issues affecting the U.S.-Mexico border region can be complex and difficult to resolve. Both the U.S. and Mexico face challenges resulting from rapid population growth, urbanization, industrial expansion, and increasing flows of international trade. The region faces many cross-border issues related to the environment, security, land use, and public health. Despite California and Mexico's common economic, social, and geographic links, barriers remain that make it difficult to jointly address these topics.

Border relations initiatives with Mexico have a long history in California. Legislation enacted in 1982 established the Office of California-Mexico Affairs within the Technology, Trade, and Commerce Agency. In 2003, the agency was abolished through Assembly Bill (AB) 1757, (Committee on Budget, Chapter 229, Statutes of 2003), and the duties of the agency were reassigned to other state entities. In 2004, the California Research Bureau released a report that listed California-Mexico programs operating in more than 100 state agencies. A majority of these programs are now defunct because no organizing entity existed to coordinate interagency cooperation.

In 2006, Assembly Bill 3021 (Núñez, Chapter 621, Statutes of 2006) was enacted to fill the need for statewide oversight and coordination of multi-agency involvement with Mexico. It created the California-Mexico Border Relations Council, which serves as the central organizing body that oversees and collaborates on California-Mexico border issues.

The Council:

- Coordinates cross-border programs, initiatives, projects, and partnerships within California state agencies.
- Establishes California state agency policies for the collection and sharing of cross-border data.
- Identifies and recommends changes in the law needed to achieve the goals of the Council.
- Provides an annual report of activities to the Legislature.

Member Agencies



Council Members



Chair

Matthew Rodriguez

Secretary, California Environmental Protection Agency
www.calepa.ca.gov



Mark Ghilarducci

Director, California Governor's Office of Emergency Services
www.caloes.ca.gov



Karen Ross

Secretary, California Department of Food and Agriculture
www.cdffa.ca.gov



Brian Kelly

Secretary, California State Transportation Agency
www.calsta.ca.gov



John Laird

Secretary, Natural Resources Agency
www.resources.ca.gov



Diana S. Dooley

Secretary, California Health & Human Services Agency
www.chhs.ca.gov



Panorea Avdis

Director Governor's Office of Business and Economic Development
www.business.ca.gov



Alexis Podesta

Secretary, Business, Consumer Services and Housing Agency
www.bcsh.ca.gov

Executive Summary

The California-Mexico Border Relations Council (Council) serves as the central organizing body within California state government for California-Mexico border issues. Chaired by the Secretary for Environmental Protection, the Council is comprised of eight state secretaries or directors of state offices: the California Environmental Protection Agency (CalEPA); the California Health and Human Services Agency (CHHS); the California Natural Resources Agency (CNRA); the California State Transportation Agency (CalSTA); the California Department of Food and Agriculture (CDFA); the California Governor's Office of Emergency Services (Cal OES); the Business, Consumer Services and Housing Agency (BCSH); the California Governor's Office of Business and Economic Development (GO-Biz); and the U.S. Environmental Protection Agency (U.S. EPA), which is an ex-officio member. This annual report to the Legislature, which is required pursuant to Government Code Section 8713, includes a summary of activities from 2016.¹

Trade

Mexico remains one of California's top trading partners. In 2016, California's exports to Mexico totaled \$25.26 billion, second only to exports to Canada. Under the 2014 California-Mexico Trade and Investment Memorandum of Understanding (MOU), GO-Biz has participated in various trade initiatives with Mexico such as supporting trade missions, information sharing to promote bilateral trade and investment opportunities, and inviting and supporting potential investment leads into California.

¹ Please note that activities taking place in the current calendar year 2017 will be reflected in next year's report.

Business, Consumer Services and Housing

Several departments, boards, bureaus and offices overseen by the Business, Consumer Services and Housing Agency conduct work relevant to the border. For example, the Department of Alcoholic Beverage Control (ABC) San Diego office collaborated with their Mexican counterparts, meeting monthly through the International Liaison Officers Association to share information on border-related crime trends and law changes. San Diego ABC Agents have conducted Informed Merchants Preventing Crime Related Tendencies (IMPACT) inspections in the San Ysidro area of the City of San Diego. The Department of Business Oversight (DBO) continued to provide protection to consumers and services to businesses engaged in financial transactions in the border region.

The Contractors State License Board partnered with the Mexican Consulate to host a forum to help educate people on how to obtain licenses regardless of immigration status. The Bureau of Automotive Repair (BAR) and the California Air Resources Board (CARB) hosted representatives of the *Secretaría del Medio Ambiente y Recursos Naturales* (SEMARNAT) of Mexico to provide information on California's Inspection and Maintenance Program.

A final highlight includes \$1.4 million from the Colonia set-aside in 2016 Community Development Block Grant (CDBG) funds awarded to Imperial County. These set-aside funds are used to meet the needs of the residents of the colonias, communities within the mainly rural U.S.-Mexico border region with marginal conditions related to housing and infrastructure. Funds may be used to provide potable water, adequate sewer systems, and decent, safe and sanitary housing.

Environment

In the border region, multiple stakeholders collaborate on work to address environmental issues, including air quality, climate change, waste and water matters.

In 2016, CalEPA worked to expand funding opportunities for environmental projects

in watersheds at the border. Senate Bill 859 (Committee on Budget and Fiscal Review, Statutes of 2016) appropriated \$1.4 million for the development of projects designed to eliminate public health and safety risks from areas with tributaries to the Salton Sea. These funds will be used to carry out the engineering and design of the New River Improvement Project.

The California-Mexico Memorandum of Understanding to Enhance Cooperation on Climate Change and the Environment (hereafter referred to as the Climate Change and Environment MOU) continued to be an important instrument for promoting exchange and collaboration on issues concerning climate change, air quality, clean vehicles and wildfires.² Working groups established under the MOU carried out various trainings on (1) measurement, reporting and verification of greenhouse gas emissions, (2) smog check and on-board diagnostics (OBD), and (3) wildfire suppression.

Air Quality

In 2016, CARB coordinated the development of an air quality website that gives the public access to real-time local air quality data, air quality alerts, and health impacts information at www.imperialvalleyair.org. The Office of Environmental Health Hazard Assessment (OEHHA) funded a two-year community-led study to improve air quality characterization for CalEnviroScreen, a California Environmental Screening methodology used to identify California communities that are disproportionately burdened by multiple sources of pollution. Air studies in communities in the San Ysidro area and Imperial County provided better cross-border information for the screening tool's fine particulate matter (PM2.5) indicator.

CalEPA also worked with Mexico on several goals to reduce emissions from both new

vehicles sold into Mexico and in-use emission rates from the existing fleet. In 2016, CARB supported SEMARNAT as Mexico continued to lay the groundwork for updating its greenhouse gas (GHG) emission standards under Mexico's official fuel economy standards program. This work will help to propel the rulemaking plan forward in 2017. CARB also organized a number of workshops for Mexican technical staff on the subject of implementing and improving emissions inspection and maintenance programs, as well as on-board diagnostic systems.

To address emissions from heavy-duty vehicles, CARB offered nine classroom training sessions in the southern border region of California to address diesel filter technologies and how operators can comply with CARB's heavy-duty diesel vehicle regulations. Two of these training sessions were conducted in Spanish. Additionally, in a joint effort by CARB and the California Highway Patrol (CHP or Highway Patrol), commercial diesel vehicles were stopped at the border by the CHP and inspected by CARB for potential excess emissions and tampering with emission control devices. They also ensured the vehicles had U.S. EPA certified engines. Approximately 1,871 diesel vehicles were inspected at three California border crossings and surrounding areas in 2016, and 702 citations, totaling more than \$278,900 in fines, were issued.

Climate Change

Collaboration also continued under the Climate Change Working Group of the Climate Change and Environment MOU, which held biweekly calls to exchange information regarding climate policies and technical aspects of climate change program development in California and Mexico. The group also organized two workshops throughout the year, focusing on forestry issues and measurement, reporting and verification of greenhouse gases.

During 2016, Michoacán and Tabasco became the ninth and tenth Mexican states to sign the Under2 Memorandum of Understanding (now known as the Under2 Coalition).

² In July 2014, California's Governor Edmund G. Brown Jr. and Mexico's Ministry of Environment and Natural Resources Undersecretary Rodolfo Lacy and National Forestry Commission Director General Jorge Rescala Pérez signed the MOU to Enhance Cooperation on Climate Change and the Environment. For more information, visit CalEPA's website at: https://calepa.ca.gov/wp-content/uploads/sites/34/2017/06/2014-MOU-Ministry_of_the_Environment_Mexico.pdf

Waste

The Border Region Solid Waste Working Group, led by California Department of Resources Recycling and Recovery (CalRecycle), with participation by other state, local, and nongovernmental organizations (NGOs), developed a Solid Waste and Waste Tire Strategic Plan that lays out long-term solutions to address challenges and remediate issues associated with waste tires, solid waste, and excessive sedimentation along the California-Mexico border. Regarding hazardous waste, CalEPA's Department of Toxic Substances Control (DTSC) is responsible for tracking imported and exported hazardous wastes through its Port of Entry (POE) program. The POE database shows that during 2016, DTSC received at least 14 import notifications, and 20 export notifications.

Water

The regional water boards, California State Parks, CalEPA, the International Water and Boundary Commission, and local stakeholders continue to work to address water issues at the border. For example, the Tijuana River Valley Recovery Team (Recovery Team), coordinated by the San Diego Regional Water Quality Control Board, collaboratively addressed sediment, trash, flooding, and water quality issues. 2016 highlights include the City of San Diego and the U.S. Army Corps of Engineers completing Phase I of the Tijuana River Watershed hydraulics and hydrology study. In addition, the County of San Diego provided resources for a study of potential hydrologic impacts related to the restoration of the Brown property. For Tijuana River Action Month, approximately 3,000 volunteers from both sides of the border removed waste tires and over 64,000 pounds (128 cubic yards) of trash from the watershed.

CalEPA, the Colorado River Regional Water Quality Control Board, the City of Calexico, Imperial County and other stakeholders continued to address challenges related to the water quality of the New River. Most notably, as mentioned above, \$1.4 million was appropriated for Phase I of the New River Improvement Project, which includes design, engineering and environmental permitting. CalEPA and the State and Regional Water Resources Control

Boards held a community meeting in Calexico in October to update the local community and gather feedback.

Energy

In 2016, the California Energy Commission (CEC) continued to collaborate with multiple border stakeholders on energy priorities. The CEC worked with the Secretaría de Energía (SENER), the UC-Mexico Initiative and the Imperial Irrigation District to host a technical workshop on clean energy across the border in California's Imperial Valley. The workshop brought together about 100 participants representing policymakers, utility representatives, energy researchers, energy developers, and NGOs to discuss investment opportunities in clean technology on both sides of the border.

On May 3, 2016, the Energy Commission partnered with the Mexican Consulate in Sacramento and the Select Committee on California-Mexico Cooperation at the California Legislature to hold a Capitol Advocacy Day focused on energy issues. While in Jalisco attending the Climate Summit of the Americas in August, the Chair of the California Energy Commission signed a new MOU with the Governor of Jalisco to support this Mexican state in launching a new state energy agency.

Agriculture

CDFA's California-Mexico activities have continued to focus on coordination and collaboration with border state government counterparts in regards to animal health issues. CDFA's Animal Health and Food Safety Services Division (AHFSS) participated with the state of Sonora in their animal health status review to obtain the bovine brucellosis free status from USDA, making Sonora the first Mexican state to achieve such recognition. In addition, AHFSS and the Imperial County Agricultural Commissioner participated in the AgroBaja Fair in Mexicali in March and distributed animal disease prevention information in Spanish.

CDFA and the *Secretaría de Fomento Agropecuario* (SEFOA) of Baja California signed a new MOU on the issue of pests. The Department of Pesticide Regulation (DPR)

conducted multiple pesticide safety outreach community events throughout California. Additionally, the California Department of Public Health's Office of Binational Border Health (OBBH) and the United States-Mexico Border Health Commission (Commission), in partnership with the California Department of Health Care Services-Office of Rural Health, U.S. Environmental Protection Agency, and the Department of Pesticide Regulation, hosted workshops to train "promotores," or community health workers, on pesticide illness and safety. The goal of these workshops is to educate farmworkers and local community members in border and binational communities throughout California.

Transportation

The California Department of Transportation (Caltrans) and the California Highway Patrol continued construction of new projects such as the flagship Otay Mesa East International Land Port of Entry. These projects will reduce border crossing wait times and improve flow of traffic between California and Mexico, resulting in environmental, health and economic benefits.

In 2016, the State Transportation Agency, CalEPA and the Natural Resources Agency presented the Sustainable Freight Action Plan to California Governor Edmund G. Brown Jr. Among the many actions identified, the Plan seeks to provide cross-border travelers with better information to aid them in travel decisions regarding when and how to travel across the border in the least amount of time.

Safety

The Highway Patrol's Border Division operates in San Diego, Imperial, Orange, and Riverside counties and is responsible for enforcement operations along the California-Mexico border. The Border Division coordinates and participates in investigative task forces and community outreach programs such as the San Diego Regional Auto Theft Task Force; the Human Trafficking Task Force; and Operation Stonegarden, a U.S. Department of Homeland Security border enforcement grant program. The Border Division also maintains its own operations along the

border such as its Canine Unit, El Protector Program, and two commercial vehicle inspection facilities located at the Otay Mesa and Calexico East international ports of entry.

Health

In 2016, OBBH continued to work on border health issues. A voluntary statewide community advisory group convenes twice a year to develop a strategic plan with goals for implementation, and to advise OBBH and the California members of the U.S.-Mexico Border Health Commission. The group of 12 members includes representatives from Los Angeles, San Diego, and Imperial Counties' health departments, an association of local health officers, local government, hospitals, health plans, community-based organizations, and universities. In 2016, the OBBH Advisory Group held two public meetings to review the Office's 3-year strategic plan.

Emergency Management

In Fiscal Year (FY) 2016-17, Cal OES was responsible for administering more than \$706 million in funds for homeland security, emergency management, and justice programs and victim services, a majority of which are distributed to local and regional entities to enable the most effective prevention, detection, and response and recovery efforts. In 2016, Cal OES worked on several border initiatives through its participation in the Southwest Border Communications Working Group, the MOU on Risk Prevention and Emergency Response, the Wildfire Working Group of the Climate Change and Environment MOU, and the San Diego-Tijuana Earthquake Planning Scenario project.

Border Region Profile

The California-Mexico border spans approximately 140 miles in length and is defined in the La Paz Agreement as the area of land 100 kilometers (62.5 miles) north and south of the international boundary. Although the term “border” defines separation by definition, in reality, the region has grown increasingly dynamic, interactive, and interdependent over time, connected by people, transportation, trade, supply-chains and economies, ecosystems, air and watersheds, security and health impacts, language, and many others. In this context, cooperative binational approaches that are closely coordinated within and across governments, such as the California-Mexico Border Relations Council, are essential.

CA Border Region Demographics (2015)	Total Population ³	Hispanic Population ⁴	% Hispanic
Imperial County	184,500	151,562	82%
San Diego County	3.26 million	1.53 million	47%

In its 2015 “State of the Border Report,” the Woodrow Wilson Center’s Mexico Institute notes that central to the demographic expansion of border regions has been rapid urbanization, with cities like Tijuana and Mexicali transitioning from medium-sized urban areas in the 1960s to burgeoning metropolises today. As these urban areas have grown, regions such as Tijuana-San Diego and Mexicali-Calexico have fused across the border, forming dynamic trans-border metropolises that share both challenges and opportunities, and are increasingly reliant on one-another for continued growth and prosperity.⁵ Over the past 25 years, rapid industrialization in Northern Baja California spurred by the “Maquiladora” program and the North American Free Trade Agreement have created economic opportunities in the region, but has also put a strain on Mexican border communities, particularly regarding environmental and human resources. In 2016, California’s international border crossings processed nearly 17 million pedestrian crossings, 31 million personal vehicles, and over 1.3 million commercial trucks.⁶

Environmental challenges at the border related to air quality, water, waste, and sewage create cross-border opportunities for collaboration and resolution. These issues present a challenge for California due to the lack of U.S. jurisdiction in Mexico, making the development of strong relationships with Mexican counterpart agencies essential. Public safety, health, environmental, and infrastructure issues affecting California are being addressed on the California side of the border by the member agencies of the Council in close coordination with federal, state, tribal, and local governments, as well as NGOs and members of the public. The California-Mexico Border Relations Council will continue to support and advance their efforts to the benefit of the border region.

3 Source: California Department of Finance, Demographics Estimates: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-1/>

4 Source: California Department of Finance, Demographics Projections: <http://www.dof.ca.gov/Forecasting/Demographics/Projections/>

5 Source: Wilson Center: https://www.wilsoncenter.org/sites/default/files/mexico_state_of_border_0.pdf

6 Source: U.S. Bureau of Transportation Statistics, 2017 https://transborder.bts.gov/programs/international/transborder/TBDR_BC/TBDR_BCQ.html

California Agencies' Border Activities

The Council is comprised of the state secretaries or office directors from CalEPA, CNRA, CDFA, CHHS, Cal OES, CalSTA, BCSH, GO-Biz and the U.S. EPA (ex-officio). The Council is governed by California Government Code sections 99520-99524, and coordinates the activities of these agencies with respect to the border. It also conducts statewide planning and oversight of issues of concern between the State of California and the State of Baja California, as well as the United Mexican States, more broadly.

Along with their boards, departments, and offices, these state leaders work toward improving and protecting trade opportunities, environment, health, safety, and infrastructure along the California-Mexico border. Through work under various memoranda of understanding and other intergovernmental partnerships, the entities within the Council have made significant progress in these areas.

The following report describes some of the major issues being considered by the Council, along with activities conducted and progress made by the Council's member agencies during the calendar year 2016.



Trade

Mexico remains one of California's top trading partners, second only to Canada in U.S. exports and to China in U.S. imports.

California exports to Mexico totaled \$25.26 billion in 2016, representing 15.4 percent of total California exports for the year.

FIGURE 1: TRADE STATISTICS AT A GLANCE⁷

(\$ in billions)	2015	2016	Growth
U.S. Imports from Mexico	\$296.40	\$294.15	-0.76 %
U.S. Exports to Mexico	\$235.74	\$230.96	-2.0 %
All California Imports	\$408.20	\$410.3	+0.5 %
All California Exports	\$165.39	\$163.61	-1.07 %
California Imports from Mexico	\$45.10	\$46.36	+2.8 %
California Exports to Mexico	\$26.78	\$25.26	-5.68 %

Business and Economic Development MOU

In 2014, California and the Ministry of the Economy for Mexico signed the California-Mexico Trade and Investment Memorandum of Understanding (MOU) in order to establish a formal and flexible framework between the participants to expand trade and investment cooperation, foster scientific and technological collaboration for business development in

emerging key sectors, strengthen communication, enhance trust, boost economic development and create jobs. In 2016, GO-Biz continued its robust partnership with Mexico, playing a leadership role in implementing various activities and engagements in line with the California-Mexico Trade and Investment MOU framework. The activities included hosting a series of trade and investment summits across the state, hosting multiple inbound delegation requests, and supporting inbound investment interests.

As part of the 2014 MOU on Trade and Investment, GO-Biz and ProMéxico, a subdivision of the Mexican Secretariat of Economy that promotes international trade and investment, together with partnering organizations across California, hosted a series of workshops across the state to discuss California-Mexico cross-border relations. The workshops allowed each region to highlight its respective assets related to trade and investment opportunities for business in both California and Mexico. Participation at each workshop ranged from 40-75 business owners and international trade stakeholders.

A series of workshops were held in 2016 in various regions of the state. The first workshop was held in January in San Diego, where participants discussed the movement of people and goods along the border, mega-region economic advantages and opportunities, and cross-border infrastructure as it related to the movement of goods. The next workshop was held in April in Los Angeles. Participants discussed similar topics as the first, in addition to the economics of ports of entry. Then, in June 2016, Fresno hosted a workshop that included a discussion on Central Valley trade promotion resources and agricultural investment opportunities. In August, the workshop in Sacramento focused on economic stimulation through international trade sales and foreign direct investment. In November, Redding hosted the final workshop of the year. Participants discussed how to stimulate economic development through increased international trade sales and foreign direct investment, as well as economic opportunities for agriculture.

In addition to leading workshops, GO-Biz arranged key meetings. In April 2016, GO-Biz

⁷ Source: International Trade Administration statistics: <http://tse.export.gov>

arranged a meeting for a Mexican Delegation hosted by ProMéxico at the City of San Jose Innovation Hub (iHub). The Mexican Information Technology (IT) delegation consisted of senior business executives, education officials, and local government officials from the IT industry. The main topic was innovation practices at the epicenter of global innovation. In October 2016, GO-Biz arranged a meeting for a Mexican Delegation hosted by ProMéxico at the North Bay iHub solar incubator of Rohnert Park to share information about clean energy innovation practices. The Mexican delegation consisted of entrepreneurs working to promote the development of clean energies in Mexico.

From October 2015 to September 2016, GO-Biz oversaw the disbursement of export promotion reimbursement stipends to California Small Businesses through the California State Trade Expansion Program (STEP). The program is designed to drive exports for California small businesses. California STEP leverages a statewide network of state, federal, private and non-profit trade promotion organizations to facilitate export promotion and activities serving targeted industries to increase the number of California small businesses that are exporting and increase the dollar value of exports by those small businesses that are currently exporting. Specifically, GO-Biz oversaw reimbursements through STEP's Individual Company Export Promotion Activities (ICEP) program. ICEP stipends supported export expansion and new-to-market penetration efforts to Mexico by supporting food manufacturers, water technologies, transportation and logistics, hot tubs/pools/spas, and natural gas vehicle conversion technology manufacturers.

Business, Consumer Services and Housing

Business, Consumer Services and Housing Agency

The Business, Consumer Services and Housing Agency's mission is to oversee Departments, Boards, Bureaus, and Commissions that provide the following services:

- Protect consumers by licensing and regulating California professionals and businesses
- Preserve, expand and fund safe and affordable housing opportunities
- Investigate and research earthquake-related issues to advise on ways to reduce earthquake risk and
- Protect the civil rights of all Californians from acts of hate violence and unlawful discrimination in employment, housing and public accommodations

The current departments, boards and commissions under the agency are: Department of Alcoholic Beverage Control, Alcoholic Beverage Control Appeals Board, Department of Business Oversight, Department of Consumer Affairs, Department of Fair Employment and Housing, California Horse Racing Board, Department of Housing and Community Development, California Housing Finance Agency, and the Seismic Safety Commission.

Department of Alcoholic Beverage Control

ABC issues licenses for the sale of alcohol, such as restaurants, stores, and bars. ABC oversees licensees and activities on licensed premises and has the authority to regulate the sale of alcohol on tribal property under federal law and tribal-state compacts. ABC also investigates and

enforces laws relating to alcohol distribution, sales and marketing.

The San Diego ABC office collaborates with their Mexican counterparts by having an agent as a member of the International Liaison Officers Association. The association is a group of law enforcement agencies, from the U.S. and Mexico, that meets approximately once per month and conducts a working lunch. At this lunch, presenters from both sides of the border share information regarding crime trends, changes in laws, and other matters. This is also a time to liaise with other agencies and to network with colleagues across the border.

In addition, a representative from ABC serves as the Terrorist Liaison Officer for San Diego and receives emails from the San Diego Law Enforcement Coordination Center (SD-LECC) regarding border crimes/issues on both sides of the border so that the ABC is aware of current issues and trends. The SD-LECC is the all-crimes, all-hazards fusion center and serves as the High Intensity Drug Trafficking Area (SD/HIDTA) Investigative Support Center (ISC) for the San Diego and Imperial County region. The SD-LECC also serves as the Regional Threat Assessment Center (RTAC) for San Diego and Imperial counties and is part of the California State Threat Assessment System (STAS). The SD-LECC operates as a collaborative partnership among federal, state and local law enforcement/public safety agencies focused on enhancing coordination, information sharing, regional preparedness, training and investigative support/analysis for first responders and other public and private partners in the region. SD-LECC provides intensive multi-disciplinary training to law enforcement, public safety, government and private sector professionals, which includes exercises to strengthen counter-terrorism readiness.

San Diego ABC Agents have conducted IMPACT inspections in the San Ysidro area of the City of San Diego, which lies adjacent to the U.S.-Mexico border crossing on the U.S. Interstate 5. These inspections are part of a grant to assist licensees by providing inspections for training purposes to assist them with compliance with ABC statutes and regulations.

Department of Business Oversight

The DBO provides protection to consumers and services to businesses engaged in financial transactions. DBO regulates a variety of financial services, products and professionals and oversees the operations of state-licensed financial institutions, including banks, credit unions, money transmitters, issuers of payment instruments and travelers' checks, and premium finance companies. Additionally, DBO licenses and regulates securities brokers and dealers, investment advisers, deferred deposit transactions (commonly known as payday loans) and certain fiduciaries and lenders. Conducting periodic examinations of all licensees is a critical business activity for the DBO.

Conducting education and outreach is an integral part of consumer protection and DBO conducts numerous activities each year throughout California. During 2016, DBO conducted 75 examinations in San Diego and Imperial counties for banks and credit unions, broker-dealers and investment advisers, California Residential Mortgage Lending Act licensees, escrow licensees, and California Deferred Deposit Transaction Law licensees (Pay Day lenders).

For more than 10 years, DBO has partnered with and attended the Consulate General of Mexico's Financial Literacy Week events in Sacramento. The program was created by the Instituto de los Mexicanos en el Exterior of the Ministry of Foreign Affairs to promote financial services and education to the community. Government agencies, community organizations and financial institutions are invited to distribute financial education in Spanish. DBO has enlisted Spanish-speaking staff from different units to work at its table, answer questions and participate in brief presentations on topics like managing money, investing, financial counseling, buying a home, saving for retirement, and starting a business. The annual event takes place in coordination with the California Financial literacy month each spring. The event is well organized and promoted, and attracts hundreds of visitors daily.

In addition, during 2016 DBO conducted several education and outreach events in San Diego and Imperial County including the Mission Federal Credit Union Artwalk and Community Resource Fair, the San Diego Public Libraries Training with the Consumer Financial Protection Bureau and the DBO Mortgage Education and Outreach Program's Homebuyer & Homeowner Fair.

Department of Consumer Affairs

The Department of Consumer Affairs (DCA) consists of 42 licensing programs that issue approximately 3.5 million licenses, certificates, registrations and permits in over 250 business and professional categories through 39 regulatory entities comprised of boards, bureaus, committees, a program, and a commission (boards and bureaus). These 39 entities set and enforce minimum qualifications for the professions and vocations they regulate, which include nearly all of California's healthcare fields, contractors, private security companies and private postsecondary institutions. DCA protects California consumers by investigating and prosecuting complaints, and helps consumers learn how to protect themselves from scams and unqualified individuals.

On February 6, 2016, the Bureau for Private Postsecondary Education participated in a "Steps to College" event at the Mexican Consulate. This event included a university fair with representatives from over 40 colleges and universities from the U.S. and Mexico and bilingual workshops on the college admissions process and financial aid.

In August 2016, the Contractors State License Board partnered with the Mexican Consulate to host a forum to help educate people on how to obtain licenses under the new law Senate Bill 1159 (Lara, Chapter 752, Statutes of 2014). Effective in 2016, it requires all licensing boards under the California Department of Consumer Affairs to consider applicants regardless of immigration status and prohibits the denial of licensure to an applicant based on his or her citizenship status or immigration status.

On September 13-14, 2016, BAR and CARB hosted representatives of SEMARNAT of Mexico to provide information on California's Inspection

and Maintenance Program. BAR presented information on Smog Check operations, on-board diagnostics based inspection procedures, the vehicle inspection database, and fraud detection. Attendees also toured a local Smog Check station, which included BAR On-Board Diagnostic Inspection System (BAR-OIS) and BAR-97 emissions inspection system (EIS) equipment demonstrations. This effort was coordinated by CARB, which received the request from SEMARNAT, the agency equivalent to U.S. EPA in Mexico.

The Medical Board of California, in collaboration with staff from DCA, the Department of Finance, and the Governor's Office, have been working with individuals to implement Business & Professions Code section 853, specifically the "Licensed Physicians and Dentists from Mexico Pilot Program." This program would allow up to 30 licensed physicians specializing in family practice, internal medicine, pediatrics, obstetrics and gynecology, and up to 30 dentists from Mexico to practice medicine or dentistry in California for a period not to exceed three years.

Department of Fair Employment and Housing

The Department of Fair Employment and Housing (DFEH) is the largest state civil rights agency in the country. DFEH investigates, mediates and prosecutes complaints alleging employment, housing and public accommodation discrimination, and investigates and prosecutes complaints alleging acts of hate violence.

DFEH participated in the Labor Rights Week held at various Mexican Consulates throughout the state in August 2016. For approximately five years, DFEH has been a regular participant in the Labor Rights Week. This outreach opportunity stems from a joint declaration between the Ministry of Foreign Affairs of Mexico and the United States Department of Labor, which established this collaborative effort between embassies and their consulates with local Department of Labor field offices to increase awareness and inform workers and employers about their rights and responsibilities under U.S. labor laws.

Each year during the last week of August,

partners join forces with worker rights groups, faith-based and community organizations and local unions, which either host or sponsor informational workshops, educational sessions and other special events. Other U.S. government agencies, such as the Equal Employment Opportunity Commission and the National Labor Relations Board also attend Labor Rights Week activities to disseminate information and educational materials on the laws their agencies enforce.

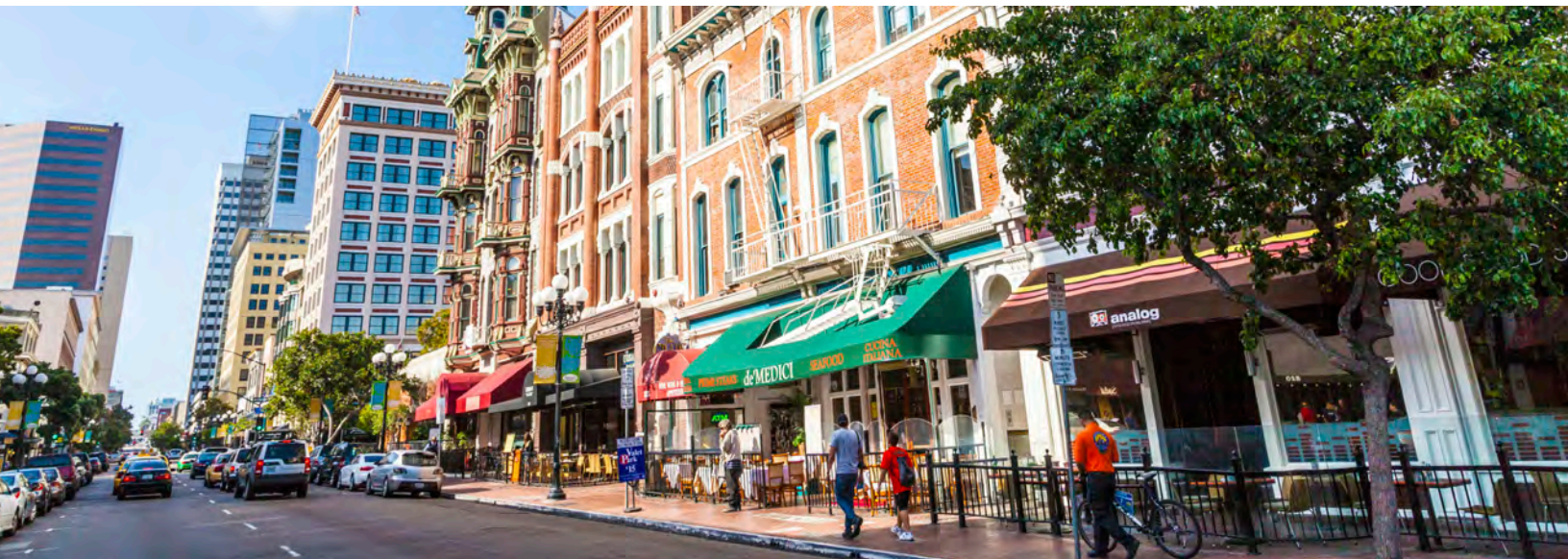
As part of its participation, DFEH sets up information tables allowing individuals and organizations to ask questions about department services and obtain educational materials and pamphlets pertaining to civil rights in the workplace and housing. Additionally, DFEH personnel and managers have participated in panel presentations on various subject matters including rights of the deaf community, applicable laws, and services provided.

The Department of Housing and Community Development

The Department of Housing and Community Development (HCD) administers state and federal housing and community development loan and grant programs. These programs develop and rehabilitate rental and supportive housing, promote home ownership, and assist in developing special needs housing for farm workers, the disabled and the homeless. HCD also administers the CDBG Program that funds housing activities, public works, community facilities, and public service projects serving lower-income people in rural communities.

In 2016, Imperial County was awarded \$1.4 million from the Colonia set-aside fund in the 2016 CDBG Notice of Funding Availability. A "colonia" refers to a community within the mainly rural U.S.-Mexico border region with marginal housing and infrastructure. The National Affordable Housing Act of 1990, Section 916, calls for border states, including California, to set aside a percentage of their annual state CDBG allocations for use in the colonias. The use of these set-aside funds is to help meet the needs for potable water, adequate sewer systems, or decent, safe and sanitary housing by the colonia residents.

In addition, Imperial County was granted a total of \$2 million in the general CDBG competition through three separate awards: \$425,000 for public services; \$1.5 million for public facilities; and \$75,000 for planning and technical assistance. Imperial County was also successful in HCD's most recent Emergency Solutions Grant (ESG) Program with two awards totaling \$354,770. San Diego County was also awarded \$939,493 from the ESG Program.



Environment

The Council's member agencies work together to maintain a healthy environment in the California-Mexico border region. Substantial environmental efforts over the past year have focused on air quality, climate change, waste and waste tire cleanup, and water.

California Environmental Protection Agency Border Program

CalEPA's Border Affairs Program (Border Program) promotes interagency cooperation on environmental programs in California and Baja California to help ensure a cleaner, safer, healthier, and more prosperous border region. The program is a collaborative effort between CalEPA and its boards, departments, and offices to address environmental issues on multiple fronts and coordinate efforts with other California state agencies, Baja California, the U.S. and Mexican federal governments and Tribal Nations in the border region.

The border region faces unique environmental challenges and opportunities, as two countries with different environmental laws meet and share common waterways and airsheds. The Border Program works towards binational solutions on environmental issues surrounding the California-Mexico border region, such as water quality, air quality and waste and sewage management. It also advocates for policies and projects that benefit the environment at the border. With the CalEPA Secretary chairing the Border Relations Council, the Border Program coordinates and oversees Council activities and projects, organizes biannual Council meetings and compiles the Annual Council Report submitted to the Legislature. The program

works collaboratively toward implementation of various plans developed recently which target environmental improvements at the border, such as the New River Improvement Project Strategic Plan (published in 2011 and updated in 2016), the Tijuana River Valley Strategic Plan and the Solid Waste and Waste Tire Strategic Plan. The Border Program also oversees the implementation of the Climate Change and Environment MOU.

Memorandum of Understanding to Enhance Cooperation on Climate Change and the Environment

In July 2014, California and Mexico signed the Climate Change and Environment MOU. This MOU is a four-year effort with four priority action areas: climate change, air quality, clean vehicles, and wildfires. The joint effort aims to improve and protect the environment while ensuring the sustainable use of natural resources to optimize quality of life and expand trade and investment opportunities. The Border Program manages the implementation of the MOU by managing the relationship with Mexico's SEMARNAT and coordinating the work of the four working groups, which cover each of the priority action areas through co-leads representing both California and Mexico. CalEPA collects quarterly reports from each of the working group co-leads and uses these to prepare an annual report that tracks the progress made under the MOU. In 2016, the Border Program published the 2015 Annual Report, which was prepared in conjunction with counterparts in Mexico and translated to Spanish allowing for increased dissemination in Mexico.

Substantive progress made in each of the working groups during 2016 is reported in the relevant thematic sections below.

Border 2020

The Border 2020 Program under the U.S. EPA and SEMARNAT is the latest environmental program implemented under the 1983 La Paz Agreement. It builds on the Border 2012 Environmental Program, emphasizing regional, bottom-up approaches for decision making, priority setting, and project implementation to address the environmental and public health

impacts in the border region. As in Border 2012, the new program encourages meaningful participation from communities and local stakeholders.

The Border 2020 Program also strengthens its focus in regional areas where environmental improvements are needed most: establishing thematic goals, supporting the implementation of projects, considering new fundamental strategies, and encouraging the achievement of more ambitious environmental and public health goals.

In 2016, Border 2020 saw several accomplishments. Through U.S. EPA's Border Water Infrastructure Program, U.S. EPA is working with Imperial County, the Border Environment Cooperation Commission, and the North American Development Bank to bring the wastewater plant in Niland, CA and Holtville, CA into compliance with the Clean Water Act. In 2016, U.S. EPA began a collector rehabilitation project in Tijuana. The U.S. EPA conducted a sophisticated sediment model for a sub-basin in the Tijuana watershed in 2016. Preliminary results showed that by paving all roads in Los Laureles Canyon, sediment production decreased by 40 percent, but peak flows increase by 20 percent. The U.S. EPA helped fund a diagnostic in Mexicali, identifying numerous repairs that are needed.

CalEPA participates in U.S. EPA's Border 2020 program, with a deputy secretary serving as a co-chair for the California-Baja California Regional Working Group. In September 2016, CalEPA participated in the working group meeting in Tijuana along with other co-chairs from SEMARNAT, the U.S. EPA and the Secretaría de Protección al Ambiente (SPA). CalEPA presented the progress made on the Climate Change and Environment MOU. The group discussed progress on implementing the 2015-2016, 2-year Action Plan and ideas for the new 2017-2018, 2-year Action Plan, as well as the Border 2020 funding cycle.

Good Neighbor Environmental Board

The Good Neighbor Environmental Board is a Federal Advisory Committee to the President and Congress on environmental issues along the U.S.-Mexico Border. The Colorado River Basin Regional Water Quality Control Board Executive Officer represents California on the board. Each year the board publishes a report on a particular issue affecting the border region between the U.S. and Mexico. In 2016, the report focused on climate change and resilient communities along the U.S.-Mexico Border. The board met in Brownsville in February 2016 to start drafting a report for the President and Congress with recommendations. The report was finalized and submitted to the President and Congress in December 2016.⁸

Air Quality

The border region faces a number of air quality issues that require monitoring of air quality and targeted regulations to address the key pollution sources. Multiple stakeholders worked on addressing these issues in 2016, including CARB and OEHHA. CARB has been able to work towards improving air quality through the Air Quality Working Group of the Climate Change and Environment MOU, as well as through its work on the Imperial County Air Quality website. OEHHA worked on the San Ysidro community-based Air Monitoring Study to measure air quality.

In order to address vehicles emissions, CARB co-leads the Clean Vehicles Working Group. This group worked in 2016 on harmonizing vehicle emissions standards as well as trainings related to compliance and maintenance programs, described in more detail below.

Air Quality Working Group

The primary accomplishments of the Air Quality Working Group under the Climate Change and Environment MOU in 2016 include the initiation of a PM_{2.5} air quality study in Mexicali, Baja California; certification of calibration standards; participation in recurring trans-border air

⁸ A copy of the report can be downloaded from: <https://www.epa.gov/faca/gneb>

quality meetings; and continued support of the Baja California Network with laboratory analytical services and training.⁹ In addition, the donation of surplus air monitoring equipment made by California to Baja California in 2015 finally cleared customs in December 2016, allowing for importation of the equipment. A two-year fine particulate matter (PM_{2.5}) study in the city of Mexicali, Baja California, Mexico began in April 2016 and will run through March 2018. PM_{2.5} is being measured continuously at two locations. The chemical and elemental constituents of PM_{2.5} are being measured at one location. Meteorological measurements are also included in the field campaign. Lastly, representatives from Mexican and U.S. national and state agencies participated in periodic Air Quality Task Force meetings and one U.S.-Mexico Air Quality meeting during 2016.¹⁰

Imperial County Air Quality Website

CARB coordinates the development of an air quality website that provides public access to real-time local air quality data, air quality alerts, and health impacts information at www.imperialvalleyair.org. The website provides air quality forecasts for ozone during the ozone season (March 1 through October 15) and particulate matter (PM) for PM₁₀ (particulate matter that is 10 micrometers or less in diameter) and PM_{2.5} (particulate matter that is 2.5 micrometers or less in diameter) year-round.¹¹ Individuals may also register to receive

a notification via email or text when the air quality in Imperial County is expected to reach unhealthy levels. CARB continues to coordinate with the Imperial County Air Pollution Control District and the website project manager to monitor the site's accessibility and air quality forecasts. The website also served as a prototype for the real-time reporting of Baja California air quality data on the SPA website: www.spabc.gob.mx/dependencia/gestion-ambiental. U.S. EPA funded the development and operation of both the Imperial County and SPA websites.

San Ysidro Community-Based Air Monitoring Study



The San Ysidro Air Monitoring Study is a collaborative effort between government, academia, and community residents to establish a network of low-cost community air monitors in San Ysidro. Image Courtesy: OEHHA

Community residents are guiding this two-year study with support from CalEPA's Office of Environmental Health Hazard Assessment and university scientists at San Diego State University and the University of Washington.

OEHHA funded the study to improve air quality characterization for its mapping tool, CalEnviroScreen. The tool identifies communities that are disproportionately burdened by multiple sources of pollution. Air quality data provided by the network of monitors is capturing air pollution at a neighborhood scale, which in turn is providing air pollution data on the border region via the third version of CalEnviroScreen (CalEnviroScreen 3.0). The data collected by the

and metals; compounds such as nitrates, organic compounds, and sulfates; and complex mixtures such as diesel exhaust and soil. More information can be found at: <https://www.arb.ca.gov/pm/pm.htm>

9 The Baja California Network is a network of air quality monitoring stations in Baja California. As of 2016, an additional three monitoring sites were added to the network.

10 The Air Quality Task Force is one of several under the Border 2020 Program. For the California-Baja California region, five different task forces were established - Air Quality, Water, Waste, Emergency Preparedness and Enforcement. The Air Quality Task Force is composed of U.S. EPA, SEMARNAT, CARB, Imperial County Air Pollution Control District, and SPA.

11 Exposure to PM₁₀ aggravates a number of respiratory illnesses and may even cause early death in people with existing heart and lung disease. PM₁₀ includes the subgroup of finer particles with aerodynamic diameter of 2.5 microns and smaller (PM_{2.5}). These finer particles pose an increased health risk because they can deposit deep in the lung and contain substances that are particularly harmful to human health. PM is a mixture of substances that include elements such as carbon

air monitoring equipment can also inform future efforts to reduce impacts in this region.

Overall, the goals of the San Ysidro Study include:

- Assessing community needs and concerns
- Utilizing regulatory monitoring data, research instruments, and next-generation low-cost sensors to assess air quality for one year
- Developing capacity to continue data collection
- Supporting ongoing improvements in public health
- Providing data for CalEnviroScreen

In 2016, community residents participated in extensive mapping exercises, questionnaires, and meetings to inform the selection of air monitoring locations. Based on community resident input, results of previous research, and a sampling strategy, 13 air-monitoring sites were selected.



San Ysidro Community Residents Providing Directionality for Location of Community Air Monitors - Image Courtesy: OEHHA

Community air monitors are currently being deployed and are collecting data. A website, launched in June 2017, provides the public with access to real-time data from the monitors.



Location of the 13 San Ysidro community air monitors. Site locations are available with real time data at <http://syairstudy.org/>
Image Courtesy: Casa Familiar

The San Ysidro Air Monitoring Study was modeled after another community air study in Imperial County. The Imperial County air study is an ongoing four-year community-based air monitoring research project funded by the National Institutes of Health. The project consists of 40 air monitors located throughout Imperial County with measurements displayed on the Identifying Violations Affecting Neighborhoods (IVAN) website. The project is a collaboration between the California Environmental Health Tracking Program, the University of Washington, and a local organization, Comité Cívico Del Valle. After completion of the Imperial County air study, OEHHA will seek to obtain and evaluate the data collected for potential inclusion in or adjustment of CalEnviroScreen indicators.



San Ysidro Community Air Monitors
Image Courtesy: San Diego State University

Specifically, the San Ysidro and Imperial community air studies could allow for better cross-border characterization for the PM2.5 indicator. The San Ysidro study could also potentially provide data for two additional CalEnviroScreen indicators, Ozone and Diesel Particulate Matter. Although the San Ysidro and Imperial community air studies are scheduled to end in 2017, CARB will supply additional funding to extend the Imperial community air study and OEHHA plans to submit a grant application in hopes of extending work in San Ysidro. The ongoing collection of data in these studies will be valuable for better understanding localized impacts from air pollution.

Clean Vehicles Working Group

The joint work plan for the Clean Vehicles Working Group of the Climate Change and Environment MOU sets forth several goals to reduce emissions from both new vehicles sold in Mexico and in-use emission rates from the existing fleet. One of the key goals is the alignment of Mexico's light-duty vehicle criteria and GHG emission standards with those set in California and the U.S. under the Low Emission Vehicle (LEV) III/Tier III standards and GHG emission programs. These emission standards are being phased in from 2015-2025 in California.

In 2016, SEMARNAT focused on laying the groundwork for updating its GHG emission standards under Mexico's official fuel economy standards program, known as Norma Oficial Mexicana 163 (NOM 163). Specifically, extensive efforts were undertaken to model the compliance paths and benefits of the new draft standards, which will help propel the rulemaking plan in 2017.

The working group also worked on implementing and improving emissions inspection and maintenance programs, such as Smog Check, in Mexico. In September 2016, staff from CARB and BAR hosted a two-day training in Sacramento for staff from SEMARNAT. The training covered the technical and business aspects of California's Smog Check program, including how to conduct On-Board Diagnostic focused inspections, methods to detect and address inspection fraud, the creation and maintenance of vehicle inspection information

systems, test equipment design, and licensing requirements.¹² In September 2016, staff from SEMARNAT visited a Smog Check station for a live demonstration on how inspections are conducted. They also toured BAR's laboratory for Smog Check program development.

Heavy-Duty Diesel Compliance

Outreach events in Imperial and San Diego counties are important to the success of CARB's Truck and Bus Regulation as well as Drayage Regulations. This area is an active goods movement corridor with many fleets providing a short-haul "transfer" service across the U.S.-Mexico Border. CARB has conducted special outreach in these areas to ensure that operators are aware of the rule requirements and compliance milestones. During these events, CARB provides detailed regulatory information and an opportunity for attendees to ask questions, collect fact sheets, and learn about funding assistance programs.

During 2016, CARB offered nine classroom training sessions near the California-Mexico Border. These classes addressed diesel filter technologies and how operators can comply with CARB's heavy-duty diesel vehicle regulations. Two of these training sessions were conducted in Spanish. In addition, outreach and compliance assistance was offered at two drop-in events at CHP scales. These events featured individualized interactions with truckers from both sides of the border in both English and Spanish. The outreach events also included information on regulations, enforcement, and funding assistance for cleaner vehicles. Along with on-site trainings and outreach events, 10 webinars on diesel regulation compliance were conducted throughout the year, including one in Spanish.

¹² On-Board Diagnostic systems are self-diagnostic systems incorporated into the computers of new vehicles. Nearly all 1996 and newer vehicles less than 14,000 lbs. (e.g., passenger cars, pickup trucks, sport utility vehicles) are equipped with OBD II systems, which are California's second generation of OBD requirements. The OBD II system monitors virtually every component that can affect the emission performance of the vehicle to ensure that the vehicle remains as clean as possible over its entire life, and assists repair technicians in diagnosing and fixing problems with the computerized engine controls. For more information please visit: <https://www.arb.ca.gov/msprog/obdprog/obdprog.htm>

Additionally, in a joint effort by CARB and the CHP, commercial diesel vehicles were stopped at the U.S.-Mexico Border by the CHP and inspected by CARB for potential excess emissions and tampering with emission control devices, and to ensure the vehicles had U.S. EPA certified engines. CARB also verified that vehicles were complying with CARB regulations, specifically the Truck and Bus Rule, the Drayage Truck Rule, the Transport Refrigeration Unit Rule, the Emission Control Label Program, and the Truck Idling Program. Approximately 1,871 diesel vehicles were inspected at three California border crossings and surrounding areas in 2016, which resulted in the issuance of 702 citations, totaling more than \$278,900 in fines.

Climate Change

Under2 Coalition

During 2016, Michoacán and Tabasco became the ninth and tenth Mexican states to sign the Under2 Memorandum of Understanding (Under2 Coalition), signaling their commitment to reduce their greenhouse gas emissions 80 to 95 percent below 1990 levels, or limit to 2 annual metric tons of CO₂-equivalent per capita, by 2050. The Under 2 Coalition, started by California and Baden-Württemberg, Germany, in 2015, is a diverse group of governments around the world who set ambitious targets to combat climate change.

Climate Change Working Group

Climate change work between California and Mexico is largely implemented through the Climate Change Working Group of the Climate Change and Environment MOU. During 2016, this group continued to make progress through biweekly calls to exchange information regarding climate policies and technical aspects of climate change program development in California and Mexico. The exchanges between SEMARNAT and CARB included discussions about policy choices for carbon pricing mechanisms, regulatory development processes and program enforcement mechanisms, including details about the development of specific program requirements for carbon offset protocols, project verification, emission caps and allowance allocation distribution. Given Mexico's plans to

launch a national emissions trading system at some point in the future, the Climate Change Working Group will continue to devote time and resources to sharing technical information on program design, as well as to sharing lessons learned from stakeholder engagement and program implementation.

CARB also continued discussions with officials at the Comisión Nacional Forestal (CONAFOR) on Mexico's National Strategy to Reduce Emissions from Deforestation and Forest Degradation (ENA-REDD+). They held a two-day meeting in Sacramento in October 2016. That in-person meeting provided an opportunity for CONAFOR and CARB staff to exchange information on topics that had been discussed during the biweekly calls, including data collection and offset project measurement, reporting, and verification efforts underway in Mexico. As part of this ongoing technical information exchange, CARB shared California's offset program requirements and verifier training/examination materials with CONAFOR. A follow-up workshop in Mexico has been proposed for 2017.

Waste

The border region faces excessive solid waste and sedimentation challenges, including issues caused by improper disposal of waste tires. In order to address these issues, Senate Bill 83 (Committee on Budget and Fiscal Review, Chapter 24, Statutes of 2015) established the Solid Waste Working Group. Overseen by the Border Relations Council, the group is tasked with developing and coordinating long-term solutions to address challenges and remediate issues associated with waste tires, solid waste, and excessive sedimentation along the California-Mexico border region that degrade valuable estuarine and riparian habitats and threaten water quality and public health.

Border Region Solid Waste Working Group

Senate Bill 83 (Committee on Budget and Fiscal Review, Chapter 24, Statutes of 2015) established the Solid Waste Working Group under the California-Mexico Border Relations Council. The working group set out to develop and coordinate long-term solutions to address challenges and remediate issues associated with waste tires, solid

waste, and excessive sedimentation along the border. This bill also called for the development of a waste tire abatement plan, in coordination with the California-Mexico Border Relations Council, which may provide for the abatement of solid waste. This bill provides that that border region activities include the development of projects in Mexico in the California-Mexico border region that address the movement of used tires from California to Mexico, and support the cleanup of illegally disposed waste tires and solid waste that negatively impact California's environment along the border.

The bill also appropriated \$300,000 from the California Tire Recycling Management Fund to support the Border Relations Council. In 2015, the Council directed the Solid Waste Working Group to develop spending recommendations for this appropriation. In February 2016, the group recommended funding for two waste tire and solid waste clean-up projects.

WILD Coast was awarded \$100,000 to conduct a one-year demonstration pilot project to clean up tires in Tijuana. The international nonprofit organization based in Imperial Beach conserves coastal and marine ecosystems and wildlife. The project objectives are to demonstrate the financial effectiveness of investing resources in Mexico, and to prevent tires from crossing the border, as these tires negatively impact the sensitive riparian and estuarine habitat of the Tijuana River Watershed. The project began in May 2016 and will conclude by December 2017. WILD Coast intends to recover up to 100,000 tires from areas in close proximity to the California-Mexico Border and adjacent to tributaries of the Tijuana River. They will work with a private company to collect and shred the waste tires, and sell them to companies that can use the shredded material for tire-derived products such as asphalt, light bricks, and other materials.

The Sonoran Institute, a nonprofit with offices in Arizona and Mexico, was awarded \$200,000 to conduct a one-year pilot project with the objective to reduce the illegal disposal of solid waste in drains in the City of Mexicali, Mexico that contributes to the pollution of the New River. The project intends to eliminate public health

risks, improve the urban landscape in Mexico, and improve the water quality of the New River as it flows into California. The project began in March 2016 and will conclude by mid-2017.

Both the Sonoran Institute and WILD Coast have provided regular updates to help inform the Solid Waste Working Group's Solid Waste and Waste Tire Strategic Plan goals.

Solid Waste and Waste Tire Strategic Plan

In 2016, CalRecycle led the Solid Waste Working Group in developing a Solid Waste and Waste Tire Strategic Plan (Strategic Plan) to address challenges and remediate issues associated with waste tires, solid waste and excessive sediment threatening water quality and public health in the California-Mexico border region.

The working group conducted a series of workshops to guide and inform the Strategic Plan's recommendations. Public workshops were held in Imperial Beach, Calexico, San Diego, and Sacramento. Presentations were given by binational, state, regional, and non-profit organizations. The first workshop was held in August 2016 and focused on market drivers of waste tires and other solid waste in the border region. Presenters included a representative from SPA, a representative from the U.S. EPA, and a representative from San Diego State University who was working to update the 2009 Tire Flow Study. Subsequent workshops, held during the fall of 2016, covered three primary topics:

- Leveraging and enhancing cooperation across borders and levels of government
- Sustainable funding mechanisms for addressing waste tires and solid waste
- Sedimentation drivers, their interaction with other waste streams, and possible solutions

The workshops were an opportunity to share information and inform the Strategic Plan. Using this input, the Solid Waste Working Group finalized the Strategic Plan in December 2016 in anticipation of the Council's January 2017 meeting.

Hazardous Waste

CalEPA's DTSC is responsible for tracking imported and exported hazardous wastes through its POE program. The POE database

shows that during 2016, DTSC received 14 import notifications and 20 export notifications.

In 2016, emphasis was placed on tracking imported and exported wastes. Import notices were reviewed and the receiving California facilities were checked to assure that they were permitted to accept the wastes in question. Information identifying the types and volumes of wastes imported and exported, and the companies that import and export hazardous wastes, were retained.

The DTSC San Diego Border Office also conducts coordinated inspections with the U.S. Customs and Border Protection (CBP) at the Otay Mesa and Calexico East Ports of Entry. All northbound trucks importing hazardous waste and/or hazardous materials are inspected, and the office notifies Mexico's Federal Enforcement Agency (PROFEPA) of any rejected hazardous waste shipments. During this reporting period, there were more than 1,533 trucks inspected, with two Summary of Violations issued to Importers of Record and/or Transporters resulting in an enforcement action.

In 2016, DTSC also conducted southbound truck stop inspections at the CBP Calexico East POE and the Otay Mesa POE. A limited number of these coordinated inspections were conducted, as they required the assistance from CBP officers. In March 2016, approximately 27 trucks transporting hazardous materials and other regulated materials were inspected at the Calexico East POE. In September 2016, approximately 57 trucks transporting hazardous materials and other regulated materials were inspected at the Otay Mesa POE. No hazardous waste violations were observed during these special southbound inspections.

DTSC is an active participant in the Border 2020 binational meetings and the local San Diego County Hazardous Waste Task Force meetings. In 2016, DTSC participated in several binational meetings in the San Diego border region including the U.S.-Mexico Border 2020 Waste Policy Forum, the Border Coordinators Exchange of Information Meeting, the California Border Environmental Task Force Meeting, and the Border 2020 Baja California/California

Waste and Enforcement Task Force Meeting.

DTSC staff also has direct communication with Mexico's PROFEPA and SEMARNAT officials to request information on facilities operating south of the border that are importing hazardous waste and electronic waste from California. This open communication is essential for investigations and enforcement activities. DTSC plans, organizes, and implements trainings regarding the import and export requirements for representatives from maquiladoras (export-oriented manufacturing and assembly plants), Mexican government officials, industry, and nongovernmental agencies. Two training workshops have been conducted as a joint effort with the two groups. DTSC also provides support to the U.S. Customs and Border Protection Agency on special projects related to imports and exports of hazardous waste materials.

Water

At the state level, water quality in California along the California-Mexico Border is under the jurisdiction of the Colorado River Regional Water Quality Control Board (Region 7) and the San Diego Regional Water Quality Control Board (Region 9). Both regions face environmental challenges, and in 2016, the regional water boards from the border region made progress towards environmental solutions. Region 9 worked on many positive projects in the Tijuana River Valley Watershed, largely in collaboration with the Tijuana River Valley Recovery Team. In Region 7, much progress was made as well, particularly related to the New River Improvement Project.

The California Department of Parks and Recreation (State Parks) collaborates with the National Oceanic and Atmospheric Administration (NOAA), the United States Fish and Wildlife Service (USFWS), and the Southwest Wetlands Interpretive Association for management of the Tijuana River National Estuarine Research Reserve (TRNERR or the Reserve) along the border. Many State Parks efforts focused in the border region are accomplished with support by and in the context of the Reserve partnership.

At the federal level, the International Boundary and Water Commission (IBWC) is headed by

commissioners from the U.S. and Mexico to provide binational solutions to issues that arise during the application of U.S.-Mexico treaties regarding boundary demarcation, national ownership of waters, sanitation, water quality, and flood control in the border region. In 2016, IBWC hosted several workshops to address transboundary flow impacts.

Tijuana River Valley Recovery Team

The San Diego Regional Water Quality Control Board and State Parks both assume leadership roles in the stewardship of the Tijuana River Valley. Reducing sediment discharge and cleaning up trash in the Tijuana Valley are among the highest priorities of the board. Since many of the sources of sediment and trash are outside of the jurisdiction of the regulatory agencies, the board utilized a collaborative, stakeholder-led approach to address these challenges by convening the Tijuana River Valley Recovery Team. The board serves as sponsor signatory to the Recovery Team and chairs the Steering Committee. The board believes the Recovery Team serves as an innovative option for addressing water quality improvements. On February 8, 2012, the San Diego Water Board adopted Resolution No. R9-2012-0030, which strongly endorses the Recovery Strategy.

The Tijuana River Valley Recovery Team consists of more than 30 federal, state, and local government agencies, NGOs, and other interested parties.

A key result of the Recovery Team's efforts has been the development and release of their strategic plan, known as the "Tijuana River Valley Recovery Strategy: Living with the Water."¹³ The document concisely summarizes the first phase of actions in a way that provides stakeholders, policymakers, and potential funding sources with a clear understanding of regional challenges and solutions. It helps the Recovery Team to achieve its vision of a healthy Tijuana River Watershed in a manner that is credible, durable, and acceptable to the communities on both sides of the border.

¹³ The Recovery Strategy is available at: http://www.swrcb.ca.gov/sandiego/water_issues/tijuana_river_valley_strategy/index.shtml

In 2015, the Recovery Team completed a Five-Year Action Plan (Action Plan) that outlines the Recovery Team's aspirations to advance its goals for the Tijuana River Watershed up to 2020.¹⁴ The information below summarizes some of the progress made in the Tijuana River Valley in 2016 through collaborative Recovery Team efforts and/or efforts made by specific Recovery Team member agencies and organizations, including State Parks.

Reclamation of the Nelson Sloan Quarry

A key project included in the Action Plan is reclamation of the former Nelson Sloan quarry using sediment excavated from the Tijuana River Valley. San Diego County acquired the quarry through funding by the California Coastal Conservancy for reclamation and restoration of native upland habitat. In 2016, the San Diego Integrated Regional Water Management's workgroup – which reviews proposed projects for Proposition 1 Disadvantaged Community grants – made a recommendation to the California Department of Water Resources to provide \$890,000 of funding for planning this project. If acquired, the funding would support the following next steps:

- Environmental impact review
- Engineering design
- Regulatory permitting
- Facilitation of a multi-agency agreement for use of the quarry
- General coordination to advance the project to the implementation stage

Understanding the Tijuana River Valley Hydrology

In 2016, the City of San Diego and the U.S. Army Corps of Engineers worked together to complete Phase I of the Tijuana River Watershed hydraulics and hydrology (H&H) study focused on analyzing existing conditions in the Tijuana River Valley. Phase II of the study is now in progress, with the goal of integrating data provided by Mexican agencies so that the H&H assessment accurately reflects conditions in Mexico. Ultimately, the H&H study findings may inform a sediment

¹⁴ The Five-Year Action Plan is available online at: www.waterboards.ca.gov/sandiego/board_decisions/adopted_orders/2015/R9-2015-0035.pdf



Image Courtesy: Tijuana River National Estuarine Research Reserve

management plan for the Tijuana River Valley. A sediment management plan is another project included in the Action Plan and could broadly inform regulatory requirements (waivers, waste discharge requirements, etc.) for the Tijuana River Valley, and specifically for Brown Property fill removal and sediment deposition, processing, and reuse at the Nelson Sloan Quarry site.

Brown Property Restoration

The Action Plan also includes the restoration of the Brown Property. The property is located within the Tijuana River Valley and had experienced unauthorized fill activities in the past. The desired outcome of this project is the removal of the unauthorized fill and restoration of the site to a riparian forest floodplain, which would substantially improve the hydrology of the Tijuana River Valley. The steps to achieve this include a study to explore any hydrologic impacts that may occur under various fill removal and restoration scenarios. In 2016, San Diego County secured financial and in-kind resources to prepare such a study.

Climate Understanding and Resilience in the River Valley

The Climate Understanding and Resilience in the River Valley project is funded by NOAA and is being carried out by TRNERR with substantial stakeholder involvement. The project is focused on the development of a climate change vulnerability assessment and adaptation plan for the Tijuana River Valley and looks at flooding from the Tijuana River as well as sea level rise vulnerabilities. In 2016, TRNERR released a draft document that includes Resilience &

Adaptation Strategies associated with climate change as one of the Action Plan's projects. The desired outcome is to provide recommendations to coastal decision-makers on how to consider climate change impacts in managing natural resources and infrastructure in the area.

South Bay International Wastewater Treatment Plant

The San Diego Regional Water Quality Control Board continues to work with the U.S. Section of IBWC (U.S. IBWC) to address sewage infrastructure challenges in Tijuana, Baja California and to prevent transboundary flows of wastewater into California. U.S. IBWC is required to conduct binational meetings, at least biannually, to discuss transboundary flow issues. The biannual meetings also address pretreatment issues that affect U.S. IBWC's South Bay International Wastewater Treatment Plant, which treats sewage originating in Tijuana. These meetings help communities on both sides of the California-Mexico Border understand the issues and steps needed to address water pollution in this region.

Tijuana River Action Month

The Tijuana River Action Network (TRAN) consists of grassroots-community groups and NGOs from the U.S. and Mexico committed to cross-border collaboration to address the conservation and restoration of the Tijuana River Watershed by engaging in outreach and education, and by advocating for natural resources. The network's primary goal is to inspire community volunteers to become watershed stewards. Last year, the network celebrated the seventh anniversary of its Tijuana River Action Month (TRAM). The special month, which has expanded to two months held in September and October, is filled with a series of educational and stewardship events. During TRAM 2016, for example, 3,000 volunteers from both sides of the California-Mexico Border removed waste tires and more than 64,000 pounds (128 cubic yards) of trash from the watershed. They also planted 320 native plants and improved two miles of recreational trails and 8.5 acres of open space habitat.

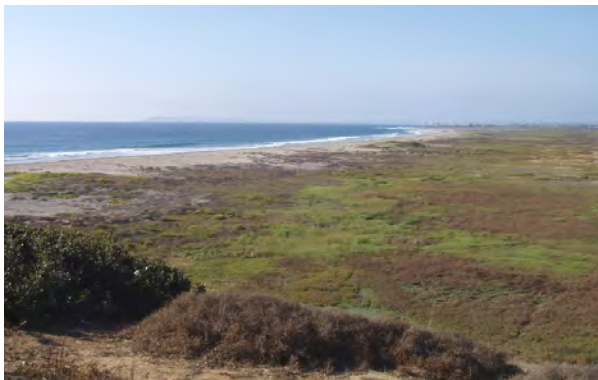
Tijuana River National Estuarine Research Reserve

State Parks collaborates with NOAA, the United States Fish and Wildlife Service, and the Southwest Wetlands Interpretive Association for management of the Tijuana River National Estuarine Research Reserve. Many State Parks efforts focused in the border region are accomplished with support by and in the context of the TRNERR partnership. 2016 project advancement through the Reserve partnership is discussed below.

Public Access and Improvements in the Tijuana River Valley

Public Access on Monument Road

Within the Reserve, Monument Road extends roughly 1.5 miles, connecting the entrance to Border Field State Park with the Reserve's day-use facility atop Monument Mesa in the southwest corner of the United States. The facility offers stunning views of the Reserve, Mexico, downtown San Diego, and the surrounding mountain ranges. Monument Mesa is also the location of Friendship Park, an area long cherished by the local community as a gathering place for people in the U.S. and Mexico to come together and meet at the International Border Fence.



View from Monument Mesa. Image Courtesy: Tijuana River National Estuarine Research Reserve

Public access to this site has been hindered by damage to the only public road that leads to it: Monument Road. There is another road, one used by the Department of Homeland Security, but that one is typically not available to the public. Monument Road suffers damage from

sedimentation and flooding, as it remains flooded for up to seven months of the year.



Monument Road flooded. Image Courtesy: Chris Peregrin, California Department of Parks and Recreation

A sustainable fix to Monument Road has long been a priority of the Reserve. Funding such a fix may soon come available, as State Parks is to receive \$5.9 million in a settlement with the U.S. Department of Homeland Security in a lawsuit over the taking of state land for border infrastructure. State Parks staff, legislators, and the public are focused on the possibility of this funding being used to address the issues with Monument Road. The Legislature included language in the State Budget for FY 2015 to direct nearly \$700,000 to Border Field State Park for preliminary studies toward repairs to Monument Road, and also toward the development of a Border Educational Plaza on Monument Mesa. The Legislature also included intent language to direct the remainder of the settlement funding toward subsequent phases of the project. In 2016, State Parks began planning the project with expected completion in 2020. State Parks also invested \$5,000 in road maintenance from the State Parks Roads Program to spread material on problem flooding areas on Monument Road at Yogurt Canyon to improve public access in this area.

Border Gateway to Nature



Border Gateway to Nature project to build a seat/wall complete. Image Courtesy: Chris Peregrin, California Department of Parks and Recreation

The “Border Gateway to Nature” project involves redesign and improvements at the entrance of Border Field State Park, the primary public access point to the southern portion of the Reserve. This project seeks to not only beautify the entrance and increase visitor-serving facilities and public access at this location, but also intends to educate the public about the primary pollution issues in the Tijuana River. The project has received significant funding from the San Diego Foundation. Design and implementation has involved a variety of partners, including 4Walls International, A Reason To Survive, AECOM, NOAA’s Marine Debris Program, Reliable Tire Company San Diego, Tijuana River Action Network, Veolia Water North America, and State Parks Southern Service Center. At the foundation of the project is the work of 4Walls International, a non-profit organization based in the San Diego-Tijuana region that specializes in re-purposing waste into building materials. Through this project, solid waste such as plastic, foam, and tires, is pulled from the Tijuana River and used as the raw material for park infrastructure such as benches, parking lot bollards, informational kiosks, and signage. Much of the work is accomplished by volunteers through community cleanup and building efforts.

In 2016, State Parks, 4Walls International, and the U.S. Fish and Wildlife Youth Conservation Corps worked to finalize additions for the Border Gateway to Nature, including accessible surfacing and perimeter fencing. State Parks

also designed interpretive panels for this facility that convey information about cross-border pollution. They are scheduled to be installed in 2017. The new public gathering space is open for use and is being enjoyed by many park visitors.

Cross-border Pollution Control and Clean-up, and Habitat Restoration



Goat Canyon Lower Trash Boom. Image Courtesy: Chris Peregrin, California Department of Parks and Recreation

Goat Canyon Sediment Basin

Increased sedimentation and habitat loss in the Goat Canyon Sediment Basin led to the creation of the Goat Canyon Enhancement Project. The Coastal Conservancy, the Southwest Wetlands Interpretive Association, and State Parks began work on what would become the Enhancement Plan, developed between 1998 and 2002, to protect the coastal wetland habitat of the Tijuana River Estuary from further degradation. The Enhancement Plan included strategies to reduce sediment flows to the Estuary. Between 2003 and 2005, two sediment basins were constructed in series within the upper floodplain of Goat Canyon to annually retain over 40,000 cubic yards of sediment. As a result, sedimentation to downstream marsh habitats has been reduced. However, due to the location of the basins downstream from the urbanized and degraded watershed in Mexico, regular sediment removal and maintenance is required. Between 2003 and 2008 habitat restoration efforts were initiated downstream of the Goat Canyon Sediment Basins.



Goat Canyon Sediment Basin during a flood. Image Courtesy: Chris Peregrin, California Department of Parks and Recreation

In Fiscal Year 2013-14, State Parks received funding from the State Parks and Recreation Fund of \$1,001,000 per year for three years through a State Budget Change Proposal. In Fiscal Year 2016-17, State Parks received a funding allocation of \$1.8 million for each year through a similar process. The FY 2016-17 proposal connects with a bill in relation to the Solid Waste Working Group under the California-Mexico Border Relations Council by identifying the CalRecycle Waste Tire funds as the funding source, and therefore integrates with efforts to resolve solid waste issues in the California-Mexico border region.

In 2016, State Parks worked on the 2016 sediment basin clean-out operation. This project allocated \$900,000 for excavation of 20,000 cubic yards and haul-off of 25,000 cubic yards of deposition material.

State Parks maintains trash capture infrastructure in Goat Canyon, consisting of two lines of floating trash booms deployed across the creek channel. In 2016, they invested an additional \$50,000 in trash capture system upgrades and coordinated additional improvements to the Goat Canyon trash boom infrastructure. With the upgrades, the upper boom was reinforced bank-to-bank with double boom infrastructure, including four feet of additional trash capture netting. These upgrades are proving extremely effective.



Goat Canyon upper trash boom. Image Courtesy: Chris Peregrin, California Department of Parks and Recreation

Nelson Sloan Quarry

The Nelson Sloan Quarry is an abandoned quarry within the Tijuana River Valley that has been identified by the Tijuana River Valley Recovery Team as an ideal location for disposal of sediments dredged from the Goat Canyon Sediment Basins and other sediment excavation areas throughout the Tijuana River Valley. State Parks has taken an active role in facilitating meetings, communication, and grant requests to further this project.

During this reporting period, funds from the Integrated Regional Water Management Program, Disadvantaged Communities (IRWM-DAC) grant program were awarded at the regional level for inclusion in the regional grant package proposal to California Department of Water Resources. The initial request of \$1.5 million was conditionally approved at \$890,000. The funding is identified to support final design and environmental review for the Nelson Sloan Quarry Project.

State Parks submitted an additional grant application for a California Coastal Conservancy Grant, seeking further support for the Nelson Sloan Quarry. This request, totaling \$250,000, is tied to the IRWM-DAC request, and is focused on project management support and facilitation of a coordinated agreement between multiple levels of government toward Nelson Sloan operation implementation and long-term management. The request is intended to meet the shortfall in funding related to the reduced allocation in the IRWM-DAC offering.

NOAA Marine Debris Community-based Cleanup Grant

The Reserve was awarded \$150,000 in spring 2014 from NOAA's Marine Debris Program Community-Based Cleanup Grant initiative. This grant funds a range of cleanup, education and outreach efforts focused on resolving land-based sources of marine debris, such as the trash flows in the Tijuana River Valley. In spring 2016, this effort was furthered through an additional allocation of approximately \$80,000 through the same competitive grant program. The project builds upon the success of the 2014 award and focuses on policies around single-use plastic and foam containers in San Diego and Tijuana. The grant also supports coordination and implementation of Tijuana River Action Month along with the Tijuana River Action Network partners.

Tijuana Estuary Tidal Restoration Program

The Tijuana Estuary Tidal Restoration Program is focused on long-term protection and restoration of the Tijuana Estuary. Initiated in the 1980's, this program has provided important guidance and vision for all major projects and programs focused on conservation and restoration of the Tijuana Estuary. The current focus of this program is to take the 2008 feasibility study for the 250-acre salt marsh restoration project to implementation. This effort will involve development of final engineer designs, complete environmental review and regulatory permits, and contract documents.

In 2016, the Reserve, in partnership with the Southwest Wetlands Interpretive Association, was awarded \$800,000 from the California Wildlife Conservation Board to complete final project design, contract documents, and environmental review. State Parks is participating in this effort as a core team member and is collaborating with the Reserve Research Coordinator, Association staff and consultants, the U.S. FWS, and the Coastal Conservancy. Currently the team is looking at restoring 75 acres of salt marsh.

Binational Collaboration



Tijuana Estuary Aerial View. Image Courtesy: Ben McCue, Outdoor Outreach

Congreso Regional de Medio Ambiente y Seguridad Industrial

In September 2016, State Parks and representatives of the Reserve gave a presentation in Mexicali on binational projects and initiatives at the Segundo Congreso Regional de Medio Ambiente y Seguridad Industrial conference. The conference, hosted by SEMARNAT and Cámara Nacional de la Industria de Transformación, aimed to connect industry representatives with the environment, providing information and tools to allow industry to be both competitive and a steward the environment.

U.S. EPA Border 2020 Administrators Visit

State Parks organized a border region tour for U.S. EPA representatives focused on cross-border pollution in December 2016. Participants included the U.S. EPA border office director in San Diego, the director of the Office of Regional and Bilateral Affairs for the Office of International and Tribal Affairs for U.S. EPA, and his deputy. A primary focus of the discussion included potential partnerships between the Reserve, NOAA Marine Debris, and U.S. EPA programs.

King Tides in Baja California

In October 2016, the TRNERR Coastal Training Program organized an inaugural photo exhibit of the Baja King Tides from the 2015/2016 season, in partnership with the Universidad Autónoma de Baja California (UABC) and a non-profit organization Instituto de Planeación Ambiental y Calidad de Vida, Asociación Civil

(INPACVI AC). Students, faculty, non-profit organizations, and the news media attended the exhibit. Additionally, a presentation on the effects of climate change was provided at the photo contest award ceremony.

The exhibit was later moved to another event in Ensenada, Expo Ciencia y Tecnología. With the photos on display again, exposure and awareness was increased with new audiences. More than 1,000 people, including students, representatives from academia, and the public attended. Various presenters spoke about sea level rise impacts. The exhibit now lives at the Reserve's Visitor Center to support the Reserve's King Tides activities, such as the King Tides interpretive walk, led by the Reserve's Education department.

Needs Assessment for Decision Makers on the International Border

In 2016, a training needs assessment was prepared with the goal of developing a tool that would allow TRNERR's Coastal Training Program to better gauge the specific training needs of coastal decision-makers within the Reserve's binational watershed. The needs assessment includes various sections to gather information, including scale of jurisdiction; organization/agency type; and level of knowledge on certain topics (including climate change impacts). The main component of the training needs assessment is a list of possible training topics, with a focus on key issues related to nature- and community-based solutions.

This training needs assessment was first developed in English to include various perspectives among Reserve programs and examples of needs assessments from other National Estuarine Research Reserves. It was later translated into Spanish for its primary audiences. The needs assessment will be delivered in 2017. Data obtained from the needs assessment will inform future trainings for those with binational roles in the Tijuana River watershed.

International Boundary and Water Commission Treaty Minute 320

IBWC Treaty Minutes implement the 1944 U.S.-Mexico Water Treaty. Minute 320, signed in 2015, is the first IBWC agreement focused on sediment, trash, and water quality issues in the Tijuana

River Watershed. It established a framework of binational cooperation to address these issues. In 2016, IBWC hosted several Binational Core Group and technical workgroup meetings to advance the goals of Minute 320 to address sediment, trash, and water quality impacts from transboundary flows.

Colorado River Basin Regional Water Board and the New River

In 2016, the Colorado River Basin Regional Water Board (Region 7) continued to work cooperatively with the U.S. EPA, the International Boundary and Water Commission, and Mexico to address New River pollution originating from Mexicali, Baja California, Mexico. The regional water board also continued to implement its regulatory programs to address New River pollution from sources in the Imperial Valley.

The regional water board participated in bimonthly Binational Technical Committee meetings and binational observations of the New River in Mexicali to assist Mexico with sewage infrastructure issues. The board also continued to implement its monthly water quality monitoring program for the New River at the International Border with Mexico to track the river's cleanup progress, track compliance with California water quality standards, and track emerging pollutants of concern. The board also updated its webpage for the New River/Mexicali Sanitation Program.

Assembly Bill 1079 (V. Manuel Perez, Statutes of 2009) required the California-Mexico Border Relations Council to develop a strategic plan containing specific elements to guide the implementation of the New River Improvement Project. The Strategic Plan was completed in 2011. In January 2016, the regional water board presented an update to the New River Improvement Plan. The update reduced the cost of the project from approximately \$80 million to \$20 million by removing the planned disinfection facility and utilizing wetlands to clean the water as an alternate approach. The Plan update was presented to the California-Mexico Border Relations Council and sent to the California Legislature in February 2016.

The regional water board worked closely with

CalEPA, the State Water Resources Control Board (State Water Board), local legislators and representatives of the Governor's Office to identify funding for implementation of Phase I of the plan's recommendations.

Phase I consists of conducting the environmental studies for the design and construction of the revised recommended structural components for the New River in the Calexico area. The three components include:

- A trash screen for the New River downstream from the California-Mexico Border
- A conveyance system to pipe the New River wastewater from the California-Mexico Border to a point immediately downstream from the crossing of the New River and the All-American Canal
- A booster pumping station and associated piping ("booster pump-back system") to pump treated wastewater from the City of Calexico Wastewater Treatment Plant back to the New River immediately downstream from the California-Mexico Border

Senate Bill 859 (Committee on Budget and Fiscal Review, Statutes of 2016) appropriated \$1.4 million from the Waste Discharge Permit Fund to the State Water Resources Control Board to provide grants or contracts for the implementation of Phase I. In October 2016, CalEPA coordinated with Assembly Member Eduardo Garcia and the regional water board to host a community meeting in Calexico to discuss the \$1.4 million appropriation and the timeline for the project. The Leighton Group, which is working for the City of Calexico, provided an update on the parkway component of the New River Plan. They stated that the parkway plans were 98 percent complete and they expect the project to be "shovel ready" in 2017.

Congressman Juan Vargas introduced New River legislation at the federal level in 2016, and CalEPA collaborated with his staff to include the Strategic Plan and the work of the California-Mexico Border Relations Council in a new version of the bill that is expected to be reintroduced in 2017. CalEPA continues to research funding options for Phase II, which is the construction

phase, for the New River Improvement Project. This phase consists of the installation and construction of the trash screen, booster pump-back system, and the conveyance system.

The regional water board continued to implement the Plan's recommended regulatory actions to address impairments of the New River in the Imperial Valley, including controlling agricultural runoff and discharges of treated wastewater from sources in the Imperial Valley. For example, the regional water board brought an action against the Imperial Irrigation District for violations of the district's discharge permit. Eventually, the district agreed to pay \$63,000 to support three Supplemental Environmental Projects (SEP) for the New River:

- A SEP to implement wetland operation and maintenance activities directly associated with the New River Citizen Congressional Task Force's Brawley wetland site
- A SEP to support implementation of the New River Wetlands Project education and outreach program
- A SEP to support the New River Improvement Project for the Calexico Area
- In addition, the District paid a \$48,000 penalty to the State Water Resources Control Board Cleanup and Abatement Account

In years past, the regional water board had issued a violation order against a beef plant in Brawley when it was owned by National Beef California. Subsequently, the plant closed. In a positive development, in January 2016, the regional water board issued a new permit and a Time Schedule Order to One World Beef for this beef plant. One World Beef purchased the slaughterhouse in 2016 and began operating the plant by late December.

In 2016, the regional water board renewed the National Pollutant Discharge Elimination System (NPDES) permits for Imperial Irrigation District, Heber Public Utilities District, City of Holtville, and U.S. Navy Air Facility in El Centro. They also revised the Conditional Waiver of Waste Discharge Requirements for Agricultural Runoff and Waste from Drain Operation and Maintenance Activities in the Imperial Valley in September of 2016.

Mexicali Sewage Infrastructure Study

Mexicali's current state of sewage infrastructure jeopardizes the water quality improvements made during the past twenty years, as well as the health and well-being of California residents and the environment. In recent years, these challenges have increased. In 2014, the regional water board determined there had been an increase in raw sewage in the New River due to several bypasses in Mexicali.

In order to address these emerging issues, in December 2014, the regional water board urged the U.S. EPA and IBWC to act. In March 2015, an Assembly Oversight Committee Hearing was held at which the regional water board discussed the issues presented by Mexicali's sewage infrastructure. In May 2015, the U.S. members of the Binational Technical Committee held a policy meeting, which resulted in the North American Development Bank funding a study regarding Mexicali sewage infrastructure in July 2015.

The Mexicali study was published in July 2016 and found that approximately \$80 million worth of repairs are required. In December 2016, the Binational Technical Committee discussed the study findings. The challenge remains in identifying funds to pay for operation, maintenance, and rehabilitation of existing and new sewage infrastructure.

Salton Sea Management Program

The regional water board continued to assist the CNRA as it acts pursuant to the Governor's directive to develop and implement a management program to address serious challenges facing the Salton Sea. Board staff include members of the CNRA's Public Outreach and Education Committee, Science Committee, and Planning Committee.

California Fish and Wildlife Restoration Grants

The Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1) authorizes \$7.545 billion in general obligation bonds to fund ecosystems and watershed protection and restoration, water supply infrastructure projects, including surface and groundwater storage, and drinking water

protection.¹⁵ The California Department of Fish and Wildlife (CDFW) supports two Restoration Grant Programs as outlined in Proposition 1:

1. The Watershed Restoration Grant

Program focuses on water quality, river, and watershed protection and restoration projects of statewide importance outside of the Sacramento-San Joaquin Delta.

2. The Delta Water Quality and Ecosystem

Restoration Grant Program focuses on water quality, ecosystem restoration, and fish protection facilities that benefit the Sacramento-San Joaquin Delta (the Delta).

Proposition 1 provides funding to meet California Water Action Plan objectives of more reliable water supplies, restoration of important species and habitat, and more resilient, sustainably managed water resources system that can better withstand inevitable and unforeseen pressures in the coming decades. Since 2015, these grant programs have committed to investing \$285 million in projects of statewide importance outside of the Delta and \$87.5 million in projects that benefit the Delta over a 10-year period.

The CalEPA Border Program worked with Assemblyman Eduardo Garcia's office on identifying grant opportunities for cross-border watershed projects. In 2015, the Legislature passed Assembly Bill 965 (Garcia, Chapter 668, Statutes of 2015). This bill required CDFW to collaborate with the Border Relations Council to establish criteria to fund watershed restoration projects that improve conditions for cross-border urban creeks and watersheds. In 2016, CDFW worked towards adding cross-border criteria to their Restoration Grant Program, and plans to host workshops in the border region in 2017 to raise awareness of this grant opportunity. In 2017, cross-border criteria will be added to CDFW's final grant solicitation, creating the opportunity for projects that qualify to apply for acquisition, planning or implementation funding.

¹⁵ To learn more about the Water Quality, Supply and Infrastructure Improvement Act of 2014, please visit the Bond Accountability website of the California Natural Resources Agency at:
<http://bondaccountability.resources.ca.gov/p1.aspx>

Energy

In 2014, Governor Edmund G. Brown Jr. and the Ministry of Energy of the United Mexican States signed a Memorandum of Understanding on Cooperation in Clean Energies (the “Energy MOU”). The Energy MOU focuses on strengthening partnerships on both sides of the U.S.-Mexico Border to reduce greenhouse gas emissions, share best practices and technology, increase investments in clean technology, expand collaboration on electric grid management, and improve trade and job opportunities.

The California Energy Commission (CEC or Energy Commission) has a 40-year history of promoting energy efficiency and conservation, supporting cutting-edge research, and developing renewable energy resources and alternative fuels. Since the signing of the Energy MOU in 2014, the Energy Commission has worked continuously to implement the agreement. The following summarizes the activities undertaken in 2016.

Technical Workshops

On February 18 and 19, 2016, the Energy Commission hosted a technical workshop on clean energy across the U.S.-Mexico Border in California’s Imperial Valley in partnership with SENER, the University of California-Mexico Initiative, and the Imperial Irrigation District. The workshop brought together approximately 100 participants representing policymakers, utility representatives, energy researchers, energy developers, and NGOs to discuss investment opportunities in clean technology on both sides of the California-Mexico Border.

The workshop also included tours of the Ormat and Energy Source geothermal plants, Tenaska South solar farms, Ocotillo Wind Project, Imperial Irrigation District’s Battery Storage

Project, San Diego State University’s Center for Sustainable Energy, and the Salton Sea.

Energy Efficiency Workshop in California

The University of California-Mexico Initiative (the Initiative) seeks to create a sustained, strategic, and equal partnership between the University of California (UC) system and institutions in Mexico to address common issues and educate the next generation of leaders. The Initiative focuses on key program areas of interest to both the United States and Mexico. Energy is one such area. The Energy Commission’s advisor on California-Mexico issues has served as a member of the working group for several years.

March 31-April 1, 2016, the UC-Mexico Initiative, in partnership with the Energy Commission, held a technical workshop to discuss energy efficiency policy, best practices, binational collaboration, and joint research with Mexico’s National Commission for the Efficient Use of Energy (CONUEE) and Instituto de Investigaciones Eléctricas, together with academics from UC Davis, UC Berkeley, UC Irvine, Lawrence Berkeley National Laboratory, Tecnológico de Monterrey, and Universidad Autonoma de México (UNAM). The workshop also included various participants from industry.

Energy Efficiency Workshop in Mexico City

November 29 – December 1, 2016, the UC-Mexico Initiative, in partnership with the Energy Commission, SENER, CONUEE, the International Energy Agency, and Consejo Nacional de Ciencia y Tecnología, held another technical workshop to discuss collaborating toward energy-efficient cities and an establishing an energy efficiency roadmap for building energy codes and appliance standards for Mexico, with a key Commissioner of the Energy Commission traveling to Mexico. This workshop also included experts from UNAM, Tecnológico de Monterrey, National Institute for Electricity and Clean Energy, Association for Norms and Certifications, UC Berkeley, UC Davis, and UC Irvine.

UC-UNAM Gathering at UC Berkeley

On July 16, 2017, the Energy Commission attended a gathering hosted by the University of California President and the Chancellor of the Universidad Nacional Autonoma de Mexico (UNAM). This gathering sought to continue promoting joint research, student exchanges, and collaboration between the UC system and UNAM, consistent with the efforts of the UC-Mexico Initiative.

California-Mexico Energy Advocacy Day

Since 2010, the Consul General of Mexico in Sacramento has organized a California-Mexico Advocacy day in the California State Capitol, with the participation of experts from public, private, and civil society from both Mexico and the United States. The mission is to increase the relevance of Mexico's relationship with the United States, with special attention to the State of California, by raising awareness of issues of common interest and providing a platform for dialogue and understanding. California-Mexico Advocacy Day encourages ties with California state legislators, government officials, policy advisors and interest groups involved in forming policy and making decisions at the state level. It also expands the portfolio of issues of bilateral interest and identifies common ground to articulate opportunities for bolstering common economic growth and prosperity.

On May 3, 2016, the Energy Commission partnered with the Mexican Consulate in Sacramento and the Select Committee on California-Mexico Cooperation at the California Legislature to hold a California-Mexico Capitol Advocacy Day focused on energy issues to bring awareness and highlight California's work with Mexico on this topic. The program included a working breakfast between the Energy Commission and SENER at the Mexican Consulate in Sacramento; a keynote address by the SENER Undersecretary at a lunch hosted by the California Chamber of Commerce; a public Senate hearing where the Chair of the Energy Commission testified and briefed the Legislature and the public on the progress of the MOU between Governor Edmund

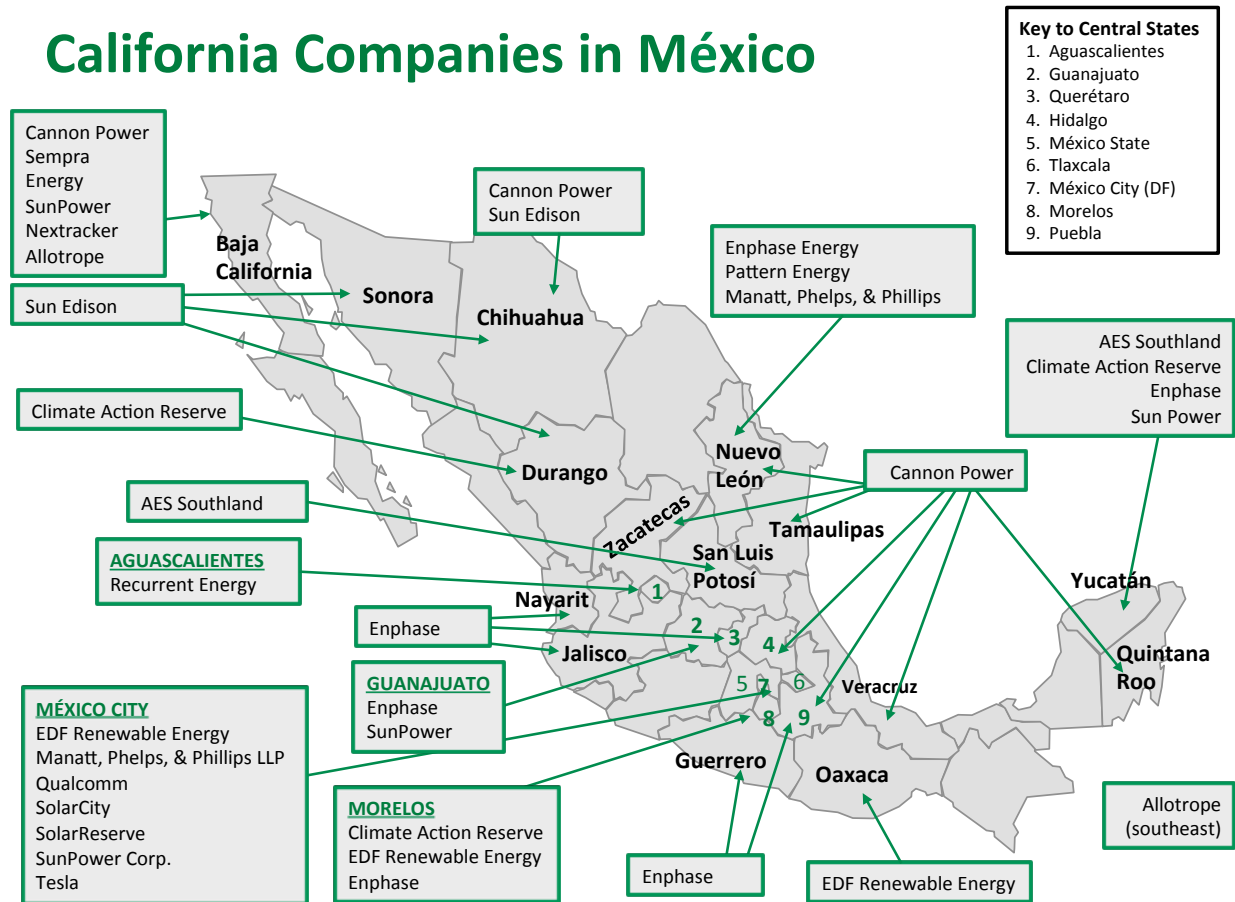
G. Brown Jr. and Mexico's Energy Secretary; and a networking reception at the Leland Stanford Mansion in Sacramento.

Promoting Renewable Energy Policies

To continue advancing the Energy MOU, the Commission Chair and his Chief of Staff traveled to Mexico City from May 11-17, 2016, to discuss developing consistent policies on both sides of the U.S.-Mexico Border to address climate change and increase the adoption of renewable energy resources. One of the most important outcomes of this trip was the Comisión Reguladora de Energia (CRE), Mexico's energy regulator, and the Energy Commission's joint efforts to set up a follow-up trip to California to work on developing Mexico's net-metering policy. The Energy Commission Chair and his Chief of Staff hosted the CRE commissioners for one week. Mexico plans to adopt the net-metering policy in February of 2017.

The presence of California clean technology companies in Mexico is growing. For example, Tesla has sold several cars in Mexico, opened a showroom in Mexico City in September, and begun to build electric vehicle charging infrastructure throughout the country. The map on page 36 shows some of the companies that have penetrated the Mexican market in recent years, and is accurate as of 2016.

California Companies in México



Energy Legislation in Mexico

Mexican legislators at the federal and state levels continue to work toward adopting new clean energy policies. For example, the State of Jalisco has created an energy agency to increase renewables, energy efficiency, and clean transportation. The State of Aguascalientes recently signed an MOU with the Energy Commission to advance similar efforts and adopted the first fleet of electric vehicles at the state level. At the federal level, the renewable energy auctions continue to break pricing records, and regulators and policymakers are beginning to consider further efforts for integration and storage.

Policymakers are also working to develop additional interconnectivity initiatives in Mexico. For example, SENER continues expanding its transmission lines from Sonora to Baja California, Mexico. This line is expected to connect Baja California to the rest of the

Image Courtesy (2016): Emilio Camacho, California Energy Commission

Mexican grid. In addition, there will be a new transmission line from Nuevo León to Sonora, which is expected to open the Mexican market to California and vice versa.

Clean Energy Ministerial – Mexico

The California Energy Commission supported the Governor’s Office in planning the Clean Energy Ministerial (CEM) and sub-CEM events for Under2 Coalition participants, which took place in San Francisco on June 1, 2016. Commission staff secured attendance by Mexican states, participated in panels and activities, and liaised with SEMARNAT’s Undersecretary, the Consul General in San Francisco, and SENER representatives.

Summit of the Americas, Jalisco 2016

The 2016 Summit of the Americas, held from August 30 – September 1, 2016, was organized by the Government of Jalisco through the Ministry of Environment and Territorial Development. The summit convened subnational governments of the American continent to follow up on new challenges presented in the newly implemented 2030 Agenda for Sustainable Development and the Paris Agreement on climate change. The event focused on the exchange of experiences in climate action, financing, regulation, and the commitments agreed upon in the Declaration of Ontario in 2015.

Governors, ministers, dignitaries, and representatives from several countries attended. The gathering provided the opportunity to share experiences and seek cooperation to implement the agreements reached.

California's delegation traveled to Jalisco to:

1. Represent Governor Edmund G. Brown Jr. at the summit
2. Represent Governor Edmund G. Brown Jr. at the Governors' Climate and Forestry Task Force meeting
3. Advance the work of the Under2 Coalition Coalition
4. Continue the clean energy policy cooperation between the California Energy Commission and the State of Jalisco

During the trip, the Energy Commission Chair signed an MOU with the Governor of Jalisco, continuing to support Jalisco in establishing a state energy agency to advance clean tech and energy efficiency in the State of Jalisco. This agreement will set a framework for future cooperation between the Energy Commission and Jalisco's new energy agency.

The Energy Commission also held several high-level meetings. Notable among these was a lunch with Mexico's leading technology companies to discuss adopting clean technologies in their operations. The Chair also met with Mexican businesses, local leaders, and officials from the State of Tabasco to secure support for the Under2 Coalition Coalition. Furthermore, the Chair participated on a panel to discuss the effectiveness

of private financing for climate action. Other panelists included the Undersecretary of SENER, and the Undersecretary of SEMARNAT.

Agriculture

The California Department of Food and Agriculture has maintained close ties with Baja California's government. In 2016, CDFA signed a Memorandum of Understanding (MOU) with the SEFOA of Baja California. CDFA also participates in the Tri-National Agricultural Accord, which brings together state and national agricultural representatives from Canada, Mexico and the U.S. to discuss issues of shared concern. The 2016 Tri-National Agricultural Accord was held in Niagara Falls, Canada.

Animal Health and Food Safety

CDFA's California-Mexico activities have continued to focus on coordination and collaboration with border state government counterparts on animal health. AHFSS helped the State of Sonora to become the first state in Mexico to earn the USDA's status as being free from bovine brucellosis. Having this status helps Mexico export Mexican feeder cattle into California. Representatives from CDFA also participated in bilateral working groups on animal health, which included meetings of the Binational Committee (BNC) in San Diego (January), Rosarito (May), and Tijuana (September), as well as a binational Fever Tick Summit in Weslaco, Texas (November).

AHFSS and Imperial County's Agricultural Commissioner participated in the AgroBaja Fair in Mexicali, Baja California in March 2016, and distributed animal disease prevention information in the form of bilingual avian health calendars and Spanish language fliers. An AHFSS veterinarian made two visits in March and August to the veterinary school at UABC in Mexicali, which included meetings with veterinary students and professors.

In addition, AHFSS visited the SEFOA office in Mexicali and met with the state veterinarian and the agriculture secretary of Baja California in August. In October, AHFSS veterinarians attended the United States Animal Health Association (USAHA) Tuberculosis (TB) Committee meeting, which was attended by veterinarians from the Mexican Cattlemen's Association and some Mexican state veterinarians. The CDFA director, who also serves as California's State Veterinarian, gave a presentation on the eradication of bovine TB from California, while another AHFSS veterinarian translated for a Mexican veterinarian who presented on eradicating TB from a highly infected dairy herd in La Laguna, Mexico. CDFA continues to cooperate with Mexican counterparts on shared animal health issues, utilizing a border coordinator serving under the State Veterinarian to liaise with Mexico on animal health issues.

Pesticides

DPR continues to participate in conferences, roundtables, and other events in the border region. DPR participates in community fairs, binational health weeks and binational conferences in various locations throughout California. DPR staff continue to provide support for trainings on pesticide illness and safety. The statewide trainings provide underserved populations and their communities with the knowledge and tools necessary to implement pesticide safety measures.

Pest Prevention and Plant Health

CDFA's Plant Health and Pest Prevention Services Division continues to work with border state counterparts in addressing plant pests of mutual concern. This includes collaboration and monitoring for the Asian Citrus Psyllid, citrus Leprosis and Huanglongbing. Mexico continues to supply CDFA with biological control parasitoids for the Pink Hibiscus Mealybug infestation in Coachella Valley. The division also continues to collaborate in the California-Baja California Integration Group, which includes representatives from the USDA Animal and Plant Health Inspection Service, U.S. Customs and Border Protection, Imperial and San Diego County Agricultural Commissioner's offices, and

representatives from Mexico's local, state, and national governments.

Outreach on Pesticide Safety and Best Practices

DPR attended as many events as possible in 2016 to distribute pesticide safety outreach materials. On January 27 - 28, 2016, the Department provided pesticide safety outreach materials to attendees at the U.S.-Mexico Border Symposium on Children's Environmental Health in San Diego. The U.S. EPA's Region 9 office sponsored this symposium attended by Mexican government officials and stakeholders, including representatives from the Department of Health, SEMARNAT, health educators (also known as Promotores) and the Sonora Environmental Research Institute, Incorporated.

On February 16, 2016, DPR staff met with the Sacramento Consul General to discuss DPR's mission and collaborative educational opportunities for them to reach out to farmworkers and others in the Mexican community on pesticide safety.¹⁶ On March 3-5, 2016, DPR staff assisted the Imperial County Agricultural Commissioner's Office at the AgroBaja Expo in Mexicali, Mexico. This event promotes the exchange of information between the U.S. and Mexico on quarantine and pest issues, as well food safety and produce residue restrictions. DPR staff provided literature on pesticide safety and gave presentations how growers in Mexico who export to California could ensure their produce meets California's pesticide food safety standards. The exposition had 67,000 visitors and 737 exhibitors.

On April 28, 2016, DPR assisted at a fieldworker pesticide safety training session sponsored by the San Diego County Agricultural Commissioner. The training was provided as part of the outreach efforts related to the Farm Worker Health Initiative, which includes members from industry, farm worker advocacy groups, and health providers. It also includes government representatives from other counties, from CalEPA and from the U.S. EPA.

¹⁶ The Sacramento Mexican Consulate has 24 counties in its jurisdiction. For more information, please visit the Sacramento Mexican Consulate website at: <http://consulmex.sre.gob.mx/sacramento>

DPR also participated in several community outreach events. On March 19, 2016, DPR provided pesticide safety outreach materials at the Mobile Mexican Consulate in Lompoc (Santa Barbara County), which was attended by about 300 people. While there, they answered questions posed by many farmworkers and their family members. Similarly, on June 18-19, 2016, DPR provided pesticide safety outreach materials at a community meeting that was organized by the Oxnard Mexican Consulate and held in San Luis Obispo. On June 30, 2016, DPR provided pesticide safety outreach materials and gave a presentation on pesticide safety and the new Federal Worker Protection Standards at the Mexican Consulate in Sacramento.

DPR presented information on pesticide safety during events surrounding Labor Rights Week led by the General Mexican Consulates of California. Events commemorating the week were held August 29-30 at the Consulate General of Mexico in San Jose; on August 31 at the Consulate General of Mexico in Sacramento, and September 1-2 at the Consulate General of Mexico in Oxnard. On September 15, 2016, the Oxnard Mexican Consulate celebrated the 206th Anniversary of the Independence of Mexico. DPR provided pesticide safety outreach materials at this event in Ventura.

On May 13, 2016, DPR participated in the Oxnard Mexican Consulate Community Partners Meeting. Topics of discussion included collaboration, outreach materials and community needs. Organizations such as Mixteco Indigena Community Organization, California Rural Legal Assistance, California Department of Industrial Relations, California Employment Development Department, and La Hermandad attended the meeting.

"Promotores"

Through OBBH, the United States-Mexico Border Health Commission (U.S. MBHC) works in coordination with the other U.S. and Mexico border states and federal governments on shared priorities related to tuberculosis, obesity/diabetes, access to care, research, and strategic planning.

CDPH implemented the U.S. MBHC's community-

based healthy border initiatives throughout the border region to improve capacity building. For example, CDPH conducted Safety Pesticide Trainings for community health workers known as Promotores (also known as Promotores de Salud), in several California counties. CDPH orchestrated workshops held in partnership with DPR, the California Department of Health Care Services-Office of Rural Health, and the U.S. EPA to train Promotores on pesticide illness and safety, helping them reach out to farmworkers and local community members in the border region and binational communities throughout the California.

On May 13, 2016, DPR attended a Promotores Conference in Oakland, CA. The objective of the conference was to relate the work of Promotores de Salud in the United States with those in Mexico to improve the health of migrants, as well as to develop a binational model of Promotores.

On September 29, 2016, DPR participated in the “2016 Adelante Promotores Conference” in San Diego. This annual conference aims to increase the professional and interpersonal capabilities of Promotores by teaching them about various health related topics affecting communities.

The Sixth Annual Immigration Conference was held on October 13, 2016, in Columbia, South Carolina. DPR presented on the outcome of 10 statewide pesticide safety trainings for Promotores de Salud. These trainings were a collaborative effort between U.S. EPA, Region 9, the California Office of Binational Border Health, DPR, and the California County Agricultural Commissioners.

Farm Worker Appreciation

On December 2, 2016, DPR’s Director attended the 37th Annual Farmworker Appreciation Breakfast in Calexico and joined the U.S. EPA’s Acting Region 9 Administrator and other U.S. EPA representatives in serving breakfast to farmworkers from the Imperial Valley. This early morning event was sponsored by the California Employment Development Department in partnership with the Farmworker Services Coalition of Imperial County.

Transportation

The California-Mexico Border is home to six international border crossings, two of which are among the busiest of all United States crossings. In 2016, California's international border crossings processed nearly 17 million pedestrian crossings, 31 million personal vehicles, and over 1.3 million commercial trucks.¹⁷ While today's cross-border flow of people and goods supports economic growth and opportunity, it also strains nearby roads and highways serving border communities and produces greenhouse gas emissions.

Caltrans and the California Highway Patrol are responsible for border mobility and enforcement. Both departments are working on innovative solutions that expand opportunities to create a safe, integrated, efficient, and secure transportation system along the California-Mexico Border. A healthy border region is vital to achieving the region's economic, public health, air quality, and mobility objectives. New projects like the flagship Otay Mesa East International Land Port of Entry will reduce border crossing wait times, improve flow of traffic between California and Mexico, and bring California closer to meeting these objectives.

Border Mobility

In 2016, Caltrans continued working on two important studies looking at ways to make border mobility more integrated and sustainable. California's Integrated Border Approach Strategy Study will examine regional mobility impacts resulting from the cross-border flow of people and goods on California's border communities

through an institutional perspective. The study seeks to understand how planning agencies could enhance domestic and binational coordination and improve project delivery to reduce impacts of cross-border travel. Caltrans is currently reviewing the final draft of this study's report.

The second study, California-Baja California Binational Region - A Fresh Look at Impacts of Border Delays, assesses how cross-border delays impact economic opportunity and air quality. Caltrans is working in close partnership with the San Diego Association of Governments (SANDAG) and the Imperial County Transportation Commission. This study updates a similar study completed in 2006, and assesses air quality impacts of passenger and commercial vehicles resulting from border crossing congestion. The study also examines practices to improve border wait-time data collection and reliability. The estimated completion date for this study is 2018.

Together these efforts explore innovative approaches for binational transportation planning and border infrastructure project funding, and identify opportunities for Caltrans and its partners to improve the California-Mexico Border.

Border Infrastructure

Tens of thousands of personal and commercial vehicles travel between San Diego, California and Tijuana, Baja California every day. These travelers are plagued by unpredictable border-crossing traffic congestion and delays. Wait times routinely exceed two hours at the existing six ports of entry. These delays are not only frustrating for pedestrians and drivers, but they further have a significant negative impact on the environment, economy, and overall quality of life of border communities. A 2006 study funded by Caltrans and SANDAG found that more than eight million trips in the region were lost per year as drivers chose to avoid battling the congestion.¹⁸ The study equated impacts of border delay to an economic loss of nearly \$1.3 billion in potential yearly revenues.

17 Source: U.S. Bureau of Transportation Statistics, 2017, Total Northbound Crossings. https://transborder.bts.gov/programs/international/transborder/TBDR_BC/TBDR_BCQ.html

18 The methodology and estimated of the economic impacts of cross border wait times are being updated as part of the "Fresh Look at Impacts of Border Delays," expected to be completed in late 2018.

Otay Mesa East International Land Port of Entry Project

The Otay Mesa East International Land Port of Entry project (Otay Mesa East) will improve mobility and reduce wait times at the California-Mexico Border. Caltrans, in coordination with SANDAG, is working with local, state and federal stakeholders in the U.S. and Mexico to construct Otay Mesa East along the San Diego-Tijuana border. Once complete, Otay Mesa East will be the California's first tolled international port of entry. Construction of Otay Mesa East will take place in three segments:

Segment 1: This segment constructed the first phase of State Route 11, a new four-lane freeway between State Route 905 and Enrico Fermi Drive. State Route 11 will connect State Routes 125 and 905 to the new port of entry facility. Construction of Segment 1 finished in 2016, and the first phase of State Route 11 is now open to traffic.

Segment 2: This segment constructs the final phase of State Route 11 and a new commercial vehicle enforcement facility. Caltrans and SANDAG jointly received a Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies (FASTLANE) federal grant in 2016 to fund a portion of Segment 2. Construction of Segment 2 is expected to begin in late 2018.

Segment 3: This final segment is construction of the new Otay Mesa East port of entry facility. Construction of this final segment requires additional binational coordination with Mexico, as well as funding.

Multiagency coordination is important to the success of the Otay Mesa East project. In the summer of 2014, the California State Transportation Agency agreed through a Memorandum of Understanding with the Mexican Secretariat of Communications and Transportation to form a binational committee tasked with expediting the Otay Mesa East project. The binational committee met regularly in 2016 and continues to monitor major project milestones and coordinate project development. In addition, a U.S. federal interagency committee, including representatives from U.S. Customs

and Border Protection and U.S. General Services Administration, meets regularly to strategize project development and policy issues with Caltrans and SANDAG.

Advanced Technology Corridors Pilot at Border Ports of Entry

California's international border crossings and surrounding roadways experience severe congestion. One important piece of the California's overall strategy to combat vehicle congestion and reduce cross-border wait times is to use intelligent transportation systems. Governor Edmund G. Brown Jr.'s 2016 Sustainable Freight Action Plan identifies the importance of using such systems along the border region. The Sustainable Freight Action Plan outlines the Advanced Technology Corridors Border pilot project in which Caltrans will work with state, regional and local partners to implement information management systems, innovative operation techniques, and enhanced traffic management technology.

The goal of this pilot project is to provide cross-border travelers with better information to aid them in travel decisions on when and how to travel across the border in the least amount of time. Moreover, one objective of the pilot project is to disseminate accurate wait time information to assist local, state and federal agencies in border operations and traffic management. Contingent on federal and local support, the pilot project may incorporate a component on mobility incentives for zero and near-zero emission vehicles crossing the border. Caltrans is working to develop a work plan for this pilot project and expects to finish by mid-2017.

Safety

Enforcement Operations for Border Crime

The purpose of the Highway Patrol is to assure the safe, convenient and efficient transportation of people and goods along California's highway system. The Highway Patrol's Border Division operates in San Diego, Imperial, Orange, and Riverside counties. The Border Division is responsible for enforcement operations along the California-Mexico Border.

The Border Division coordinates and participates in investigative task forces and community outreach programs like the San Diego Regional Auto Theft Task Force; the Human Trafficking Task Force; and Operation Stonegarden, a U.S. Department of Homeland Security border enforcement grant program. The Border Division also employs its own operations along the California-Mexico Border such as its Canine Unit; the El Protector Program;¹⁹ and two commercial vehicle inspection facilities located at the Otay Mesa and Calexico East international ports of entry. Each of these programs and operations has a unique mission but all enhance the Highway Patrol's ability to protect and serve California's residents.

19 The goal of the El Protector Program is to educate and encourage positive traffic safety behavior and to build better community relations between the community and law enforcement agencies. The driving force and focus of this program is the use of a CHP officer of Hispanic ancestry or officers that are bilingual and bicultural - known as the El Protector Program Coordinator. The coordinator organizes community events, provides traffic safety education presentations and serves as a Hispanic role model. For more information, please visit: <https://www.chp.ca.gov/programs-services/programs/el-protector>

Because the Highway Patrol has the primary responsibility for the recovery of stolen vehicles but does not have jurisdiction in Mexico, the Border Division has developed a bilateral partnership with Mexican authorities through its Mexican Liaison Unit and participation in the Regional Auto Theft Task Force. The Border Division leverages its bilateral partnerships to intercept and recover stolen vehicles on both sides of the California-Mexico Border. In 2016, the Mexican Liaison Unit and the Regional Auto Theft Task Force recovered a combined 753 vehicles valued at approximately \$7.4 million. The CHP's excellent working relationship with Mexican officials has led to cooperation in other enforcement areas such as murders, bank robberies, kidnappings, insurance fraud and locating fugitives.

Commercial vehicle inspections at the Otay Mesa and Calexico East international ports of entry help ensure trucks traveling from Mexico into California comply with the California's vehicle laws. In 2016, the Highway Patrol inspected 37,435 vehicles at its two border inspection facilities. On average, approximately 3,028 vehicles per day traveled through the Otay Mesa inspection facility and approximately 1,136 vehicles per day traveled through the Calexico East inspection facility in 2016. Furthermore, the California Department of Motor Vehicles provides on-site commercial vehicle registration services at the Otay Mesa inspection facility to support the Highway Patrol.

The Border Division's Canine Unit is one of its most valuable assets. In 2016, the Border Division deployed its Canine Unit on 322 different occasions. As a result, the Canine Unit made 119 seizures amounting to 22 pounds of heroin, 357 pounds of cocaine, 391 pounds of methamphetamine, and 3,709 pounds of marijuana. The Canine Unit also confiscated more than \$3.3 million in U.S. currency and assisted with 398 arrests.

The Highway Patrol's Border Division participates in efforts to end human trafficking and slavery along the California-Mexico Border. The Border Division assigns officers to two multi-agency human trafficking task forces, one in Orange County and the other in San Diego County. In

2016, the efforts of the two task forces resulted in 124 emancipations, 33 of which were juveniles.

Driver Education and Assembly Bill 60

Community engagement and public education remain an integral piece of the Highway Patrol's mission. The Border Division's El Protector Program focuses on improving driver safety in California's border communities by offering bilingual educational events. In 2016, the El Protector Program engaged the border community through multiple radio, television and newspaper outlets, as well as through social media such as Twitter. In addition, the El Protector Program facilitated forty education events on traffic laws, driver safety, and driver license regulations regarding Assembly Bill 60 (Alejo, Chapter 524, Statutes of 2013). This bill requires the Department of Motor Vehicles to issue an original driver's license to a person who is unable to submit satisfactory proof that the applicant's presence in the United States is authorized under federal law if he or she meets all other qualifications for licensure and provides satisfactory proof to the department of his or her identity and California residency.

In 2014, the Mexican Foreign Ministry and the Department of Motor Vehicles signed a Memorandum of Understanding to collaborate on the implementation of AB 60 and to ensure that Mexican identification documents were accepted as sufficient identification for Mexican applicants under the program. In January 2015, the Department of Motor Vehicles successfully implemented the AB 60 program. By the end of 2016, approximately 995,000 individuals applied for an AB 60 driver's license, and approximately 836,000 successfully completed the full licensing process and were issued licenses.

Operation Stonegarden Program

The Operation Stonegarden (OPSG) Grant Program supports enhanced cooperation and coordination among CBP, United States Border Patrol (U.S. BP), Cal OES, and federal, state, local, tribal, and territorial law enforcement agencies. The OPSG Program provides funding to support joint efforts to secure the U.S. borders

along routes of ingress from international borders to include travel corridors in states bordering Mexico and Canada, as well as states and territories with international water borders. In 2016, the U.S. Department of Homeland Security awarded the Highway Patrol's Border Division a \$677,000 Operation Stonegarden grant to support law enforcement operations along the California-Mexico Border. The Border Division continues to leverage Operation Stonegarden grants to improve its enforcement operations along the California-Mexico Border that result in seizures of illegal drugs and firearms as well as criminal arrests.

The San Diego County Sheriff's Department administers OPSG for the San Diego Sector. The program, which now has 24 participating agencies, includes all city police departments in San Diego County (Cities of Carlsbad, Chula Vista, Coronado, El Cajon, Escondido, La Mesa, National City, Oceanside and San Diego), the San Diego Harbor Police, Sheriff's Departments from San Diego, Orange, Los Angeles, Ventura, Santa Barbara, San Luis Obispo, Monterey, Santa Cruz, and San Mateo Counties, and state law enforcement agencies, to include the California Highway Patrol, California Department of Fish and Wildlife, California Department of Parks and Recreation and University of San Diego Police Department.

The San Diego County OPSG grant provides enforcement of international water borders from the U.S.-Mexico Border to San Mateo County, covering approximately 489 miles of coastline north of San Diego County. Together, the agencies participating in the San Diego OPSG grant provide increased law enforcement presence in their designated areas of jurisdiction in order to support U.S. Customs and Border Protection efforts in the region to reduce border-related crimes and improve border security.

Historically, San Diego County has been a highly favored operational area for human and drug smuggling organizations. The close proximity of Tijuana, Baja California to San Diego, California, population density, significant coastline, and extensive transportation networks leading to the interior immediately north of the California-Mexico Border make San Diego a consistently

lucrative target. Now, as the maritime smuggling threat increases, these organizations are looking for smuggling opportunities beyond San Diego County as demonstrated by boat landings (pangas) being discovered more than 400 miles north in San Mateo County. Border-related crime represents an all-threat environment in that the primary criminal activity (drug/human smuggling) often results in cross-border criminal organizations and individuals undertaking secondary and frequently, tertiary criminal activities that involve a wider range of crimes (including kidnappings, assaults, murders, money laundering, and cross-border weapons trafficking). These criminal activities, when undertaken in the U.S., constitute a threat to domestic security, subsequently triggering involvement by state and local law enforcement.

During the 2016 calendar year, the agencies participating in the San Diego County Operation Stonegarden grant produced the following results:

- 14,832 vehicle stops
- 1,131 pedestrian stops
- 636 vessel stops
- 3,812 citations issued
- 7,165 field interviews of suspicious subjects conducted
- 604 misdemeanor arrests
- 332 felony arrests
- 397 narcotics seizures
- 140 non-drug seizures, which includes weapons and currency

An example of the cooperation and collaboration between agencies can be demonstrated by Operation Gridlock IV (the Operation). Held October 25-26, 2016, the goal of the Operation was to gather intelligence and intercept drug courier groups transporting narcotics into and throughout the United States. The Operation simultaneously conducted narcotic interdiction operations in three separate time zones across the country. Modeled after the previous three Operation Gridlocks, Operation Gridlock IV was a multi-agency, multi-jurisdiction, narcotics interdiction operation. Within San Diego County, the Operation simultaneously targeted Interstate 5, Interstate 8 and Interstate 15 and adjacent state routes, and included maritime operations

along Southern California coastal waterways.

In addition to thoroughfares in Southern California, on a national level Operation Gridlock IV targeted narcotic thoroughfares and the states of Florida, Georgia, Idaho, Minnesota, Missouri, Nevada, Oklahoma, Pennsylvania, South Carolina, Utah, and Wyoming. The statistics for the Operation within San Diego County and nationwide are below.

OPERATION GRIDLOCK IV STATISTICS

Statistics	San Diego County	Nation-wide	Total
Vehicle Stops	1090	607	1697
Citations	271	64	335
Misdemeanor Arrests	59	30	89
Felony Arrests	33	30	63
Field Interviews	346	41	387
Pursuits	2	0	2
Narcotic Seizures	40	32	72
Non-Drug Seizures	11	4	15
Warrants Cleared	15	5	20
Methamphetamine (Pounds)	73	0	73
Marijuana (Pounds)	4	470	474
U.S. Currency Seized	\$5,977	\$175,058	\$181,035
Pharmaceuticals	138	190	328
Cocaine (Pounds)	27	9	36
Firearms	8	2	10

The outlook for OPSG in 2017 is mixed. The San Diego County Operation Stonegarden award has increased very little in the past several years, despite the addition of agencies, change in threat and increased areas of responsibility, primarily

the international water border of the State of California. At this time, the grant scope cannot be increased without an increase in the award amount. Additionally, the administrative aspects of the grant are increasing, without additional funding.

State Threat Assessment Center

The State Threat Assessment Center (STAC) is California's primary fusion center and is operated by Cal OES, in collaboration with the California Highway Patrol and the California Department of Justice. The STAC supports Cal OES by monitoring, reporting, and sharing information with local, state, federal and international law enforcement, public safety, and NGO partners. Efforts include a wide range of border and transnational crime issues within California and along the California-Mexico Border.

The STAS, which is comprised of five regional fusion centers and the STAC, coordinates with local and state partners of the California Regional Anti-Human Trafficking Task Force to train, identify, investigate, and combat the threat of human trafficking statewide. This program supports and funds nine local task forces, four of which are based in Southern California, to identify human trafficking victims and prosecute traffickers.

In addition to producing a broad spectrum of Intelligence Products, the STAC partners with multiple CBP offices throughout California, and collaborates with the El Paso Intelligence Center. The STAC also coordinates information sharing and analytic research with other southwest border fusion centers such as the Texas Fusion Center in Austin, Texas and the Arizona Counter Terrorism Intelligence Center, and provides regular law enforcement and executive briefs on these issues.

Health

Office of Binational Border Health

The mission OBBH is to protect and improve the health of California communities by facilitating communication, coordination, and collaboration among California and Mexico health officials and health professionals, while working closely with communities on both sides of the California-Mexico Border.

A voluntary statewide community advisory group convenes twice a year to develop a strategic plan with goals for implementation, and to advise CDPH and the California members of the U.S.-Mexico Border Health Commission (Commission). The group of 12 members includes representatives from Los Angeles, San Diego, and Imperial Counties' health departments, an association of local health officers, local government, hospitals, health plans, community-based organizations, and universities. In 2016, the OBBH Advisory Group held two public meetings to review the OBBH's three-year strategic plan.

In 2016, OBBH border health programs continued to focus on border and binational communities throughout California and Baja California by sustaining partnerships and enhancing communications between state and federal officials in California and Mexico. OBBH's 2015 Annual Border Health Status Report to the Legislature presents important health indicators for border and binational communities in California and describes the border region experiences in terms of public health challenges and issues that are distinctive to the region. Health issues that impact the region's 3.5 million residents are important to California statewide. Significant geographic and ethnic disparities exist for each of the health issues covered in

this report including demographics, access to health care, obesity, diabetes, tuberculosis, HIV/AIDS, immunizations, and vaccine-preventable diseases.

In partnership with the County of San Diego, Health and Human Services Agency, and the Commission's Mexico Section, OBBH facilitated the Border Health Consortium of the Californias (BHCC), consisting of public, private and academic representatives to improve health along the California-Baja California border region.

The goals of the BHCC are to:

- Identify the common challenges and align with the Commission's Healthy Border 2020
- Optimize articulation and the three C's - Communication, Coordination, and Collaboration
- Training and Development

The BHCC has developed small work groups to address specific health issues (such as obesity, tuberculosis, mental health, and HIV/AIDS) and hold two binational meetings each year to report out and focus on specific binational health issues. The OBBH also focuses on enhancing the detection and response capabilities to infectious disease incidents and threats in the border region.

During 2016, OBBH continued collaborating with a variety of state and federal partners in California and Baja California to enhance the region's ability to detect and respond to infectious disease threats. OBBH worked with state, local, and federal partners on surveillance and monitoring of infectious diseases, development of routine and emergency binational communication protocols, facilitating cross-border exchange of information, investigating binational infectious disease cases and outbreaks, and facilitating communications between public health officials in California and Baja California on infectious disease matters of binational interest. OBBH also conducted surveillance for syndromic and virologic influenza in the border region. Results of this surveillance are published weekly during the influenza season in the California Department of Public Health Influenza Surveillance Program report.

OBBH continues to manage and coordinate

the California Border Infectious Disease Surveillance Program (CA-BIDS) of the Centers for Disease Control and Prevention (CDC). CA-BIDS is a collaboration between CDPH, CDC, the County of San Diego Health and Human Services Agency, and the Imperial County Public Health Department. CA-BIDS activities focus on enhancing surveillance, laboratory testing, and reporting of urgent and routine infectious diseases in the border region.

OBBH also continued monitoring all binational infectious disease cases throughout the State of California via the California Reportable Disease Information Exchange (CalREDIE) system at CDPH. CalREDIE is a computer application that CDPH has implemented for web-based disease reporting and surveillance. The purpose of CalREDIE is to improve the efficiency of surveillance activities and the early detection of public health events through the collection of more complete and timely surveillance information on a statewide basis.

During 2016, OBBH convened quarterly binational epidemiology meetings to enhance situational awareness as it relates to infectious disease matters in California and Baja California. The meetings provided a platform for sharing information on current infectious disease cases and/or outbreaks and other matters of public health concern. Participants included key local and state public health officials from both states.

Since 2011, the U.S. EPA and the Commission have worked to identify joint priorities and possible areas of collaboration. In August of 2014, U.S. EPA and the U.S. Section of the Commission officially adopted a collaborative agreement. Key actions within the agreement include intra-agency collaboration during Border Health Month each October, a “State of the Border Environmental Health Report” (on status and trends), collaborative support for the new Healthy Border 2020 Initiative within the Commission, and the development of a Pediatric Environmental Health Specialty Unit along the border. An accomplishments report is provided on the U.S. EPA website that highlights successes that were achieved under the collaborative agreement.

In 2016, OBBH assisted U.S. EPA and a number of collaborating partners, to hold a binational symposium on “Exploring Health and Environmental Aspects of Zika, Dengue, and Chikungunya”, in Mexicali, Baja California. The purpose of the symposium was for health professionals and providers to learn about the clinical aspects and occurrence of vector-borne diseases, how the environment influences vector movement, methods for vector control, and personal protection from mosquito bites. There was also a discussion regarding resources for effective communication campaigns.

CDPH will continue to focus on border and binational communities through the efforts of border health programs.

Office of Environmental Health Hazard Assessment Activities

The Office of Environmental Health Hazard Assessment is helping to coordinate CalEPA Border Program efforts to maintain a healthy environment for people in the California-Mexico border region. OEHHA activities in the year 2016 include work on CalEnviroScreen, the San Ysidro Air Monitoring Study (as discussed in the Air Quality section of this report), the California Environmental Contaminant Biomonitoring Program, and fish consumption advisories for Spanish speakers.

California Communities Environmental Health Screening Tool (CalEnviroScreen)

CalEnviroScreen is a screening tool developed by OEHHA that scores all California census tracts based on 20 indicators of pollution burden and population vulnerability. In September 2016, OEHHA released a draft of the latest CalEnviroScreen version, CalEnviroScreen 3.0, and held seven public workshops throughout California (including San Diego and Calexico) to receive public comments on the draft. The release of a final CalEnviroScreen 3.0 document was expected in January 2017.

CalEPA is using CalEnviroScreen to identify “disadvantaged communities” for the implementation of Senate Bill 535 (De León, Chapter 830, Statutes of 2012). This law requires

that a portion of monies from the Greenhouse Gas Reduction Fund be allocated to projects in communities considered disadvantaged based on geographic, socioeconomic, public health, and environmental hazard criteria. CalEnviroScreen scores provide an environmental justice-related measure of census tracts statewide. In addition to funding projects that benefit disadvantaged communities, the information has been used to focus compliance and enforcement activities, and to direct funding from several state programs.

CalEnviroScreen 3.0 used additional sources of data to more accurately reflect the impacts of pollution originating in Mexico on California communities located near the U.S.-Mexico Border. OEHHA conducted a review of pollution sources in Mexico and made adjustments to numerous pollution indicators for CalEnviroScreen including ozone, particulate matter, diesel particulate matter, toxic releases from facilities, and traffic. Additionally, there are efforts in place to collect air pollution data for CalEnviroScreen at the California-Mexico Border including the San Ysidro 2-year, OEHHA-funded, community-led study that is in the process of deploying 13 community air monitors.

California Environmental Contaminant Biomonitoring Program

Biomonitoring is the measurement of chemicals (or their metabolites) in a person's body tissues or fluids, such as blood or urine. It can indicate the amount of chemicals that enter peoples' bodies from various sources (for example, from air, soil, water, dust, consumer products, and food) combined. Because of this, biomonitoring is a good way to measure how much exposure to toxic chemicals a person has had.

OEHHA collaborates with the California Department of Public Health (lead agency) and the Department of Toxic Substances Control in implementing the California Environmental Contaminant Biomonitoring Program, also known as Biomonitoring California.²⁰

20 For more information on Biomonitoring California, visit: <http://www.biomonitoring.ca.gov/>. Summary results from the projects available so far can be accessed in an interactive database: [Biomonitoring California is currently scoping out a new multi-regional, statewide project, which will ultimately include the border region. Given resource limitations, the project must be phased in over time. The project plans to start in Los Angeles County, measuring metals \(including arsenic, cadmium, lead, mercury\) in blood and/or urine and perfluoroalkyl and polyfluoroalkyl substances \(PFASs\) in serum. Biomonitoring California's website also includes a range of materials for Spanish-speaking audiences.²¹](http://</p></div><div data-bbox=)

OEHHA is launching an environmental justice consultation project, surveying community organizations across California, including in the border region, to learn more about community concerns regarding chemical exposures. The purpose is to identify concerns that could be addressed through biomonitoring and to build relationships for possible future studies.

OEHHA is additionally developing a community-oriented newsletter to increase outreach and awareness. The newsletter will include practical tips that will help people to reduce their chemical exposures. The first issue is will be released in spring 2017.

OEHHA is in the process of beginning the second phase of their Asian/Pacific Islander (API) study, in collaboration with the Vietnamese Voluntary Foundation. The study will measure levels of selected metals (arsenic, cadmium, lead, and mercury) in urine and/or blood, and levels of PFAs in serum. Information from this study will expand understanding of chemical exposures in the API community, which makes up approximately 14% of the California population. Data from this study can serve as an additional comparison point for measurements of these same analyses in border populations as part of a multi-regional study.

[biomonitoring.ca.gov/results/explore](http://www.biomonitoring.ca.gov/results/explore)

21 Biomonitoring California's website includes: an interactive guide to biomonitoring (<http://www.biomonitoring.ca.gov/guia-sobre-el-biomonitoreo>); a video about Biomonitoring California that includes Spanish subtitles (<http://www.youtube.com/watch?v=nrGcvOtwzKg>); and chemical fact sheets that provide information on sources of exposure to biomonitored chemicals, potential health concerns, and possible ways to reduce exposure (<http://biomonitoring.ca.gov/es/chemicals/fact-sheets-spanish>). <http://www.biomonitoring.ca.gov/informacion-en-espanol>

Fish Consumption Advisories for Spanish Speakers

OEHHA evaluates the health risks from chemical contamination of sport fish and advises the public on which fish are safe to eat and those that should not be eaten or should be consumed only in limited amounts. The fish advisories are posted on OEHHA's website and published in the California Department of Fish and Wildlife Sport Fishing Regulations booklets under the "Public Health Advisory on Fish Consumption" section. Many local agencies also post signs containing the advisories at popular fishing locations.

Thirty-one OEHHA fish advisories are available in Spanish, including the advisories for San Diego and San Francisco Bays and the statewide advisories for lakes, reservoirs, and coastal areas that do not have site-specific advice. In November 2016, OEHHA released new state fish consumption advisories for the Alamo River and the New River in Imperial County, including safe-eating advice for carp, catfish and tilapia caught from these waters as part of an ongoing effort to develop sport fishing advisories for different California water bodies.²²

22 Advisory posters and fact sheets for the Alamo River and the New River are available in both English and Spanish at OEHHA's website: <http://oehha.ca.gov/fish/advisories> Fish advisories and fact sheets in Spanish are posted at: <http://www.oehha.ca.gov/fish/pescado.html>

Emergency Management

In Fiscal Year (FY) 2016-17, the Governor's Office of Emergency Services was responsible for administering more than \$706 million in funds for homeland security, emergency management, justice programs and victim services, a majority of which are distributed to local and regional entities to enable the most effective prevention, detection, and response and recovery efforts. In 2016, Cal OES worked on several border initiatives through the Southwest Border Communications Working Group, the MOU on Risk Prevention and Emergency Response, the Climate Change and Environment MOU Wildfire Working Group, and the San Diego-Tijuana Earthquake Planning Scenario project.

Southwest Border Communications Working Group

Cal OES, along with officials from federal, state, local, and tribal public safety agencies, continues to participate in the Southwest Border Communications Working Group (SWBCWG) to discuss emergency communication efforts towards terrorist threats, hazmat incidents, natural disasters, border violence, escapes and evasions, and medical emergencies. In 2016, SWBCWG held three meetings throughout the year discussing interoperability communications issues along the southwest border. The working group continues to serve as a forum to share information on common emergency communications issues, collaborate on existing and planned activities, and facilitate federal involvement in multi-agency projects within the southwest border region, which includes Arizona, California, New Mexico, and Texas. The group also continues to build partnerships among emergency communications practitioners

in the southwest border region, identify best practices and lessons learned for border area communications, and share information regarding key regulatory issues that impact emergency communications in the border region. The SWBCWG's efforts help to ensure success in meeting end users' communications needs while improving coordination between U.S. departments and agencies at all levels of government, as well as cross-border Mexican governmental departments and agencies.

Memorandum of Understanding on Risk Prevention and Emergency Response

Cal OES continues to maintain a long-standing partnership with Baja California. In 2009, the State of California and Baja California established a Memorandum of Understanding on Risk Prevention and Emergency Response. Under this agreement, California has collaborated with Baja California on emergency management efforts, such as disaster assistance, communication, earthquake preparedness, training, and sharing best practices.

In 2016, the directors and other key officials met in San Diego to continue discussions on the MOU action plan and identify the 2017 objectives. Topics of discussion included developing an exercise between both departments to exercise binational communication capabilities during an emergency. Other topics included a briefing on the California Biological Weapons Detection Program, hazardous material and response training, earthquake and tsunami early alert and warning system, including methods of notifications to stakeholders, partners, and the public, as well as discussion on the Geographic Information System and Situation Awareness and Collaboration Tool Response Tools.

Both organizations continue to partner with the Earthquake Engineering Research Institute (EERI) and their members to update the San Diego-Tijuana Earthquake Scenario Plan. This scenario is a response plan for catastrophic earthquakes affecting the California-Mexico border region and aims to reduce the impacts and risks of earthquakes and promote research and collaboration. The Cal OES southern region

participates in this workgroup to coordinate, learn more about items affecting the San Diego Operational Area, relay information on cross-border items, and see where the unmet needs are, and what Cal OES can do to coordinate those needs.

Wildfire Working Group

In 2016, the Wildfire Working Group of the Climate Change and Environment MOU, comprised of the California Governor's Office of Emergency Services, the Department of Forestry and Fire Protection (CAL FIRE), and CONAFOR, advanced its action plan and corresponding plans for training. The Wildfire Working Group held several teleconference meetings early in the year to identify Cal OES and CAL FIRE training opportunities in which CONAFOR officials could participate. A training list, which aligns with the Working Group Action Plan, was finalized on May 16. This list grouped the training opportunities into five different priority levels, according to CONAFOR's preference. For 2016, the working group focused on the training opportunities within the first two priority levels, which include the Wildfire Simulation Demonstration and Exercise and the Incident Management Team Field Observation.

April 25-29, 2016, eight CONAFOR participants attended the S-130/S-190 Wildfire Suppression Training Course in Tecate, Baja California. Led by CAL FIRE instructors, this course provided 71 Mexican firefighters with entry-level wildland firefighting training, as well as an introduction to wildland fire behavior and personal safety. On July 19, the Wildfire Workgroup provided a Spanish-translated copy of the Cal OES FIRESCOPE Wildland Urban Interface (WUI) Structure Protection guide to CONAFOR. This guide provides a general overview of strategies and guidelines for fire behavior forecasting and tactics, as well as structure protection and triage. In addition, CAL FIRE provided its comprehensive WUI Operating Principles to CONAFOR. This guide provides an in-depth overview of WUI operating policy and tools to reduce the impacts of WUI fires.

CAL FIRE in collaboration with CONAFOR partnered to host the International Wildland

Firefighting training from October 24 to November 4, 2016 in Ensenada, Baja California. CAL FIRE provided 10 instructors, four from the Riverside Unit and six from the San Diego Unit while CONAFOR provided seven instructors, including the North West Region Chief. CONAFOR also provided a government representative from each Mexican state that had its firefighters attend. Firefighters representing local, state, and federal agencies from Baja California North, Baja California South, Sonora, and Sinaloa attended the training as well, which consisted of 80% classroom and 20% fieldwork. Topics and instruction included Instructor 1A, S-390, Atmospheric Pressure, Topography, Fire Behavior, Fire Prevention, Fire Investigation, ICS, Communication, Aviation, Firefighter Safety and Survival, Firing Devices, and Finance.

Earthquakes

San Diego-Tijuana Earthquake Planning Scenario

The San Diego-Tijuana Earthquake Planning Scenario project will update a 1990 Planning Scenario for a major earthquake in the San Diego-Tijuana regional area with the intent to initiate emergency preparedness coordination and collaboration between the U.S. and Mexico governments and the communities. EERI has taken the initiative to form a working group of private and government professionals to review and update the scenario considering current information resulting from improved technology and information about seismic behavior, geology, engineering, social, economic and cultural evolution since 1990.

The San Diego-Tijuana metropolitan region is home to more than five million people living in an integrated cross-border community with interdependent infrastructures and economies. The interdependence of economies and communities demands an assessment of ways to improve resilience. This scenario will help address fundamental questions such as: How prepared is the region? What types of damages and impacts are expected and what types of impacts may be unexpected? What will the social and economic impacts be to this region from such an event? And most importantly, what can

be done now to improve community earthquake safety and resilience?

This earthquake scenario project has volunteer engineers, scientists, researchers, architects, geologists, seismologists, emergency managers, planners, building officials, and even social scientists and economists working together to determine not only how the community will respond in the event of a major earthquake, but steps to take now to improve the disaster resilience of the cross-border region. These volunteers are organized into three interconnected working groups that will yield a final scenario report and policy recommendations for the region.

Working Group 1: Focuses on “Earth Science” and initiated the bi-national effort by selecting and defining the scenario earthquake as part of the geo-hazards evaluation.

Working Group 2: Focuses on “Engineering” aspects and is studying building and infrastructure inventories and vulnerabilities to estimate the expected physical damage from the scenario earthquake.

Working Group 3: Focuses on “Social Science” and will estimate impacts on social and economic systems on both sides of the International Border.

Finally, the project will focus on defining recommended policy measures, including actions that if applied today could reduce earthquake losses in the future. In this task, a Government and Civil Society Group will develop and implement a regional crisis management exercise to test and build response capacity.

Much progress was made in 2016. Work continued in all three working groups. The core planning group expanded to include representatives from the U.S. Navy and San Diego Gas and Electric. San Diego Gas and Electric will be holding an exercise in 2017 on an earthquake scenario and are very pleased to have access to the scenario, shake maps, engineering data and other information developed by this group. San Diego Gas and Electric has committed to providing \$60,000 in 2017 to the group to help with some of the GIS costs, identification and HAZ-U.S. mapping of infrastructure in Tijuana and/or to allow U.S. GS to engage in short-term project support.

The Emergency Preparedness Public Outreach Forum in the City of San Diego was held on September 27, 2016. On October 20, 2016 a presentation was delivered at the San Diego Unified Disaster Council meeting to encourage participation from cities and other stakeholders and as outreach to learn what data would be most useful for them in the report for their mitigation, preparedness, response and recovery, and to contribute to their resiliency.

Cal OES, with the Structural Engineers Associates of San Diego (SEAOSD), is working on obtaining access to the City of San Diego building database. The final goal is to work with City on including an Advanced Engineering Building Module (AEBM) HAZ-U.S. run of all buildings. They are discussing this with State Parks regarding Balboa Park buildings. SEAOSD members are working with Degenkolb employees and University of California at San Diego students on creating a non-ductile concrete building inventory of San Diego. Work Group 3 has gathered several earthquake scenarios to understand best practices. They are also looking at the National Institute of Standards and Technology resiliency guide framework, to be incorporated into a study. They are looking at the contribution of different industries to the gross domestic product and discussing environmental concerns as part of the final report.

Seismic Safety Commission

Under BCSH, the Seismic Safety Commission (SSC) researches earthquake issues, holds public hearings on seismic safety issues and makes recommendations to the Governor and Legislature on policies to reduce earthquake risk. SSC also investigates and evaluates earthquake damage and reconstruction efforts following earthquakes; conducts earthquake preparedness, education and outreach programs; and provides consistent policy direction for earthquake-related programs for agencies at all government levels. The SSC conducted work in the border region of San Diego at UCSD.

Post-Earthquake Fire Performance of a Light-Gauge Cold-Fanned Steel Framed Building

The need for low cost, multi-hazard resilient buildings constructed of sustainable low carbon footprint materials is urgent. Light-gauge cold-fanned steel (CFS) framed multi-story buildings for hospitals, medical buildings and schools have the potential to support this need. There are numerous benefits of CFS-framed structures: lower installation and maintenance costs as compared with other systems; durability; and made of ductile, lightweight, and manufactured recycled materials. In addition, consistency in material behavior and low material costs are added benefits compared with their wood-framing counterparts. CFS-framed structure aligns with the performance needs in moderate to high seismic zones. These many beneficial attributes lead to a highly sustainable construction type for housing communities. However, the lack of full-scale, system-level test data documenting the seismic response at key performance levels, particularly for CFS-buildings above three to four stories, is needed to substantiate its benefits to the community.

Presently, design engineers and contractors are precluded from constructing mid-rise CFS-framed buildings due to limited understanding of their performance even under low-level earthquake motions. In addition, post-earthquake fire performance of CFS-framed buildings above three to four stories is completely unknown, and performance information is therefore needed to support future acceptance of such buildings in earthquake-prone areas.

In spring 2016, the SSC partnered with UCSD & Worcester Polytechnic Institute to evaluate post-earthquake fire performance to a CFS-multistory building. The test was performed on the UCSD Large High Performance Outdoor Shake Table (LHPOST). The CFS-multi story building was subjected to a suite of earthquake motions of increasing severity to assess damage progression. The results of this test are being evaluated and a final report will be delivered to the SSC in the fall of 2017.

Inspection of Earthquake and Fire Damaged Buildings using Unmanned Aerial Vehicles

Unmanned Aerial Vehicles (UAVs), often referred to as drones, have become an option for a broad range of application scenarios. Relatively inexpensive, lightweight and easily deployable, UAVs provide a viable alternative to traditional airborne vehicles such as helicopters. Modern devices have scaled UAVs to very small sizes, making them a powerful tool for disaster and post-disaster reconnaissance. The SSC and UCSD partnered to perform a study of the diagnostic value of UAV data for structural health assessments pre- and post-natural disaster(s). UAVs can swiftly, systematically and reliably inspect and document the health of structures before, during and after extreme events. With this capability field teams have the ability to rapidly inspect damage, by capturing site-specific data from a broad range of perspectives.

A multi-story light-gauge cold-fanned steel building was constructed on UCSD's LHPOST. The construction and earthquake testing of the multi-story CFS building on the LHPOST allowed a unique project and research opportunity. They conducted UAV-based inspection of earthquake and fire damaged buildings, under controlled conditions and structural health assessment and data collection, pre-event, event and post-event. The project occurred in the spring of 2016 and a final report with the findings of this event will be delivered to the SSC in the fall of 2017.

Border Area Legislation 2016

Assembly Bill 1079 (V. Manuel Perez, Statutes of 2009) required the California-Mexico Border Relations Council to develop a strategic plan containing specific elements to guide the implementation of the New River Improvement Project. The Plan was completed in 2011. In January 2016, the Colorado River Basin Regional Water Quality Control Board prepared an update to the Plan that modified a proposed project to divert and clean water in the river. This approach reduced the cost of the project from approximately \$80 million to \$20 million by removing a planned disinfection facility and utilizing wetlands to clean the water as an alternative approach. The update was presented to the California-Mexico Border Relations Council and then sent to the California Legislature in February 2016.

Senate Bill 859 (Committee on Budget and Fiscal Review, Statutes of 2016) appropriated \$1.4 million of funding from the Waste Discharge Permit Fund to the State Water Resources Control Board to provide grants or contracts for the development of planning, environmental, and design documents related to implementation of the New River Improvement Plan. This funding will be used to support design, engineering and environmental permitting for first phase of the proposed water quality infrastructure project recommended in the Plan.

In 2016, the Solid Waste Working Group finalized the Solid Waste and Waste Tire Strategic Plan pursuant to Senate Bill 83 (Committee on Budget and Fiscal Review, Chapter 24, Statutes of 2015). The Plan will be presented to the Border Council in 2017. This bill states that CalRecycle “shall adopt a five-year plan, which shall be updated every two years, to establish goals and priorities

for the waste tire program and each program element. On or before July 1, 2001, and every two years thereafter, the department shall submit the adopted five-year plan to the appropriate policy and fiscal committees of the Legislature.” This five-year plan is to include certain elements, such as “border region activities conducted in coordination with CalEPA.” These border activities are to include, “in coordination with the California-Mexico Border Relations Council, the development of a waste tire abatement plan, which may also provide for the abatement of solid waste.” Pursuant to this bill, CalRecycle plans to submit the Solid Waste and Waste Tire Strategic Plan as part of their two-year update to the Legislature in 2017.

Assembly Bill 965 (Garcia, Chapter 668, Statutes of 2015) mandated the California Department of Fish and Wildlife to work with the California-Mexico Border Relations Council to establish cross-border criteria for Proposition 1 Watershed Restoration grant funding. In 2016, the California Environmental Protection Agency worked with the Department of Fish and Wildlife on behalf of the Council to develop cross-border criteria that will be included in the 2017 Proposition 1 Chapter 6 Watershed Restoration Grant solicitation by the Department of Fish and Wildlife when it is publicly released for public comment in 2017.

List of Acronyms

AB	Assembly Bill
ABC	Department of Alcoholic Beverage Control
AHFSS	Animal Health and Food Safety Services Division of the California Department of Food and Agriculture
API	Asian Pacific Islander
BAR	Bureau of Automotive Repair
BCSH	Business, Consumer Services and Housing Agency
BHCC	Border Health Consortium of the Californias
CA-BIDS	California Border Infectious Disease Surveillance Program
CalEnviroScreen	California Environmental Screening methodology, used to identify California communities that are disproportionately burdened by multiple sources of pollution
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
Cal OES	California Governor's Office of Emergency Services
CARB	California Air Resources Board
CalRecycle	California Department of Resources Recycling and Recovery
CalREDIE	California Reportable Disease Information Exchange System
CalSTA	California State Transportation Agency
Caltrans	California Department of Transportation
CBP	U.S. Customs and Border Protection
CDBG	Community Development Block Grant
CDC	Centers for Disease Control and Prevention
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CDPH	California Department of Public Health
CNRA	California Natural Resources Agency
CEM	Clean Energy Ministerial
CFS	Cold-fanned Steel
CHP	California Highway Patrol
CHHS	California Health and Human Services Agency
CONAFOR	Comisión Nacional Forestal - Mexico National Forestry Commission
CONUEE	Mexico's National Commission for the Efficient Use of Energy
CRE	Comisión Reguladora de Energia
DBO	Department of Business Oversight
DCA	Department of Consumer Affairs
DFEH	Department of Fair Employment and Housing
DPR	Department of Pesticide Regulation
DTSC	Department of Toxic Substances Control
EERI	Earthquake Engineering Research Institute
ENA-REDD+ Degradation	Mexico's National Strategy to Reduce Emissions from Deforestation and Forest
ESG	Emergency Solutions Grant
FASTLANE	Fostering Advancements in Shipping and Transportation for the Long-Term Achievement of National Efficiencies

FY	Fiscal Year
GHG	Greenhouse Gas
GO-Biz	California Governor's Office of Business and Economic Development
HCD	Department of Housing and Community Development
H&H	Hydraulics and Hydrology
HIV/AIDS	Human Immunodeficiency Virus Infection and Acquired Immune Deficiency Syndrome
IBWC	International Boundary and Water Commission
ICEP	Individual Company Export Program
iHub	City of San Jose Innovation Hub
IMPACT	Informed Merchants Preventing Crime-Related Tendencies
IRWM-DAC	Integrated Regional Water Management Program Disadvantaged Communities
IT	Information Technology
LEV	Low Emission Vehicle
LHPOST	Large High Performance Outdoor Shake Table
MOU	Memorandum of Understanding
NGO	Nongovernmental Organization
NOAA	National Oceanic and Atmospheric Administration
NOM 163	Norma Oficial Mexicana 163 – Mexico's Fuel Economy Standards Program
NPDES	National Pollutant Discharge Elimination System
OBBH	Office of Binational Border Health
OEHHA	Office of Environmental Health Hazard Assessment
OBD	On-Board Diagnostic
OPSG	Operation Stonegarden
PM	Particulate Matter
PM2.5	Particulate Matter 2.5 micrometers or less in diameter
PM10	Particulate Matter 10 micrometers or less in diameter
POE	Port of Entry
PROFEPA	Mexico's Federal Enforcement Agency
SANDAG	San Diego Association of Governments
SB	Senate Bill
SD-LECC	San Diego Law Enforcement Coordination Center
SEAOSD	Structural Engineers Associates of San Diego
SEFOA	Secretaría de Fomento Agropecuario – Mexico Secretariat of Agricultural Development
SENER	Secretaría de Energía – Mexico Secretariat of Energy
SEMARNAT	Secretaría del Medio Ambiente y Recursos Naturales – Mexico Secretariat of Environment and Natural Resources
SEP	Supplemental Environmental Projects
SPA	Secretaría de Protección al Ambiente – Secretariat for the Environment of Baja California, Mexico
SSC	Seismic Safety Commission
STAC	State Threat Assessment Center
STAS	State Threat Assessment System
STEP	State Trade Expansion Program
SWBCWG	Southwest Border Communications Working Group
TB	Tuberculosis
TRAM	Tijuana River Action Month
TRAN	Tijuana River Action Network
TRNERR	Tijuana River National Estuarine Research Reserve
UABC	Universidad Autonoma de Baja California
UAV	Unmanned Aerial Vehicles
UC	University of California
UCSD	University of California, San Diego
UNAM	Universidad Autonoma de Mexico
Under2MOU	Under 2 MOU/Coalition, a group of governments around the world who set ambitious targets to combat climate change

USAID	United States Agency for International Development
U.S. BP	United States Border Patrol
U.S. EPA	United States Environmental Protection Agency
U.S. MBHC	United States-Mexico Border Health Commission
WUI	Wildland Urban Interface



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