## Draft Five-Year Plan For The Waste Tire Recycling Management Program

(Twelfth Edition Covering Fiscal Years 2023–24 to 2027–28)

**Draft Report to the Legislature** 

November 30, 2022 Workshop

The following document is a draft plan that contains only the proposed activities and projected budgets for FYs 2023–24 to 2027–28. The full version of the draft plan that contains program status, objectives, performance measures, activities, expected budgets, and appendices will be presented during CalRecycle's regular monthly meeting to be held in April 2023.

#### Five-Year Plan for the Waste Tire Recycling Management Program

Senate Bill (SB) 876 (Escutia, Statutes of 2000, Chapter 838) was enacted to provide a comprehensive measure to extend and expand California's regulatory program related to the management of waste and used tires. One of the key provisions of this measure requires the Department of Resources Recycling and Recovery (CalRecycle) to adopt and submit to the legislature a Five-Year Plan (Plan) that included proposed budget allocations. In addition, it requires that the Plan be updated every two years. The eleventh edition of the Five-Year Plan was adopted in June 2021 and covers Fiscal Years 2021–22 through 2025–26. Staff has begun the process to revise the plan to cover FYs 2023–24 to 2027–28.

Please note on September 16, 2022, Governor Newsom approved AB 2836 (Garcia, Statutes of 2022, Chapter 355,) that extends the collection of the tire fee at \$1.75 per tire until January 1, 2034.

The following table is a summary of draft proposed expenditures for the twelfth edition covering FYs 2023–24 to 2027–28. The spending authority limit for the Tire Program as outlined in the Governor's Budget is \$40,242,000. Further details about each program area are contained in this draft Plan. We anticipate the next version of this draft Plan will be presented during a CalRecycle monthly meeting to be held in April 2023.

.Table 1: Total Tire Program Funding for Fiscal Years 2023-24 through 2027-28\*

Program Areas	FY 2023–24	FY 2024–25	FY 2025–26	FY 2026–27	FY 2027–28	Totals for All Fiscal Years
Enforcement	\$6,650,000	\$6,600,000	\$6,600,000	\$6,600,000	\$6,600,000	\$33,050,000
Hauler Program and Manifest System	\$450,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,450,000
Cleanup	\$7,250,000	\$7,250,000	\$7,250,000	\$7,250,000	\$7,250,000	\$36,250,000
Research and Market Development	\$11,509,439	\$11,509,439	\$11,509,439	\$11,509,439	\$11,509,439	\$57,547,195
Mexico/ California Border	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$125,000
Program Staffing and Administration	\$8,608,667	\$8,608,667	\$8,608,667	\$8,608,667	\$8,608,667	\$43,043,335
Administration	\$4,367,859	\$4,367,859	\$4,367,859	\$4,367,859	\$4,367,859	\$21,839,295
Mandatory Contracts	\$1,381,035	\$1,381,035	\$1,381,035	\$1,381,035	\$1,381,035	\$6,905,175
Total Spending Plan	\$40,242,000	\$40,242,000	\$40,242,000	\$40,242,000	\$40,242,000	\$201,210,000
Tire Program's Spending Authority	\$40,242,000	\$40,242,000	\$40,242,000	\$40,242,000	\$40,242,000	\$201,210,000
Farm and Ranch Solid Waste Cleanup and Abatement Grant Program's Spending Authority	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$2,000,000

<sup>\*</sup>The numbers in the table are projections of the funding amounts that CalRecycle expects to be appropriated in future State Budgets. These numbers remain subject to revision.

### Enforcement and Regulations Related to the Storage of Waste and Used Tires

#### **Activity Description and Budget**

The Waste Tire Enforcement Program implements a two-pronged approach to statewide enforcement using local enforcement entities where available and state resources in other areas. The program provides ongoing assistance to local jurisdictions and oversees the entire enforcement effort. Table 2 provides a list of activities and associated budgets for the "Enforcement and regulations relating to the storage of waste and used tires" element.

Table 2: Budget for Enforcement and Regulations Relating to the Storage of Waste and Used Tires

Program Area	FY 2023–24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Waste Tire Enforcement Support Activities	\$200,000	\$150,000	\$150,000	\$150,000	\$150,000
California Highway Patrol Agreement to Support Enforcement Activities	\$100,000	\$75,000	\$50,000	\$50,000	\$50,000
Local Government Waste Tire Enforcement Grant Program	\$6,050,000	\$6,050,000	\$6,050,000	\$6,050,000	\$6,050,000
Database System Maintenance and Enhancement	\$200,000	\$225,000	\$250,000	\$250,000	\$250,000
Tire Enforcement Inspector Technical Training	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Totals	\$6,650,000	\$6,600,000	\$6,600,000	\$6,400,000	\$6,600,000

#### 1. Waste Tire Enforcement Support Activities

The activities in this line item support the overall mission of enforcing the laws regarding the hauling, storage and disposal of waste and used tires in California. Intensive focus of activities along the California-Mexico border region and illegal activities related to export of tires through California ports. Funds will be allocated to the following projects:

#### • Investigation Database Subscriptions

CalRecycle purchases access to advanced government investigation databases for the purposes of properly locating and serving responsible parties with notices when environmental violations have been observed and parties need to be brought into compliance or further enforced upon.

#### • Waste Tire Conversion Calculation Re-evaluation

CalRecycle will procure contractor support, and/or execute an interagency agreement, to evaluate any changes in the average industry standard tire size and weight and to develop and implement any revised passenger tire equivalent conversion factors and volumetric estimation calculation methods that are used by inspectors in the field to estimate the number of waste tires in tire piles.

#### Surveillance Equipment and Assistance

CalRecycle will continue an agreement with the California Air Resources Board (CARB) which supports investigations conducted by CalRecycle tire enforcement staff and local waste tire enforcement grantees. CARB has extensive experience in assisting other agencies in the purchase, maintenance, monitoring, and use of both covert and overt surveillance equipment. CARB's expertise has aided and should continue to aid CalRecycle and local waste tire enforcement grantees' efforts to detect, deter, and prosecute those who illegally haul and dispose of tires or engage in illegal activities related to tire exports through California ports. Additionally, as needed, CARB will help CalRecycle identify, evaluate, and procure more sophisticated surveillance equipment for covert activities to allow for real-time remote monitoring and sensing.

#### Waste Tire Enforcement Training, Development, and Outreach

CalRecycle will continue to provide training and conduct regular meetings, workshops, and webinars to train and maintain a high level of competence among all local government waste tire inspectors working in the TEA Grant Program in support of ongoing compliance verification, violation detection, and enforcement case development. CalRecycle will also provide ongoing training for CHP officers, local sheriff's deputies, police officers, and other state law enforcement personnel to make them aware of California's waste tire laws and regulations and the role they can play in helping detect violations and provide additional enforcement support, particularly in the border region.

Funds from this activity have been redirected to the Hauler Program and Manifest System activity to support the manifest modernization project.

#### **Activity Funding**

FY 2023–24	\$200,000 per fiscal year
FYs 2024-25 through 2027–28	\$150,000 per fiscal year

2. California Highway Patrol (CHP) Agreement to Support Enforcement Activities CHP will continue its support of CalRecycle's field efforts in the areas of ground and

aerial surveillance, covert and overt investigations, inspector security, training for state and local law enforcement officers, and roadside checkpoints to assist CalRecycle as well as local waste tire enforcement personnel in their efforts to detect and deter waste tire facility and hauling violations. If CHP is unable to continue this work after the current contract expires in December 2024 due to budget or priority issues, CalRecycle will pursue a similar agreement with other law enforcement agencies. This effort also includes surveillance and enforcement support focused on illegal activities related to tire exports through California ports and in the California-Mexico border region.

Funds from this activity have been redirected to the Hauler Program and Manifest System activity to support the manifest modernization project

#### **Activity Funding**

FY 2023–24	\$100,000
FY 2024–25	\$75,000
FYs 2025–26 through 2027–28	\$50,000 per fiscal year

#### 3. Local Government Waste Tire Enforcement (TEA) Grant Program

This long-running <u>TEA Grant Program</u> enhances California's waste tire enforcement infrastructure by providing noncompetitive grants to cities and counties that perform local waste tire inspection and enforcement activities. This program augments CalRecycle's enforcement efforts in overseeing the proper management and flow of waste tires throughout the state. Eligible entities are reimbursed for costs to identify waste tire sites, conduct waste tire facility inspections, investigate illegal tire disposal activities, conduct small tire pile cleanup (tire piles with 35 tires or less), review waste tire hauler documents, and issue notices of violation. This Program also helps ensure that tire dealers, waste tire processors, auto dismantlers, retreaders, tire haulers, and other waste tire entities comply with all applicable laws, storage standards, and manifest requirements. This Program allows grantees to be reimbursed for time that grantees spend training or coordinating with a Local Conservation Corps to clean up illegally dumped waste tires.

The program helps ensure consistent statewide inspection and enforcement coverage in a cost-effective and efficient manner. Through participation in this Program, local governments have an expanded role in waste tire enforcement that enhances public health, safety and the environment. City and County inspectors have the ability to apply unique local knowledge of waste tire businesses to ensure proper management of California's annual production of over 51 million waste tires.

#### **Activity Funding**

FYs 2022–23 through 2027–28 ......\$6,050,000 per fiscal year

#### 4. Database System Maintenance and Enhancement

The Waste Tire Management System (WTMS) tracks tire enforcement and manifest

program activities. WTMS was developed per the requirements defined in the approved feasibility study report. WTMS tracks waste tire generators, registered waste tire haulers, permitted and unpermitted end-use facilities, manifest forms, inspection records, and enforcement actions.

WTMS was initially released in July 2003 and had a technical upgrade in May 2019 to operate with current technologies, department standardized coding platforms, and better display options on more devices. Areas of ongoing maintenance and enhancement include:

- Standard reports to track facility inspections, waste tire storage permits, grantee referrals, and notices of violation to ensure performance measures are achieved
- Ongoing enhancements to compliance reports that assist grantees with inspection prioritization and planning, development of an automated work plan assignment system, and an integrated complaint and referral system
- Ongoing maintenance that includes revising inspection forms and making now mandatory electronic inspection reporting efficient and cross-platform supported
- Examination and development of mobile paperless manifesting solutions that will eliminate or greatly reduce the costs and potential errors in reporting associated with paper-based manifesting
- Continued, periodic upgrades to WTMS are anticipated as the program continues to grow and change to meet the needs of our internal and external stakeholders and CalEPA reporting requirements

Funds from the CHP Agreement to Support Enforcement Activities have been redirected to this activity to support the manifest modernization project.

#### **Activity Funding**

FY 2023–24	\$200,000
FY 2024–25	\$225,000
FYs 2025–26 through 2027-28	\$250,000 per fiscal year

#### 5. Tire Enforcement Inspector Technical Training

These funds are used to supplement the tire portion of <u>CalRecycle's annual technical</u> <u>training series</u> for local waste tire enforcement agencies and CalRecycle tire enforcement staff. Training provides inspectors and managers with up-to-date information on CalRecycle's waste tire management policies, programs, and grants, as well as a venue to network and discuss other items of interest regarding the management of waste tires and emerging challenges or threats. Other outreach activities may also be held during the year. This annual training event offers concurrent technical sessions, and field tours provide an opportunity to network with other local enforcement agencies, tire enforcement agencies, CalRecycle staff, and industry representatives.

#### **Activity Funding**

FYs 2023–24 through 2027–28 ......\$100,000 per fiscal year

#### Waste and Used Tire Hauler and Manifest Program

#### **Activity Description and Budget**

Budgeted funds cover the cost of registration and manifest documents issued to California's 30,000 plus waste tire entities. The hauler registration and manifest program budget line item is shown in Table 3.

Table 3: Budget for the Waste and Used Tire Hauler Program and Manifest System

Program Area	FY 2023–24	FY 2024–25	FY 2025–26	FY 2026–27	FY 2027–28
Hauler Program					
and Manifest	\$450,000	\$500,000	\$500,000	\$500,000	\$500,000
System					
Totals	\$450,000	\$500,000	\$500,000	\$500,000	\$500,000

#### 1. Hauler Program and Manifest System

This activity includes the following projects:

#### Waste Tire Hauler Registration

CalRecycle costs associated with Waste and Used Tire Hauler Registration include printing registration application materials, registered waste tire hauler decals and certificates, and Tire Program identification number certificates, and training and education materials.

#### Waste Tire Manifest Program

The Waste Tire Manifest Program costs include printing, mailing, and return postage for the Comprehensive Trip Log (CTL) waste tire manifest forms that are provided free of charge to California's approximately 1,400 registered waste tire haulers and post office handling. Costs also cover contractor support to scan and conduct manual hand-key data entry of the returned CTL forms. The program also produces and training and education materials to instruct haulers and facilties on proper manifesting procedures. And, funds cover augmenting CalRecycle's Information Technology Services Branch annual budget for manifest and hauler registration-related upkeep and maintenance of the WTMS database.

#### Waste Tire Electronic Manifesting

CalRecycle will work on developing and implementing an electronic mobile manifest application to modernize the waste and used tire tracking system to transition the paper-based system to an electronic system.

#### Waste Tire Hauler Training Workshops

This effort will focus on providing ongoing education and training to waste tire haulers as part of their annual registration renewal activities. The overall effort is focused on using the Internet to communicate with our partners and stakeholders in the regulated community and providing needed education and training. This is a part of CalRecycle's efforts to achieve greater waste tire enforcement compliance through expanded education and outreach. This will enable CalRecycle to focus limited enforcement resources on more serious and repeat offenders. CalRecycle will continue conducting free, bilingual training workshops throughout California, with a special emphasis on the California-Mexico Border region, to augment annual hauler registration renewal outreach and educational efforts and to inform and educate waste tire haulers of their roles and responsibilities under California's waste tire compliance system.

Funds from the Waste Tire Enforcement Support Activities have been redirected to this activity to support the manifest modernization project.

#### **Activity Funding**

FY 2023–24	\$450,000
FYs 2024-25 through 2027–28	\$500.000 per fiscal vear

# Cleanup, Abatement, or Other Remedial Actions Related to Tire Stockpiles Throughout the State

#### **Activity Description and Budget**

The Cleanup Program will continue to clean up illegal tire piles with CalRecycle-managed contractors and grants. The Local Conservation Corps will continue to assist local governments with cleanup and collection activities. Also, CalRecycle will continue an emergency reserve account, which cannot exceed \$1,000,000, as directed by SB 876. Table 7 provides a list of activities and associated budgets for the element titled "Cleanup, Abatement, or Other Remedial Actions Related to Tire Stockpiles throughout the State."

Table 7: Budget for Cleanup, Abatement, and Remedial Action

Program Area	FY 2023–24	FY 2024–25	FY 2025–26	FY 2026–27	FY 2027–28
Short-Term Remediation Projects	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
Local Conservation Corps Grant Program	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
Local Government Waste Tire Cleanup Grant Program	\$0	\$1,250,000	\$0	\$1,250,000	\$0
Local Government Waste Tire Amnesty Grant Program	\$1,250,000	\$0	\$1,250,000	\$0	\$1,250,000
Emergency Reserve Account	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
Farm and Ranch Solid Waste Cleanup and Abatement Grant Program*	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
Totals	\$7,250,000	\$7,250,000	\$7,250,000	\$7,250,000	\$7,250,000

<sup>\*</sup> Funds transferred to Farm and Ranch Solid Waste Cleanup and Abatement Grant program.

#### 1. Short-Term Remediation Projects

Public Resources Code (PRC) Section 42846 allows CalRecycle to perform any cleanup, abatement, or remedial work required to prevent substantial pollution, nuisance, or injury to public health and safety at waste tire sites where the responsible parties have failed to take appropriate action. CalRecycle funds short-term collection

and remediation of illegal waste tire sites with CalRecycle-managed contracts. The contractor may be used to stabilize piles until removal, remove all waste tires, and remediate the site after the tires have been removed.

#### **Activity Funding**

FYs 2023–24 through 2027–26......\$300,000 per fiscal year

#### 2. Local Conservation Corps Grant Program

The purpose of this Grant Program is to implement beverage container recycling and litter abatement programs, recycling activities related to the collection and recovery of used oil and electronic waste, and the cleanup and abatement of waste tires. Eligible applicants are Local Conservation Corps (LCCs) that are designated by a county to perform litter abatement, recycling, and related activities, and are certified by the California Conservation Corps as having operated for a minimum of two years and as meeting all other criteria of PRC section 14507.5. This Grant Program expends funding from the California Beverage Container Recycling Fund, Electronic Waste Recovery and Recycling Account, California Tire Recycling Management Fund, and California Used Oil Recycling Fund. Eligible activities may include cleanup events, education and outreach, event labor and staff resources in partnership with local jurisdictions, collection and hauling services, and other projects allowed under PRC sections 17001(b)(3) and 42872. The LCCs currently assist local governments with waste tire cleanup and collection activities. CalRecycle also works with the LCCs to extend Program services to areas of the state not traditionally served by the LCCs, including projects to improve environmental conditions in communities of the California/Baja border region.

#### **Activity Funding**

FYs 2023–24 through 2027–28......\$5,000,000 per fiscal year

#### 3. Local Government Waste Tire Cleanup Grant Program

This <u>Grant Program</u> is designed to pay for the cost of cleanup of illegally dumped waste tires. Funds are available for the collection, removal, transportation, recycling, and disposal of California waste tires from tire piles and areas where illegal dumping has occurred. Funds are limited to the removal of waste tires along public rights-of-way and on private property with either: 1) less than 500 tires on site, or 2) 500 to 4,999 tires if the property owner signs an affidavit stating that they did not bring the tires on site or allow others to bring the tires on site. Local governments including cities, counties, special districts, other political subdivisions and jurisdictions joined together by formal agreements, as well as qualifying Indian tribes, are eligible for funding. Cities or counties may submit a regional application with authorization from other cities and counties participating in the regional application. Priority will be given to applicants with existing tire piles that are 1) a serious threat to public health, safety and the environment, 2) located within a disadvantaged community, or 3) located in a border

region. CalRecycle will conduct outreach in the border region, in collaboration with CalEPA's Border Affairs Office, to increase awareness of this grant program. Applicants that demonstrate coordination with a Local Conservation Corps will have the next priority. Eligible costs for this coordination will be described in the procedures and requirements section of the grant agreement.

#### **Activity Funding**

FYs 2024–25 and 2026–27 ......\$1,250,000 per fiscal year

#### 4. Local Government Waste Tire Amnesty Grant Program

This Grant Program is designed to help divert waste tires from landfill disposal and prevent illegal tire dumping. Funds pay for waste tire collection events that are held in convenient locations for the public to bring in their used tires at no charge. An amnesty event can also consist of a coupon program that allows citizens to bring in their tires on specified days. Amnesty events are not intended for the disposal of waste tires from waste tire generating businesses (PRC §42954(7)). Local governments—including cities, counties, special districts, other political subdivisions and jurisdictions joined together by formal agreements, as well as qualifying Indian tribes—are eligible for funding. Cities or counties may submit a regional application with authorization from other cities and counties participating in the regional application. Priority will be given to applicants who hold tire amnesty collection events within a disadvantaged community or border region. CalRecycle will conduct outreach in the border region, in collaboration with CalEPA's Border Affairs Office, to increase awareness of this grant program. Applicants that demonstrate coordination with a Local Conservation Corps will have the next priority. Eligible costs for this coordination will be described in the procedures and requirements section of the grant agreement.

#### **Activity Funding**

FYs 2023–24, 2025–26 and 2027–28.....\$1,250,000 per fiscal year

#### 5. Emergency Reserve Account

Senate Bill 876 (Escutia, Statutes of 2000, Chapter 838) requires CalRecycle to create and maintain an emergency reserve account, which shall not exceed \$1,000,000. Funding for FYs 2023–24 through 2027–28 is being proposed at \$300,000. These funds will be used to respond to emergencies involving waste tires (e.g., tire fires). This Emergency Reserve Account is subject to change depending on the need to fund cleanups for any emergencies that arise. While CalRecycle is required to maintain funds in this account with expenditure authority for emergency purposes, if needed more than \$1,000,000 may be expended on a yearly. If allocated funds are not expended, funds may be carried forward to the fund balance in the following fiscal year.

#### **Activity Funding**

FYs 2023–24 through 2027–28......\$300,000 per fiscal year

#### 6. Farm and Ranch Solid Waste Cleanup and Abatement Grant Program

The purpose of this <u>Grant Program</u> is to provide funding for the cleanup of illegal solid waste sites on farm or ranch property. A site may be eligible for funding if the parcels are zoned for agricultural use, unauthorized solid waste disposal has occurred, and the sites are in need of cleanup in order to abate a nuisance, a public health and safety threat, or a threat to the environment. Tire piles can attract more dumping. Cleaning up these sites will help deter future illegal dumping of tires. SB 876 requires that transferred tire funds be allocated to pay the costs of cleanup, abatement, or other remedial action related to the illegal disposal of whole waste tires on farm or ranch properties. Other non-tire cleanup costs are paid for using other program funding sources.

#### **Activity Funding**

FYs 2023–24 through 2027–28......\$400,000 per fiscal year

# Research Directed at Promoting and Developing Alternatives to the Landfill Disposal of Tires, Market Development, and New Technology Activities for Waste and Used Tires

#### **Activity Description and Budget**

CalRecycle is proposing to continue funding the following initiatives:

- Tire-derived aggregate (TDA) and rubberized asphalt concrete (RAC) research and technical support
- Support of Caltrans specifications development
- Research on retreads
- Feedstock conversion assistance and material testing.

This will support CalRecycle's focus on RAC, TDA, and other tire-derived products (TDPs) that use the largest number of tires. Since a large number of tires can be diverted through RAC, TDA, and molded product applications, funding to expand this use is a priority. Table 9 provides the budget for this element.

**Table 9: Budget for Research and Market Development Activities** 

Program Area	FY 2023–24	FY 2024–25	FY 2025–26	FY 2026–27	FY 2027–28
Tire-Derived Aggregate Civil Engineering Technical Support and Research;	\$600,000	\$850,000	\$600,000	\$850,000	\$600,000
Technology Center and Laboratory Testing Services	\$0	\$200,000	\$0	200,000	\$0
Rubberized Asphalt Concrete Technical Support and Research	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000
Environmental Studies and Research	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Waste Tire Technologies Evaluation and Development	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
Tire-Derived Aggregate Grant Program	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000
Rubberized Pavement Grant Program	\$4,909,439	\$5,184,439	\$4,934,439	\$5,184,439	\$4,934,439
Tire-Derived Products Grant Program	\$700,000	\$0	\$700,000	\$0	\$700,000
Tire Incentive Program	\$3,200,000	\$3,200,000	\$3,200,000	\$3,200,000	\$3,200,000
Tire Market Analysis and Support	\$200,000	\$175,000	\$175,000	\$175,000	\$175,000
Tire Events	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Totals	\$11,509,439	\$11,509,439	\$11,509,439	\$11,509,439	\$11,509,439

#### 1. Tire-Derived Aggregate (TDA) Civil Engineering Technical Support and Research;

CalRecycle will continue to provide technical support to address issues associated with the use of TDA in civil engineering projects and research to investigate new TDA applications As shown in the activity descriptions below, funding for these efforts will vary between \$600,000 and \$850,000 per fiscal year. This is done to accommodate the award cycles for the contracts needed to support CalRecycle's Technical Support Contracts.

#### TDA Civil Engineering Technical Support

CalRecycle's technical support efforts will promote the use of TDA through technical assistance and targeted outreach to industry, associations, and other potential TDA users. CalRecycle also directs its technical assistance contractor to develop technology transfer materials that showcase the performance and cost benefits of using TDA. The technical assistance contractor will present these materials and serve as a CalRecycle liaison at various key stakeholder group workshops and conferences.

#### TDA Research

Under this activity, CalRecycle will continue to investigate new civil engineering uses for TDA, including partnering with state, local, and private-sector engineers to conduct research and to train and educate them on the use of TDA in their projects. For TDA-related research projects, CalRecycle may implement project-specific contracts. These projects could include, but are not limited to, erosion control, earthquake damping, vibration mitigation, retaining and sound walls, storm water runoff and drainage control, and septic tank leach field applications. A recent example was the previously mentioned project done in partnership with Santa Barbara County in 2019 to demonstrate the feasibility of using TDA in a mechanically stabilized earth application. The project rehabilitated a failing section of road on a steep hillside.

#### **Activity Funding**

FYs 2023–24, 2025-26, and 2027–28	\$600,000 per fiscal year
FYs 2024–25 and 2026–27	\$850.000 per fiscal vear

#### 2. TDA and RAC Technology Center and Laboratory Testing Services

CalRecycle will continue its partnership with a contractor who has knowledge and experience with the TDA and RAC material specifications in California. Through the TDA Technology Center, the contractor will provide statewide technical assistance to local governments through direct consultation and presentations at local and regional workshops related to material specifications for both TDA and RAC. CalRecycle may request that the contractor participate in environmental studies that relate to TDA and RAC. To assure compliance with material specifications, the contractor will also provide validation-testing services in support of CalRecycle RAC and TDA projects. The contractor will also continue to provide curriculum development support to California universities to educate the next generation of engineers on the benefits of using TDA.

#### **Activity Funding**

FYs 2024–25 and 2026–27.....\$200,000 per fiscal year

3. Rubberized Asphalt Concrete (RAC) Technical Support and Research
The success of CalRecycle's RAC programs has been largely due to the technical

support that has been provided through CalRecycle's RAC technical assistance contract and research efforts conducted by its university partners. CalRecycle is proposing to continue to provide technical support and research to address issues associated with roadway projects, including rubber hot-mix, rubber chip seal, rubber cape seals, and other emerging rubber paving applications. As shown in the descriptions below, funding for these efforts is proposed to be \$300,000 per fiscal year.

#### • RAC Technical Support

The technical assistance contractor will assist CalRecycle with marketing and promoting the use of RAC through the development and distribution of technology transfer materials and presentation of these materials at key stakeholder workshops and conferences. The contractor provides technical assistance and training to RAC grantees to ensure that their projects are successful. To date, the contractor has conducted training sessions for over 300 local government entities.

Through this program, the contractor will assist on agency projects and may provide design assistance, specification review, bidding and procurement, construction management, quality assurance, and quality control, as necessary.

#### RAC Research

Under this activity, CalRecycle will continue to conduct research of rubberized paving applications in support of efforts to promote its use. Listed below are several RAC research proposals that CalRecycle is currently considering:

- Performance model implementation for rubberized paving applications (e.g., hotmix, chip seals),
- Rubberized chip seal design specifications, and
- Research in determining the rubber content in rubberized binders.

#### **Activity Funding**

FYs 2023–24 through 2027–28.....\$300,000 per fiscal year

#### 4. Environmental Studies and Research

CalRecycle will partner with a research Institute who has knowledge and experience with environmental studies and research to conduct a comprehensive evaluation and assessment on emerging environmental issues associated with TDPs. The research might be conducted in coordination with other stakeholders and State agencies such as DTSC and Water Board. The goal of the research may include but not limited to assessing the impact of emerging contaminants such as Tire Wear Particles, 6 PPDQ, Zinc, etc. on the environment.

#### **Activity Funding**

FYs 2023–24 through 2027–28......\$500,000 per fiscal year

#### 5. Waste Tire Technologies Evaluation, Investigation and Development

CalRecycle will continue to investigate TDPs and technologies that utilize waste tires to study and determine whether they are viable in the current tire market and if there are health and safety impacts that could adversely affect their use. Some of these applications may include identification of end-of-life options for various TDPs, including: turf applications and playgrounds; assessing the feasibility of using crumb rubber in molded, extruded, and other products; assessing market challenges and potential solutions for retread tires; assessing market opportunities for various TDPs; and research into innovative and emerging technologies such as devulcanization. Research may also be performed regarding changes in the composition of materials used to manufacture tires, the potential impacts of those changes on manufacturing TDPs, and the impacts of those manufacturing changes on the service life of the tire (e.g., rolling resistance, durability, microplastics generated by tire wear particles). CalRecycle may also develop methodologies to quantify the greenhouse gas emissions associated with TDPs. To conduct this investigation, CalRecycle may partner with industry, universities, and other state agencies.

#### **Activity Funding**

FYs 2023–24 through 2027–28......\$250,000 per fiscal year

#### 6. Tire-Derived Aggregate Grant Program

This <u>Program</u> provides funding for civil engineering projects utilizing TDA to:

- Local governments, special districts, and joint powers authorities
- State agencies (including offices, departments, bureaus, and boards)
- California-based private and for-profit entities
- Non-profit organizations
- Qualifying California Indian tribes

To be eligible for the grants, projects must use TDA in one of a variety of approved civil engineering applications.

#### **Activity Funding**

FYs 2023–24 through 2027–28......\$750,000 per fiscal year

#### 7. Rubberized Pavement Grant Program

This <u>Program</u> will continue to be offered to cities, counties and qualifying California Indian tribes that fund public works projects located in California. The program is designed to help create long-term sustainable markets by focusing on first-time and limited-experience users of rubberized paving. This may include grants and incentives to further the purposes of the program.

#### **Activity Funding**

FY 2023–24 ......\$4,909,439

FYs 2024–25 and 2026–27	\$5,184,439 per fiscal year
FYs 2025–26 and 2027–28	\$4,934,439 per fiscal year

#### 8. Tire-Derived Product Grant Program

This <u>Program</u> and its predecessors have increased demand for TDPs, especially with local governments and school districts. It has also encouraged the appropriate substitution of recycled rubber for virgin rubber (also known as feedstock conversion). Typical TDPs include:

- Storm water mitigation measures
- Landscaping and playground loose-fill mulch
- Playground tiles
- Crumb rubber infill for all-weather sports surfacing, rubberized sidewalks and tree wells, floor and agricultural mats, and sports tracks

#### **Activity Funding**

FYs 2023–24, 2025–26, and 2027-28......\$700,000 per fiscal year

#### 9. Tire Incentive Program

This successful and competitive Program is targeted at expanding demand for higher value-added products using crumb rubber from California-generated waste tires. Incentives may include, but are not limited to: new and existing tire-derived products, end-of-life material, feedstock conversion, and use of fine (< 50) mesh material.

Examples of possible eligible products include, but are not limited to:

- Flooring underlayment
- Rubberized flooring
- Conveyer belts
- Calendared or compounded rubber
- Agricultural harvesting devices
- Landscaping and garden products
- Building products
- Traffic devices
- Spacers
- Fencing
- Asphalt products (that are not eligible under other CalRecycle programs)
- Paintings and coatings

Asphalt products must contain a minimum of 5 percent crumb rubber in the binder or flux.

#### **Activity Funding**

FYs 2023–24 through 2027–28......\$3,200,000 per fiscal year

#### 10. Tire Market Analysis and Support

This contract intends to document market trends and assist with the arrangement and organization of the California tire conferences. CalRecycle staff and an independent contractors will provide:

- An annual in-depth survey and analysis of the waste tire and TDP markets in California and the associated California Waste Tire Market Report. This effort consists of a market analysis study to assess the market for California waste tires and influencing factors in the market, including providing information on the waste tire diversion rate, market trends, supply and demand balance and capacity, and other relevant market analyses. The analysis will culminate with the annual publication of the California Waste Tire Market Report.
- In coordination with CalRecycle, the contractor will assist with the arrangement and
  organization of the California tire conferences. The contractor will solicit
  stakeholder input on topics that will be the subject of the conferences, develop
  educational priorities and plans for achieving them, organize conference sessions,
  identify and secure potential presenters, and attend and participate/present at the
  conferences.

#### **Activity Funding**

FY 2023–24	\$200,000
FYs 2024–25 through 2027–28	\$175,000 per fiscal year

#### 11. Tire Events

CalRecycle will continue to hold tire workshops, forums, and trainings, as it has in past years. These tire business and product events will provide attendees with up-to-date information about waste tire management programs. They provide a venue to discuss all aspects of waste tire management, including hauling, manifests, cleanup, proper disposal, recycling technologies, and research and market development activities. These events also offer a venue for staff and stakeholders to meet and focus on issues of common concern. These events may be held virtually in 2021. Wherever possible, events will be conducted in conjunction with related events organized by organizations such as the League of California Cities, California Public Works Association, and California State Association of Counties. In addition, CalRecycle staff combined the tire and used oil/household hazardous waste annual conference and the Recycling Market Development Zone conferences and training workshops into one combined three-year contract to provide efficiencies of scale and other benefits. All events will be coordinated with CalRecycle's Office of Public Affairs.

#### **Activity Funding**

FYs 2023–24 through 2027–28.....\$100,000 per fiscal year

## California/Mexico Border Waste Tire Activities and Support

#### Activity Description and Budget

Consistent with this <u>Memorandum Of Understanding to Enhance Cooperation on</u>
<u>Environmental Protection, Natural Resources, And Climate Change Between the Ministry of Environment and Natural Resources of the United Mexican States and the Environmental Protection Agency and the Natural Resources Agency of the State of California of the United States of America, CalRecycle plans to provide:</u>

- 1. Translation and interpretation services that will allow documents, meetings, workshops, and conferences to be available in Spanish
- 2. Referral of property owners with illegal waste tire piles to one of the following:
  - Local Government Waste Tire Cleanup Grant Program
  - Local Government Waste Tire Amnesty Grant Program
  - o Farm and Ranch Solid Waste Cleanup and Abatement Grant Program
  - Local Conservation Corps Grant Program
  - CalRecycle's southern California short-term remediation contractor to remediate the waste tires
- 3. Market development and technical virtual workshops to Baja California government, non-profits, and businesses
- 4. Hauler and manifest virtual training to tire haulers based in Mexico and operating, or interested in operating, in California or around the border region
- 5. A Feasibility Committee for Market Development of Civil Engineering in Mexico
- 6. A Border Check Point Cross-Training Workgroup, in coordination with the binational work group regarding waste tires
- 7. Knowledge transfer and technical assistance to the governments of Baja California to establish a long-term tire management program
- 8. Staff members to participate in groups that focus on the border region, such as US EPA Border 2025, Tijuana River Valley Recovery Team, and the California-Mexico Border Relations Council

When appropriate, CalRecycle will consult with an advisory group for the activities listed below. The advisory group will include national, state and local governments, non-profits, and stakeholders from both sides of the border.

Update on the **Border Region Site Identification, Enforcement, and Cleanup Assistance** activity from the previous Five-Year Tire Plan that was funded in the amount of \$200,000 in FY 2021–22. CalRecycle has received numerous complaints over several years claiming illegal waste tire dumping in the CA border region. To address this concern, CalRecycle worked with the Solid Waste and Tire Cleanup Program engineering

consultant, Geo-Logic and Associates (GLA) to develop a study of illegal dumping sites in the CA border region. The study included an extensive survey of Federal, County, and City level public agencies with property or property jurisdiction in the border region, along with numerous non-governmental organizations and non-profits operating in the border region. The survey was followed by field assessments of identified potential sites. The study was conducted in the summer and fall of 2022, with surveys and field assessments completed recently. CalRecycle will work with GLA to develop a study report during the fall and winter of 2022–23.

Table 10: CalRecycle's California/Mexico Border Waste Tire Activities and Support

Program Area	FY 2023-24	FY 2024–25	FY 2025–26	FY 2026–27	FY 2027–28
Spanish Translation					
and Interpretation	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Services					
Totals	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
	n/a	n/a	n/a	n/a	n/a
Program Area					
(existing budget	FY 2023–24	FY 2024–25	FY 2025–26	FY 2026–27	FY 2027–28
line items in Plan)					
Tire Cleanups in	Funding	Funding	Funding	Funding	Funding
California including	based on				
the Border Region*	projects	projects	projects	projects	projects
	received	received	received	received	received
Local Government	Funding	Funding	Funding	Funding	Funding
Waste Tire Cleanup	based on				
and Amnesty Grant	applications	applications	applications	applications	applications
Programs*	received	received	received	received	received
Local Conservation	Funding	Funding	Funding	Funding	Funding
Corps Grant	based on				
Program*	projects	projects	projects	projects	projects
Market					
Development	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Technical Virtual	φ5,000	\$5,000	φ5,000	\$5,000	φ5,000
Workshops					
Waste Tire Hauler					
Training to Mexican	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000
Haulers					
Feasibility					
Committee for	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Market	φ15,000	φ15,000	φ15,000	φ15,000	φ15,000
Development of					

Program Area	FY 2023–24	FY 2024-25	FY 2025–26	FY 2026–27	FY 2027–28
Civil Engineering in					
Mexico					
Border Check Point					
Cross-Training	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Workgroup					
Knowledge Transfer					
and Technical	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Assistance					
Staff Participation in					
Groups that Focus	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
on the Border	ψο,σσσ	ψο,σσσ	Ψο,σσσ	φο,σσσ	φο,σσσ
Region					
Totals from					
existing budget					
line item in Plan					
(Plus cleanup					
projects funded by	\$53,000	\$53,000	\$53,000	\$53,000	\$53,000
CalRecycle grants					
and contracts that					
are undetermined					
at this time.)					

<sup>\*</sup>An amount designated to the border activities cannot be determined at this time. The amount allocated will be based on the projects received in the border region.

#### Activities

1. Spanish Translation and Interpretation Services: This contract would provide both verbal interpretation and written translation from English to Spanish and Spanish to English. These services are for tire events, reports, and educational material that are of interest to the border area. This would increase accessibility for Spanish-speaking stakeholders to our tire conferences, workshops, and other programmatic activities.

#### **Activity Funding**

FYs 2023–24 through 2027–28......\$25,000 per fiscal year

#### Existing Budget Line Items in Plan

2. Tire Cleanups in California including the Border Region: CalRecycle has a three-year contract to fund short-term remediation of illegal waste tires. There are two contracts: \$150,000 for Northern California and \$150,000 for Southern California. CalRecycle-managed contracts can be used on a case-by-case basis for tire cleanups in California, including the border region. However, our contractor can only perform cleanups in California.

CalRecycle's Amnesty and Cleanup Grant Programs will give priority funding for local governments in the California border region. This activity will be funded from the existing allocation in the Cleanup Element.

The Local Conservation Corps (LCC) in the border region assist local governments with waste tire cleanup and collection activities. This activity will be funded from the existing allocation to the LCC in the Cleanup Element.

- 3. Market Development Technical Virtual Workshops: CalRecycle will hold virtual workshops to disseminate information on Rubberized Asphalt Concrete (RAC) and Tire-Derived Aggregate (TDA) technology to the Mexican Government, non-profits and businesses. This activity will be funded in the amount \$5,000 each fiscal year from the technical support contracts described in the Research and Market Development Element.
- 4. Waste Tire Hauler Training to Tire Haulers based in Mexico: CalRecycle will continue conducting free, bilingual workshops throughout California, with a special emphasis on the border region. Trainings inform and educate waste tire haulers of their roles and responsibilities under California's waste tire compliance system including: how to register annually, how to create a manifest, how to use the online system to submit a manifest, how to properly handle and dispose of waste tires, and how reduce the impacts to public health and the environment that arise from improper hauling, storage and disposal of waste tires.

Additional assistance is available on a one-on-one basis to participants after the virtual

workshop. This activity will be funded in the amount of \$8,000 each fiscal year from the Hauler and Manifest Element.

- 5. Feasibility Committee for Market Development of Civil Engineering in Mexico: CalRecycle could help chair a committee to determine which type of civil engineering projects could develop a market in Mexico. This committee could explore market development, equipment and plant requirements, funding opportunities, business networks, and training. The committee could include members from CalEPA, US EPA, Mexican Government, tire recycling businesses, non-profits, and local governments. CalRecycle estimates \$15,000 a year for staffing cost to facilitate a committee, which could be funded from the existing Program Staffing listed in the Plan.
- 6. Border Check Point Cross-Training Workgroup: CalRecycle could work to coordinate regular workgroups with government authorities from Mexico and the U.S. involved with international ports to exchange information about tire commodity import and export requirements and monitoring processes. The workgroup could identify how the flow of tire commodities are tracked at international border check points by each country and evaluate if any additional opportunities exist to further monitor the flow of tires across the border. The workgroup could explore enforcement needs, identify issues relating to illegal flows of tires, and develop communication protocols to report to each other should any issues of concern arise that need to be further investigated. The workgroup could include CalRecycle, U.S. and Mexico Border Customs Agencies, California Highway Patrol, and registered tire hauler stakeholder representatives. This activity will be funded in the amount of \$10,000 from the existing Waste Tire Enforcement Support activity.
- **7. Technical Assistance:** CalRecycle will provide technical assistance to Baja California to develop an integrated waste tire management program. This activity will be funded from the existing Program Staffing listed in the Plan.
- 8. Staff Participation in Groups that Focus on the Border Region: CalRecycle staff members will participate in groups that focus on the border region, such as US EPA Border 2025, Tijuana River Valley Recovery Team, Commission of the Californias, and the California-Mexico Border Relations Council. This activity will be funded from the existing Program Staffing listed in the Plan.

#### **Administrative Costs**

#### **Program Staffing**

Tire-related activities are performed by a total of 65 positions within CalRecycle. The cost of staffing is approximately \$8.6 million. Breakdown of positions are as follows:

Division or Office	Positions
Administration, Finance & Information Technology Services Division	1
Audits Office	1
Legal Affairs Office	3
Legislative & External Affairs Office	1
Materials Management and Local Assistance Division	19
Waste Permitting, Compliance and Mitigation Division	40
Total Tire Positions within CalRecycle	65

#### **Personnel Funding**

#### **Administration**

Administration includes the following: executive management, accounting, human resources, grants, business services, employee health and safety, small-office support, and statewide pro rata assessments. Pro rata is the sharing of central service costs (as mentioned in the State Administrative Manual, Section 8753) that generally serve all of CalRecycle (i.e., indirect or overhead costs) by funds other than the General Fund. Administration funding represents the distribution of these "indirect costs" to direct CalRecycle program activities that include the tire program.

#### **Activity Funding**

#### **Mandatory Contracts**

Mandatory contracts include allocations for the following:

- California Department of Tax and Fee Administration,
- Foundation for California Community Colleges,
- Risk Management,
- Health and Safety,
- California Conservation Corps, and

• The Governor's Office of Planning and Research.

#### **Activity Funding**