Otay Mesa – Mesa de Otay
Binational Corridor
Strategic Plan

March 2010
Progress Report
OTAY MESA-MESA DE OTAY BINATIONAL CORRIDOR STRATEGIC PLAN

2010 Draft Progress Report

INTRODUCTION

As a follow up to the Regional Comprehensive Plan (RCP) initiatives, in 2005, the SANDAG Borders Committee and the Committee on Binational Regional Opportunities (COBRO) identified the Otay Mesa – Mesa de Otay binational corridor study area for a binational planning pilot project. Transportation, economic development, housing, and environmental conservation were identified as the main issue areas for the Otay Mesa – Mesa de Otay Binational Corridor Strategic Plan.

The Otay Mesa – Mesa de Otay Binational Corridor Strategic Plan created a process for collaboration and established a framework for binational planning. This partnership continues to grow through the implementation of several initiatives identified in the Strategic Plan and serves as a guide for future binational planning efforts.

The Otay Mesa – Mesa de Otay Binational Corridor Strategic Plan was approved in 2007 by both the SANDAG Board of Directors and the City of Tijuana City Council. Since then, two annual joint policy meetings of the Borders Committee, the Committee on Binational Regional Opportunities (COBRO) and the City of Tijuana were held in 2008 and 2009 to review progress on selected actions of the strategic plan. This 2010 Progress Report is an update on the implementation of select strategies since last reported in the June 2009 Strategic Plan Progress Report. COBRO reviewed the 2010 Draft Progress Report at its February 2010 meeting and provided input, which was incorporated into this draft.

TRANSPORTATION ACTIONS

ISSUE IMPLEMENT THE FUTURE OTAY MESA EAST-MESA DE OTAY II PORT OF ENTRY (POE) AND CONNECTING ROADS

EARLY ACTION Establish the Otay Mesa East-Mesa de Otay II POE Technical Commission to advance planning and implementation of the future Otay Mesa East-Mesa de Otay II POE and connecting roads as a binational project, in collaboration with Caltrans, SIDUE, and IMPlan, and based upon discussions with the United States (U.S.) interagency coordination group.

Progress

In the past year, Caltrans, the U.S. General Services Administration (GSA), the County of San Diego, SANDAG, and the Mexican government continued to make progress to advance the implementation of the proposed Otay Mesa East – Mesa de Otay II POE and connecting roads on both sides of the border (Figure 1). Caltrans District 11 has taken the lead on several planning tasks to advance this project. In Mexico, the Secretariat of Communications and Transportation (SCT) also has undertaken required studies for the Mesa de Otay II POE and connecting roads.
Figure 1
State Route 11 / Otay Mesa Port of Entry

Source: Caltrans, 2009
PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT (PEIS/PEIR) FOR SR 11 AND THE OTAY MESA EAST POE

Caltrans, in cooperation with GSA and FHWA, initiated project-level environmental clearance studies for State Route 11 (SR 11) and the Otay Mesa East POE. A Tier II Environmental Impact Report/Environmental Impact Statement (EIR/EIS) is evaluating design and operational alternatives for SR 11, the POE, and a potential Commercial Vehicle Enforcement Facility (CVEF). The Tier 2 EIR/EIS for both SR 11 and the new POE, is anticipated to be completed in early 2011.

In addition, the engineering studies for both SR 11 and the new POE are also expected to be completed by December 2010. The design and right-of-way acquisition are scheduled for 2011 and construction is expected to begin in late 2012/13, with completion in 2014/15.

Future Project Financing

A total of $13 million is programmed by the state for the environmental clearance phase. SAFETEA-LU also includes $800,000 for this project, $4.9 million in Border Infrastructure Program (BIP) funds, and an additional $75 million has been allocated toward construction from the state’s Proposition 1B Trade Corridors Improvement Fund. Depending on the alternative and year of construction, the cost for SR 11 ranges from $300 to $360 million. The POE facility is estimated to cost in the range of $300 to $350 million depending on the functionality of POE.

SANDAG and Caltrans are working jointly to develop a financial strategy to build the SR 11/Otay Mesa East POE project. SANDAG is seeking services from an investment banking team to assist with bond placement, traffic and revenue study, and specialized legal and bond counsel.

SANDAG submitted a letter of interest for a possible Transportation Infrastructure Finance and Innovation Act (TIFIA) loan. SANDAG anticipates a TIFIA loan could cover up to one third of the eligible costs for the SR 11/Otay Mesa East POE; and the loan would be repaid with future toll revenues. SANDAG is also forging a Master Agreement with project partners such as the U.S. GSA and the U.S. Customs and Border Protection (CBP).

ITS Pre-Deployment Strategy for the Otay Mesa East POE

Federal Highway Administration (FHWA’s) vision for the research of Intelligent and Efficient Border Crossings is to enable the implementation of innovative Intelligent Transportation Systems (ITS) solutions for a binational border system that ultimately improve safety and mobility, reduce emissions, and facilitate trade and travel without compromising the vital mission of securing America’s borders. To advance this vision the FHWA Office of Freight Management and Operations offered a research grant to explore ways of effectively deploying this technology at the U.S.-Mexico and U.S.-Canada POEs.

In an effort to evaluate these technologies, SANDAG and Caltrans District 11 applied in the Fall of 2009 for this FHWA grant to study an ITS pre-deployment Strategy for the Otay Mesa East POE. The title of the proposed study is the: Technology Pre-Deployment Proposal for Otay Mesa East POE A Clean, Green, and Smart Border. This proposal was selected in January 2010 for an approximately $1.2 million grant.

This grant will be used to research the Otay Mesa East POE as a case study for an intelligent and efficient border crossing through the use of ITS applications. These
applications would be used to reduce delays caused by traffic congestion, better accommodate projected trade and travel demand, and increase economic growth and job opportunities on both sides of the border without sacrificing border safety and security.

This study will also include the collaboration of FHWA to support the development of a plan for a tolling system that can accommodate dynamic pricing at the border. This opportunity also allows all parties involved to plan a holistic approach to ITS at the new border crossing that enables a "Clean, Green, and Smart Border."

The ITS components/areas included in this research are: electronic toll collection systems, border wait-time monitoring systems, variable pricing of tolls to reduce wait times, enhanced border security systems, and advanced traveler information systems. It will be the first North American international land border crossing project that proposes the use of nontraditional transportation project financing to improve capacity and operation of an international land border crossing.

Another key aspect of this research initiative is to examine and develop marketing strategies such as discounting for lower-emission trucks (promoting a green border) and advance toll payment (pre-payment discounting). It will also focus on prioritizing the discounting or pricing for guaranteed usage and on determining what ITS technology is needed to implement these strategies.

MEXICO

Garita Mesa de Otay II (POE)

All the road access projects connecting to Mesa de Otay II POE are being planned by the Secretariat of Communications and Transportation (SCT) with input from Tijuana’s Municipal Planning Institute (IMPlan) and the Secretariat of Infrastructure and Urban Development of Baja California (SIDUE). There is no definite construction start date as this is dependent on a bidding process in Mexico. The executive project design stage is at 25 percent completion and construction cost estimates are approximately $50 million. This would include: Boulevard Las Torres as a passenger vehicle access, a dedicated boulevard for commercial truck access, and the construction of three interchanges at the Tijuana-Mexicali Toll road with Boulevard Hector Teran Teran, Calzada Las Torres and the Cañón Rinconada cargo access to Mesa de Otay II POE. (Figure 2).
The new Mesa de Otay II POE is planned to have 20 northbound lanes crossing into the United States and 12 southbound lanes crossing into Mexico. Eight northbound and four southbound lanes will be dedicated for commercial trucks. Work on this POE is programmed to begin in 2010 and end in 2014/2015 with a total cost of $123 million.

The configuration of the pedestrian and public transit access to the planned Mesa de Otay II POE also are being developed. A transit facility is planned to be conveniently located to connect the new POE and the future mass transit service in Tijuana.

The State of Baja California announced that funds to acquire the POE parcel were secured by the Mexican federal government and this transaction is under way.

**ISSUE** IMPLEMENT IMPROVEMENTS TO EXISTING OTAY MESA-MESA DE OTAY POE AND CONNECTING ROADS

**EARLY ACTIONS**

a. Coordinate with CBP and Mexican Customs on the process to fund and implement identified short-term capital and operational improvements at the Otay Mesa-Mesa de Otay Commercial POE.

b. Explore the feasibility of short-term operational and capital improvements at the Otay Mesa-Mesa de Otay Passenger POE (operations and facilities).
Progress

As last reported, the Department of Homeland Security (DHS), in April 2009, was awarded approximately $21.3 million of American Recovery and Reinvestment Act (ARRA) funds for some initial Otay Mesa POE modernization projects which will cover the cost of land acquisition and design for the expansion project. The expansion project would make improvements to both commercial and non-commercial portions of the existing port.

In July 2009, GSA awarded the Architecture and Engineering design contract for the Otay Mesa POE Modernization project. This began a design phase that is scheduled to be complete in May 2011. In addition, an EIS for this project is anticipated to be released in Summer of 2010. Construction is subject to the availability of construction funding that has not yet been authorized by Congress. The construction authorization is anticipated to be made in Fiscal Year (FY) 2012. If the authorization is given as planned, construction completion would be in December 2015.

Some highlights of the proposed Otay Mesa POE Modernization include:

- Expansion of the passenger vehicle crossing from 12 to 24 primary passenger vehicle inspection booths;
- Acquisition of a 10.5 acre parcel immediately east of the commercial facility that would accommodate four new commercial inspection booths; and
- Relocation of the existing hazardous waste inspection facility located just west of the southbound vehicle crossing in Otay Mesa.

MEXICO

In 2009, the City of Tijuana repaved the south and northbound lanes connecting to the Mesa de Otay POE with ‘white topping.’ The landscaped area between the southbound and northbound crossing was removed to add an additional northbound passenger vehicle lane. The northbound taxi lane that connects to the Mexican Customs facility and runs parallel to the southbound crossing lanes will eventually be eliminated when the POE’s modernization is completed (Figure 3).
1. Pedestrian Bridge and Ramps
2. Flag Pole
3. Drop Off/Pick Up
4. Taxis Parking Area (42 Spaces)
5. Services/Information

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Pedestrian Walkway
SENTRI Lane
Bus Lane
Public Transit Route (Buses)
Public Transit Route (Taxis)
INDAABIN’s Project Area
ADUANA’s Project Area

Source: IMPlan, 2009
There also have been advances in the planning of an east-west pedestrian bridge and the installation of a transit intermodal center. They both are 80 percent complete per the executive project design stage. Final designs are anticipated to be complete by Spring 2010. Construction would immediately follow when the POE’s modernization is completed. It is expected to take four months to construct and a total cost of approximately $3 million. Recommendations from the SANDAG-IMPlan study “Evaluation of Tijuana’s Public Transportation Facilities at the Otay Mesa – Mesa de Otay POE; South Bay BRT” completed in 2008 were considered in this planning.

The configuration of the pedestrian and public transit access to Mesa de Otay is in the planning stages. These plans are dependent on the commencement of United States construction to modernize the Otay Mesa – Mesa de Otay POE.

The improvements at Avenida Josefina Rendon and the SENTRI lane access also is at the 80 percent executive project design completion stage. When the POE’s modernization is completed, construction would immediately be initiated and completed in four months. The total cost of this project would be approximately $1 million.

Engineering and design work has been completed to resolve an ongoing bottleneck that occurs at the Mexican Commercial (Imports) Customs exit to Boulevard Bellas Artes. The traffic improvement consists of adding traffic signals at this location and signal synchronization throughout the boulevard that will be completed in the first four months of 2010 with a cost of approximately $300,000.

Next Steps

IMPlan will continue to work with stakeholder agencies on both sides of the border to ensure efficient pedestrian and transit movement and connectivity. As preliminary POE designs are developed, more detailed discussions will focus on pick-up and drop-off points for public transportation near the Mesa de Otay POEs. In addition, input will be provided on making the planned pedestrian bridge design pedestrian friendly and handicap accessible.

**ISSUE**  FACILITATE IMPROVEMENTS TO CROSS-BORDER AND REGIONAL PUBLIC TRANSPORTATION SERVICES

**EARLY ACTION**  Initiate advanced planning work to extend the South Bay Bus Transit (BRT) service between Eastern Chula Vista and the Otay Mesa POE.

**Progress**

SANDAG is in the process of completing the environmental document for the Phase One South Bay Bus Rapid Transit (BRT) alignment. Figure 4 illustrates the South Bay BRT alignment. Several technical studies are being conducted including: traffic, habitat, noise, and visual. Extensive public outreach was done in Fall 2009 as part of the California Environmental Quality Act (CEQA). The Mitigated Negative Declaration (MND) is expected to be completed and permits are anticipated to be secured by Spring of 2010. Final design is expected to start in April 2010 and completed in 2011. The South Bay BRT project is on schedule to be implemented in late 2012.
Figure 4

Source: SANDAG, 2008
Propuesta preliminar para análisis de los corredores

27% DE LA DEMANDA DE ZONA METROPOLINA SE ENCUENTRA EN EL CORREDOR 1 REFUGIO–SAN ISIDRO

18% DE LA DEMANDA DE ZONA METROPOLINA SE ENCUENTRA EN EL CORREDOR 2 STA FE–OTAY

It is anticipated that in 2010 these studies will be completed which will permit the identification of specific goals. Once approved by FONADIN, the solicitation bidding process will begin for construction and concession of two transit corridors and their respective auxiliary routes. The two high volume trunk lines that will be constructed are: Route 1, traversing 18.4 Km or 11.4 miles that would connect downtown Tijuana with the Puerta Mexico (San Ysidro) POE and the southeastern part of the city and Route 2 (BRT type) will connect the Mesa de Otay area (including the POEs) along a 30 Km or 18.6 mile route to Santa Fe and Ciudad Industrial on the southwest portion of the city (Figure 5).

Figure 5
Draft/Preliminary Corridor Analysis for the Metropolitan Zone

Corridor 1
Corridor 2

27% of the metropolitan zone demand is captured on Corridor 1 (Refugio – San Ysidro)

45% of the total metropolitan zone demand is captured on the two corridors

Draft/Preliminary Corridor Analysis for the Metropolitan Zone

Source: IMPlan, 2009
NEW ACTION Collaborate with the San Diego County Regional Airport Authority in the upcoming market demand study of a cross-border terminal connection between Otay Mesa and Tijuana International Airport (TIJ) toward its possible implementation.

Progress

In January 2007, the San Diego County Regional Airport Authority evaluated feasibility issues related to a cross-border terminal between the United States and Tijuana International Airport. In addition, in May 2008, the Airport Authority completed a market demand study of the cross-border terminal to evaluate existing demand and capacity at Tijuana International Airport (TIJ), review data on existing U.S. passengers that travel from the Tijuana Airport, conduct a survey of San Diego residents that may use the Tijuana Airport if a convenient cross-border connection existed, and develop projections of expected passenger growth at the Tijuana Airport.

The San Diego County Regional Airport Authority Board decided not to dedicate additional funds to further study the crossborder terminal but decided to include it in the Regional Airport Strategic Plan.

In 2008, in an effort to advance this concept, a private investment group - the Otay-Tijuana Venture, LLC. - purchased 52 acres of undeveloped industrial land in Otay Mesa to develop the U.S. side of the crossborder airport terminal project. Its intent is to build a full-service crossborder passenger facility. This proposed San Diego-Tijuana Cross Border Facility (CBF) project includes the construction and operation of the CBF and an above-grade pedestrian bridge linking border facilities in the United States with a commercial passenger airport terminal at the TIJ.

The CBF would enable ticketed airline passengers to travel between Mexico’s TIJ and San Diego, California, via an enclosed, elevated pedestrian bridge. The CBF will consist of: a main building on the U.S. side of the border housing U.S. CBP inspection facilities along with shops and services to accommodate travelers; an approximately 525-foot pedestrian bridge from the main building on the U.S. side connecting into TIJ’s passenger terminal on the Mexican side; and parking facilities and areas for car rentals and potentially bus service on the U.S. side. The CBF is expected to serve 2 million passengers annually, a number that is forecasted to increase to 4.9 million by 2030.

The following summarizes the latest project developments:

- On October 2, 2009, the U.S. Department of State published in the Federal Register a Notice of Receipt of Application for a Presidential Permit for the CBF. The notice requested comment on Otay-Tijuana Venture, LLC.’s application for a Presidential Permit to authorize the construction, operation, and maintenance of a new international pedestrian bridge by December 30, 2009.

- Per the National Environmental Policy Act (NEPA) requirements, the Draft Environmental Assessment (EA) was released on December 29, 2009. The draft EA addresses the potential environmental effects of the construction and operation of the United States portion of the CBF. Input is being sought on whether issuance of a Presidential Permit for this proposed bridge would be in the U.S. national interest. Comments regarding this draft EA were due on February 12, 2010.
• Concurrent to the EA process the project proponents are seeking to receive the City of San Diego’s Planned Development Permit and Vesting Tentative Map approvals including the Otay Mesa Community Plan Update approval. In addition, this project will be evaluated through the California Environmental Quality Act (CEQA) approval process, which is expected to begin in Spring 2010.

Approval of the Presidential Permit from the Department of State is pending. Otay-Tijuana Venture, LLC., anticipates that the crossborder airport terminal could be operational as early as 2012.

**ECONOMIC DEVELOPMENT ACTIONS**

**ISSUE**  PROMOTE CREATION OR EXPANSION OF COMMON EMPLOYMENT CLUSTERS ON BOTH SIDES OF THE BORDER AND ADDRESS FUTURE INDUSTRIAL LAND USE SUPPLY AND DEMAND


**Progress**

As reported in the 2009 Progress Report, the SANDAG Board of Directors accepted the 2007 San Diego Regional Economic Evaluation and Prosperity Strategy (REPS) as an element of the Regional Comprehensive Plan. The REPS’ Strategic Goal 4 called for reserving prime employment land (existing and vacant) for light industrial and research and development uses and to establish a redevelopment process that would renew and retain existing industrial lands for similar uses in the future.

In September 2009, SANDAG and the San Diego Regional Economic Development Corporation completed the San Diego Region 2009 Employment and Residential Lands Inventory & Market Analysis report. In November 2009, SANDAG updated the Regional Economic Development Information (REDI) system, an internet-based mapping, analysis, and reporting tool to keep the inventory up to date and provide broad public access to it.

The purpose of compiling the land-based inventory databases is to help address concerns expressed by land brokers and developers, as well as businesses in our high-technology industry clusters, about the increasing costs, rapid absorption, and pressure to convert existing “industrial” land over to a residential or commercial use. The region has a limited supply of these “prime” industrial sites. In addition, these industrial sites are where a significant portion of our emerging growth high-technology companies are clustered, and these companies and sites provide the best opportunity for future economic growth and expansion.

The report highlighted the following significant characteristics for the Otay Mesa study area. Nearly 60 percent of the region’s Gross Developable Employment Land is located in five planning Areas. Three of those are located in the Otay Mesa study area, which include Otay (2,201 Acres or 22%), Otay Mesa (1,343 Acres or 13%), and Chula Vista (811 Acres or 8.1%).
In addition, of the 10,000 gross developable acres, 20 percent (2,040 acres) are immediately available for development (can be developed within one year). More than 36 percent of these immediately available acres are located in the planning areas of Otay (391 acres or 19.2%) and Otay Mesa (343 acres or 16.8%).

The City of San Diego has 690 acres of immediately available employment land. Fifty percent of these acres are in Otay Mesa (343 acres) while more than 99 percent of the immediately available employment land (391 acres) in the unincorporated County is in the Otay Planning Area.

**ISSUE**

**PROMOTE CREATION OR EXPANSION OF COMMON EMPLOYMENT CLUSTERS ON BOTH SIDES OF THE BORDER AND ADDRESS FUTURE INDUSTRIAL LAND USE SUPPLY AND DEMAND**

**EARLY ACTION**

*Within the framework of San Diego Dialogue’s Crossborder Innovation and Competitiveness Initiative, begin the implementation of selected recommendations from the Borderless Innovation study outlined below:*

**Establish the Crossborder Innovation and Competitiveness Center.**

*Initiate a crossborder program to foster scientific and technology relationships, awareness of research, and commercialization of discoveries in the life sciences between the San Diego-Baja California region and other regions in Mexico.*

**Progress**

In June 2007, the San Diego Dialogue produced the first briefing paper titled *Borderless Biotech & Mexico’s Emerging Life Sciences Industry*, which outlines progress on this collaborative effort. The report describes the San Diego border region as a portal for borderless biotech due to its strategic location along the U.S.-Mexico border and the unique opportunity to work with Mexico’s emerging life science industry. Merck which is the only private sector U.S. participant has based upon the progress in fostering collaborative relationships among the participating regions made during the first year of the Initiative, has extended their participation through June 2010.

In 2008, stakeholders from the Mexican regions of Cuernavaca, Guadalajara, Guanajuato, and Monterrey were in the process of formally establishing the Mexican Life Sciences Alliance to collaboratively promote their capabilities internationally, including a showing at the San Diego BIO tradeshow in June 2008. They also agreed to co-develop a proposal to the Inter-American Development Bank (IDB). Under a three-year grant, IDB funding would be used to support Alliance activities to build commercialization infrastructure (e.g., training and policies) within participating research institutions, business support services for new life science start up companies, and international outreach for research and business development opportunities which include linkages with San Diego’s life sciences community. Under the proposal UCSD Extension (San Diego Dialogue and Global CONNECT) and Merck & Co., would serve as partners to the Alliance.

The Mexican Life Sciences Alliance became formalized as a Mexican civil association (asociación civil) in mid-2009, and submitted its proposal to the IDB shortly thereafter. The proposal is currently under review by the IDB.
Beginning in Fall 2009, San Diego Dialogue and Global CONNECT launched a process of providing advice and input to new Mexican life science start-up firms. Among the companies reviewed to-date, two have offices in Otay Mesa. These were referred to CONNECT for participation in its springboard coaching and mentoring program, and as of February 2010, one is undergoing the process. Through a series of workshops in Mexico, additional companies are being assessed for bridging into the San Diego market. This activity will continue through the end of June 2010. San Diego Dialogue and Global CONNECT will also hold additional workshops in Mexico and San Diego on topics such as the different kinds of capital available to life science companies and the creation of organized angel investor networks.

**HOUSING ACTIONS**

**NEW ACTION**  **Collaborate with IMPlan and the Urban Land Institute (ULI) on sharing resources, planning techniques, and strategies as they relate to Smart Growth planning.**

**Progress**

In 2009, IMPlan updated the City of Tijuana’s Urban Development Program (Programa de Desarrollo Urbano del Centro de Población de Tijuana or PDUCPT). The PDUCPT is updated every five years and grants the City zoning authority to regulate land use. IMPlan coordinates the preparation of the PDUCPT and also oversees implementation of long-term urban and regional planning.

The 2009 PDUCPT promotes smart growth practices such as land use densification and infill development of urban zones as a strategy to avoid sprawl and to concentrate access to urban services.

The planned land use includes a system of territorial units that would include one central urban area and the identification of 24 sub-urban centers. A hierarchical transportation network of commercial corridors and services also will be developed. The formation of districts and neighborhoods will be developed at a different scale through future specific plans.

The program identifies where planned land use areas would increase density, mixed use, and public infrastructure. In addition, the program incorporates recent Secretariat of Social Development (SEDESOL) regulations that require that communities become more self-sufficient in order to reduce the use of automobiles.

To advance these goals, the City of Tijuana has established a series of plans that include improving the transportation network and implementation of a mass transit system.

**ENVIRONMENTAL ACTIONS**

**ISSUE**  **ADDRESS CONSERVATION OF SENSITIVE HABITAT AND URBAN RIVER CORRIDORS (E.G., ALAMAR RIVER AND OTAY RIVER WATERSHED) AND WATER QUALITY**

**EARLY ACTION**  **Support plans for habitat restoration and rehabilitation along the Alamar River riparian corridor.**

**Progress**

In mid-2009, IMPlan completed an environmental impact study analyzing the 2nd and 3rd sections of the Arroyo Alamar. This study identified habitat restoration changes that would affect the planned expressway and the river channel. In order for these restoration efforts to be effective, Mexico’s National Water Commission
(CONAGUA) is negotiating resources for implementation and environmental compensation.

Also in 2009, through aerial photography specific native habitat was identified as being threatened by urban growth. Steps have been taken by the city to protect these areas from impending growth. Through the PDUCPPT the City has adopted the use of legal instruments such as the transfer of development rights and the recording of areas and lots in the City's Tax Assessor records that could potentially be transferred. Other tools to conserve land include the purchase of conservation easements and payment for environmental services that could give the City the ability to conserve land.

In addition, the City has already began the process to conserve a riparian corridor known as La Cañada los Saucos in Playas de Tijuana located in the northwest corner of the City which connects north to the Tijuana River Estuary. This will serve as a prototype for future conservation efforts.

EARLY ACTION  Link the creation of conservation areas to the objectives and goals established in “A Binational Vision for the Tijuana River Watershed” and the Border 2012 programs.

Progress

Tijuana River National Estuarine Research Reserve (TRNERR) and Los Laureles

During coastal storm events, the effect of raw sewage, sediment, and trash generated upstream, such as in the Tijuana community of Los Laureles Canyon, impacts Tijuana and San Diego beach water quality, coastal and ocean resources.

As reported in past progress reports agencies and Non-Governmental Organizations (NGOs) both from the U.S. and Mexico continue to seek solutions to the problems that plague the Los Laureles Canyon and the Tijuana River Estuary.

In 2009, the Tijuana River National Estuarine Research Reserve (TRNERR) secured a grant from the United States Environmental Protection Agency (U.S. E.P.A.) to, among other tasks, hire a full-time Watershed Coordinator (WC). The WC will seek to establish and maintain regular communication and cooperation between the Reserve and other programs, organizations, and government entities whose actions influence the long-term health of the Reserve.

The goal of this three-year TRNERR/U.S.E.P.A. project is to further develop programs aimed at restoring and protecting the water quality, habitat, and environment of the Tijuana River Watershed. The WC is conducting on-the-ground watershed improvement projects in Mexico and the U.S. and spearheading larger, longer-term efforts to expand the ability of regional agencies to manage sediment in coastal ecosystems.

The WC is promoting the following projects:

- Control erosion in Los Laureles Canyon and promote work in that area as model for other locations
- Prevent sediment from entering the Reserve
- Secure conservation easements in urban canyons in Mexico
- Tire reutilization designs
- Trash consolidation and tire recycling

In Tijuana, the TRNERR along with support from Mexico’s Secretariat of Environment and Natural Resources (SEMARNAT) have identified the Las Laureles sub-watershed to receive restoration to its riverbed,
revegetation, and conservation of land. IMPlan is facilitating direct communication with property owners of designated conservation lands in Las Laureles to set aside land.

Since December of 2009, large quantities of earth have been moved to make room for the “Border 2012 Park” in Tijuana. This first of its kind project will feature engineered and patented retaining walls made from recycled tires. Thousands of used tires will be used as part of the effort to reduce the flow of waste tires into the Tijuana River Estuary, and as one of the steps to promote new public policies in Mexico.

In addition, an engineered solution to produce high quality pervious pavers will be put to the test by the Spring of 2010. A collaborative effort between the WC, the UCSD Jacobs School of Engineering and a group of residents from Los Laureles canyon will begin soon; the project will ensure a daily production of standardized commercial quality pavers.

After years of negotiation with the City of Tijuana, the construction of sediment basins in Los Laureles canyon has been initiated. The first project started last fall but additional funding is needed to complete other important components.

The WC recently obtained permits from Mexico’s SEMARNAT to import approximately 20,000 native plants to Tijuana. Some of these plants will be used to restore reconstructed slopes in Los Laureles, and the rest would become part of the first ever “Native Plant Nursery” in Tijuana. This one acre parcel located at the municipal nursery has been granted to the watershed coordination group.

In 2009, the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center initiated the San Diego Coastal Storms Real Time, Remote Erosion Monitoring and Outreach Pilot for the Los Laureles area. This project proposes to combine real-time sedimentation monitoring technology and educational outreach efforts in Los Laureles Canyon to address this binational pollution problem in the Tijuana River Watershed.

This project’s goal is to quantify data on upstream sedimentation/trash generation and provide outreach efforts that integrate members of the Los Laureles community directly in the monitoring, training, and instituting a local alert system. In this manner, technology efforts will provide researchers and community stakeholders on either side of the U.S.-Mexico border a mechanism to evaluate and implement best management practices to reduce risk to human health and the environment.

Project benefits include:

- Implementation of an advanced warning system and emergency evacuation plan that involves local community members will also assist in ultimately saving lives during coastal storm events.
- More accurate alert systems to warn the public of imminent health hazards.
- May be applied to northwestern Mexico and Southern California where similar steep canyons and low-income communities exist.

**Next steps**

Additional funding will be sought to carry out specific activities and to assist with key planning efforts in the watershed.
ISSUE  COLLABORATE WITH THE U.S. EPA IN THE BORDER 2012 PROGRAM, THE BINATIONAL AIR QUALITY TASK FORCE, AND THE SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT (APCD) IN BINATIONAL CLEAN AIR EFFORTS

EARLY ACTION  Support the San Diego APCD cross-border clean air demonstration projects.

Progress

In 2008, the APCD received a grant from the U.S. Environmental Protection Agency (EPA) to fund the second phase of the San Diego/Tijuana Clean Diesel Demonstration Project, with the objective of mitigating the air quality impact of increased cross-border, heavy-duty diesel truck traffic.

The first phase of this project was completed in 2008 and retrofitted 50 cross-border trucks with Diesel Oxidation Catalysts (DOCs) plus a Spiracle crankcase filtration system. In 2009, the second phase of the project was completed. Ten border drayage trucks were retrofitted with Diesel Particulate Filters (DPF). DPFs reduce particulate matter emissions by 85 percent.

During 2009, the APCD also applied for a grant from the EPA’s National Clean Diesel Funding Assistance Program to retrofit crossborder drayage trucks. This was to be funded through the ARRA of 2009 (Recovery Act). However, funding was not awarded for this project.