

COOPERATIVE IMPLEMENTATION AGREEMENT

THIS AGREEMENT, ENTERED INTO EFFECTIVE ON June 08, 2016, is between the State of California acting by and through its Department of Transportation, referred to herein as CALTRANS and the CITY OF CARSON, a body politic and a municipal corporation (chartered City) of the State of California, referred to herein as "AGENCY". CALTRANS and AGENCY are together referred to as PARTIES.

RECITALS

1. CALTRANS and AGENCY, pursuant to California Streets and Highways Code (SHC) Sections 114 and 130, are authorized to enter into a Cooperative Agreement for improvements to the State Highway System (SHS) as a watershed stakeholder within AGENCY's jurisdiction.
2. As per Attachment IV of the Caltrans National Pollutant Discharge Elimination Permit Order 2012-0011-DQW (NPDES Permit), Section I.A, CALTRANS and AGENCY are to collaboratively implement the NPDES Permit requirements as they have been identified as stakeholders in the Total Maximum Daily Load (TMDL) for the CARSON WATER CAPTURE FACILITY (hereinafter referred to as "Water Capture Facility"). CALTRANS has agreed to contribute an amount not to exceed THIRTEEN MILLION (in English) Dollars (\$13,000,000) to AGENCY for AGENCY to construct the Water Capture Facility, within the regional area under the jurisdiction of AGENCY to comply with the TMDL. The NPDES Permit (including Attachment IV) is located at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/caltrans.shtm
3. AGENCY has agreed to implement Water Capture Facility Project (hereinafter referred to as the "PROJECT") subject to the terms and conditions of this Agreement including all attached hereto that are incorporated herein and made a part of this Agreement (collectively referred to as the "AGREEMENT").
4. AGENCY will be responsible for all management, maintenance and operations, including costs of the constructed Water Capture Facility.
5. CALTRANS will be credited with one (1) Compliance Unit (CU) for each Eighty Eight Thousand Dollars (\$88,000) paid to AGENCY. A compliance unit is defined as one (1) acre of CALTRANS's Right-of-Way (ROW) from which the runoff is retained, treated, and/or otherwise controlled prior to discharge to the relevant reach. The financial equivalent as submitted by CALTRANS is One Hundred Seventy Six Thousand Dollars (\$176,000) per CU. The State Water Resources Control Board ("State Water Board") is encouraging collaborative efforts and Cooperative Implementation Agreements, and uses a 50% discount for CU in dollars contributed to the Cooperative Implementation. This sets the CU equivalent at Eighty Eight Thousand Dollars (\$88,000).
6. Cooperative Implementation has the following advantages: (i) allows for retrofit projects off the ROW, at locations that may otherwise have space, access, or safety limitations within the ROW; (ii) provides for the involvement of local watershed partners who have an interest and expertise in the best way to protect, manage, and enhance water quality in the watershed; (iii) allows for implementation of Best Management Practices (BMPs)

and other creative solutions not typically available to CALTRANS; (iv) allows for larger watershed-scale projects; and (v) leverages resources from other entities.

7. All services performed by AGENCY pursuant to this AGREEMENT are intended to be performed in accordance with all applicable Federal, State and AGENCY laws, ordinances, regulations, and CALTRANS published manuals, policies, and procedures. In case of conflict between Federal, State and AGENCY laws, ordinances, or regulations, the order of precedence applicability of these laws shall be Federal, State and then AGENCY laws and regulations, respectively.
8. Project funding is as follows:

<u>FUND TITLE</u>	<u>FUND SOURCE</u>	<u>DOLLAR AMOUNT</u>
SHA	State of California	\$13,000,000

SECTION I

All sections of this agreement including the recitals are enforceable.

1. AGENCY has agreed to implement PROJECT in accordance with Attachment II-SCOPE SUMMARY. The SCOPE SUMMARY that is attached to and made a part of this AGREEMENT defines in detail the PROJECT's scope of work, description, timeline, location and budget.
2. AGENCY will be responsible for all management, maintenance and operations, including costs of the constructed Water Capture Facility.
3. AGENCY will develop and construct the Water Capture Facility in accordance with the applicable laws, policies, practices, procedures and standards. This applies to all procurements, including land acquisitions, licenses and permits.
4. AGENCY shall prepare initial engineering and geotechnical assessments, and detailed design as well as acquire environmental reviews and Right-of-Way need for the PROJECT. This work is the AGENCY equivalent to Caltrans process of Project Initiation Document (PID). Project Approval & Environmental Document (PA & ED) and Plans, Specification and Estimate (PS&E). AGENCY will pay for coordinate, prepare, obtain, implement, renew, and amend all any permits needed to complete the PROJECT. AGENCY will prepare CEQA environmental documentation to meet CEQA requirements.
5. AGENCY will advertise, open bids, award, and approve the construction contract in accordance with the California Public Contract Code and the California Labor Code and will be responsible for the administration, acceptance, and final documentation of the construction contract.
6. AGENCY shall be reimbursed for actual costs not exceeding the amount provided in the AGREEMENT herein
7. CALTRANS shall have the right to inspect the work to be performed hereunder at any time during its progress and to make final inspection upon completion thereof. Failure of CALTRANS to object within 30 days after final inspection shall indicate satisfactory performance of the AGREEMENT by AGENCY.
8. The total amount reimbursable to AGENCY pursuant to this AGREEMENT by CALTRANS shall not exceed \$13,000,000 ("Contract Sum"). Costs incurred by AGENCY for PROJECT work under this AGREEMENT in excess of the Contract Sum will be borne by AGENCY. It is understood and agreed that this AGREEMENT fund limit is an estimate and that CALTRANS will only reimburse the cost of services actually rendered as authorized by the CALTRANS Contract Manager or designee at or below the fund limitation amount set forth in this AGREEMENT and in accordance with the Budget included in Attachment II.
9. All administrative draft and administrative final reports, studies, materials, and documentation relied upon, produced, created or utilized for PROJECT will be held in confidence to the extent permitted by law, and where applicable, the provisions of California Government Code section 6254.5(e) shall govern the disclosure of such

documents in the event said documents are shared between the Parties. Parties will not distribute, release, or share said documents with anyone without prior written consent of the party authorized to release said documents except: (i) to employees, agents, and consultants who require access to complete the work described herein this Agreement; or(ii) release is required or authorized by law.

10. HM-1 is defined as hazardous material (including but not limited to hazardous waste) that requires removal and disposal pursuant to Federal or State law, whether it is disturbed by PROJECT or not. HM-2 is defined as hazardous material (including but not limited to hazardous waste) that may require removal and disposal pursuant to Federal or State law, only if disturbed by PROJECT.
 11. CALTRANS independent of PROJECT costs, is responsible for any HM-1 found within existing CALTRANS Right-of-Way (ROW). CALTRANS will undertake HM-1 management activities with minimum impact to PROJECT schedule and will pay all costs associated with HM-1 management activities.
 12. CALTRANS has no responsibility for management activities or costs associated with HM-1 found outside the CALTRANS existing ROW. AGENCY, independent of PROJECT costs, is responsible for any HM-1 found within PROJECT limits outside existing CALTRANS ROW, and will pay, or cause to be paid, all costs associated with HM-1 management activities. AGENCY will undertake, or cause to be undertaken, HM-1 management activities with minimum impact to PROJECT schedule.
 13. If HM-2 is found within the limits of PROJECT, the AGENCY responsible for advertisement, award, and administration (AAA) of the PROJECT construction contract will be responsible for HM-2 management activities. Any management activity cost associated with HM-2 is a PROJECT construction cost.
 14. This AGREEMENT may only be amended or modified by mutual written agreement of the parties.
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SECTION II – GENERAL PROVISIONS.

1. TERMINATION

- A. This AGREEMENT may be terminated by PARTIES upon mutual written agreement. In the event of a termination CALTRANS will reimburse AGENCY all allowable, authorized, and non-cancelable obligations and prior costs incurred by AGENCY.
- B. CALTRANS reserves the right to terminate this agreement before the AGENCY awards the construction contract or begins to do project work. CALTRANS will reimburse AGENCY reasonable, allowable, authorized and non-cancelled costs up to the date of termination that are attributable to the PROJECT.
- C. This Agreement will terminate upon completion of PROJECT that all parties have met all scope, cost, and schedule commitments included in this agreement and have signed a closure statement, which is a document signed by the parties that verifies the completion of PROJECT, except for all indemnification, document retention, audit, claims, environmental commitment, legal challenge, hazardous material, operation, maintenance and ownership articles will remain in effect until terminated or modified in writing by mutual agreement.
- D. AGENCY has sixty (60) days after the effective date of AGREEMENT termination, or such other time agreed upon in writing by PARTIES, to submit invoices to CALTRANS to make final allowable payments for Project costs in accordance to the terms of this AGREEMENT. Failure to submit invoices within this period may result in a waiver by AGENCY of its right to reimbursement of expended costs.

2. BUDGET CONTINGENCY CLAUSE

All OBLIGATIONS of CALTRANS under the terms of this Agreement are subject to the appropriation of resources by the Legislature, the State Budget Act authority. It is mutually agreed that if the State Legislature does not appropriate sufficient funds for the program, this Agreement shall be amended if possible to reflect any reduction in funds, but nothing herein obligates parties to provide additional funding or proceed if sufficient funding is unavailable

3. ALLOWABLE COST, PAYMENTS AND INVOICING

- A. The method of payment for this Agreement will be based on actual allowable costs. CALTRANS will reimburse AGENCY for expended actual allowable direct costs and indirect costs, including, but not limited to labor costs, employee benefits, travel (overhead is reimbursable only if the Agency has an approved indirect costs allocation plan) and contracted consultant services costs incurred by AGENCY in performance of the PROJECT work, not to exceed the cost of the Contract Sum.
- B. Reimbursement of AGENCY expenditures will be authorized only for those allowable costs actually incurred by AGENCY in the performance of the PROJECT WORK. AGENCY must not only have incurred the expenditures on or after the Effective Date of this AGREEMENT and before the Termination Date, but must have also paid for those costs to claim any reimbursement.

- C. Travel, per diem, and third-party contract reimbursements are an OBLIGATIONS COST only after those hired by AGENCY to participate in OBLIGATIONS incur and pay those costs. Payments for travel and per diem will not exceed the rates paid rank and file state employees under current California Department of Human Resources rules current at the effective date of this Agreement.
- D. CALTRANS will reimburse AGENCY for all allowable PROJECT costs no more frequently and no later than monthly in arrears and as promptly as CALTRANS fiscal procedures permit upon receipt of itemized signed invoices. Invoices shall reference this AGREEMENT Number and shall be signed and submitted to the Contract Manager at the following address:

California Department of Transportation
Division of Environmental Analysis – Stormwater Program
Attention: Constantine Kontaxis, MS 27
P.O. Box 942874
CA, 94271-0001

- E. Invoices shall include the following information:

- 1) Invoice Cover Sheet The invoice cover sheet summarizes the previous, current and total amounts billed for the agreement. Details included on the cover sheet are:
 - a. Invoice Date
 - b. Contract Number
 - c. Invoice Number
 - d. Billing period (performance period), specified with beginning and ending dates. Best towards top of page.
 - e. Brief description of the work performed
 - f. Summary of total dollar amount billed to date
 - i. Previous month invoice balance
 - ii. Amount billed this month
 - iii. Total amount billed including current invoice amount
 - g. Total amount due
 - h. Summary of charges
 - i. Agency (city) Labor Costs
 - ii. Sub-Vendor Labor Costs (consultant)
 - iii. Sub-Vendor Direct Costs (materials, equipment, miscellaneous itemized costs)
 - iv. Other Direct Costs
 - i. Discounts (if applicable)
 - j. Remittance information including name and address
 - k. Agency Contract Manager's name, address and phone number
 - l. Agency Contract Manager's signature and signature block
 - m. Caltrans Contract Manager's name and address

n. Caltrans Contract Manager's signature block (optional)

2) Invoice and Supports

All invoice charges must match the rates on the contract cost proposal and personnel request. (Changes in billing rates must be approved BEFORE billing.) The Caltrans' Contract Manager needs an invoice with sufficient detail to verify the charges are allowable under the agreement with sufficient support to allow them to verify charges. Supporting documentation, such as receipts, is required for all costs included on the invoice that are not for hourly or sub-contract labor.

Agency labor charges need to show person's name, hours worked, billing rate and brief description of work performed. Supporting documents (timesheet or payroll report) need to be provided. These documents need to include:

- a. Name (first and last)
- b. Hours charged
- c. Brief description -- identify the work is for the project funded by the Cooperative Implementation Agreement
- d. Month, day and year of the charges
- e. Worker and supervisor's signatures (Exceptions can be made for electronic timesheets.) All overtime must be approved in advance by the Caltrans Contract Manager

Direct costs (such as material costs, vehicle rental) are reimbursable. These costs need to be verified, therefore, a copy of the receipt, paid purchase order or other documentation that shows the items and cost needs to be attached to the invoice.

Agency personnel travel costs may be reimbursed according to the Consultant and Contractor travel guidelines located on the Caltrans' website at: <http://www.dot.ca.gov/hq/asc/travel/ch12/1consultant.htm>. Attached is the Travel Expense Claim (TEC) form.

Subcontractor costs are reimbursed after providing a copy of the paid invoice. This invoice needs to show the AGENCY contract manager reviewed and approved the payment. Caltrans requires its vendors to submit proof of costs incurred, such as timesheet or payroll records, travel reimbursement form (that includes the reason and dates for travel) with receipts, receipts for materials, lab services or other items) and assumes the agency has similar requirements that are documented.

3) Progress Reports

Each invoice needs to be accompanied by a Progress Report for the billing period. This report includes:

- a. Work performed during the billing period (can be in a bullet format)

- b. Contract progress estimate -- percentage of work completed (not dollar based)
- c. Work anticipate during the next billing cycle (can be in a bullet format)
- d. Total amount spent during the billing period (agency personnel, agency direct costs, subcontractor costs and total)
- e. Total amount spent to date (agency, subcontractor, total)
- f. Percentage of Caltrans Interagency Agreement (CIA) funds used to date.
[Total (agency and subcontractor)/CIA not to exceed amount]

4. COST PRINCIPLES

- A. If PARTIES fund any part of OBLIGATIONS with state or federal funds, each PARTY will comply, and will ensure that any sub-recipient, contractor or subcontract hired to participate in OBLIGATIONS will comply with the federal cost principles of 2 CFR, Part 225, and administrative requirements outlined in 49 CFR, Part 18. These principles and requirements apply to all funding types included in this Agreement.
- B. Any Project costs for which AGENCY has received payment or credit that are determined by subsequent audit to be unallowable under 2 CFR, Part 200, and/or Part 48, Chapter 1, Part 31, are subject to repayment by AGENCY to CALTRANS. Should AGENCY fail to reimburse moneys due CALTRANS within thirty (30) days of discovery or demand, or within such other period as may be agreed in writing between the parties hereto, CALTRANS is authorized to intercept and withhold future payments due AGENCY from CALTRANS.
- C. PARTIES will maintain and make available to each other all PROJECT related documents, including financial data, during the term of this AGREEMENT. PARTIES will retain all PROJECT-related records for three (3) years after the final voucher.

5. MUTUAL INDEMNIFICATION

Neither CALTRANS nor any officer or employee thereof is responsible for any injury, damage, or liability occurring by reason of anything done or omitted to be done by AGENCY, its contractors, sub-contractors, and/or its agents under or in connection with any work, authority, or jurisdiction conferred upon AGENCY under this Agreement. It is understood and agreed that AGENCY, to the extent permitted by law, will defend, indemnify, and save harmless CALTRANS and all of its officers and employees from all claims, suits, or actions of every name, kind, and description brought forth under, but not limited to, tortious, contractual, inverse condemnation, or other theories and assertions of liability occurring by reason of anything done or omitted to be done by AGENCY, its contractors, sub-contractors, and/or its agents under this Agreement.

6. RETENTION OF RECORDS/AUDITS

- A. AGENCY, its contractors, subcontractors and sub-recipients shall establish and maintain an accounting system and records that properly accumulate and segregate incurred PROJECT costs. The accounting system of AGENCY, its contractors, all subcontractors, and sub-recipients shall conform to Generally Accepted Accounting Principles (GAAP), enable the determination of incurred costs at interim points of

completion, and provide support for reimbursement payment vouchers or invoices. All books, documents, papers, accounting records and other supporting papers and evidence of performance under this AGREEMENT of AGENCY, its contractors, subcontractors and sub-recipients connected with PROJECT performance under this AGREEMENT shall be maintained for a minimum of three (3) years from the date of final payment to AGENCY and shall be held open to inspection, copying, and audit by representatives of CALTRANS, the California State Auditor, and auditors representing the federal government during business hours with appropriate notice. Copies thereof will be furnished by AGENCY, its contractors, its subcontractors and sub-recipients upon receipt of any request made by CALTRANS or its agents. In conducting an audit of the costs and under this AGREEMENT, CALTRANS will rely to the maximum extent possible on any prior audit of AGENCY pursuant to the provisions of State and AGENCY law. In the absence of such an audit, any acceptable audit work performed by AGENCY's external and internal auditors may be relied upon and used by CALTRANS when planning and conducting additional audits.

- B. AGENCY, its sub-recipients, contractors, and subcontractors will permit access to all records of employment, employment advertisements, employment application forms, and other pertinent data and records by the State Fair Employment Practices and Housing Commission, or any other AGENCY of the State of California designated by CALTRANS, for the purpose of any investigation to ascertain compliance with this AGREEMENT.
- C. This AGREEMENT be subject to a pre-award audit prior to execution of the AGREEMENT to ensure AGENCY has an adequate financial management system in place to accumulate and segregate reasonable, allowable and allocable costs.
- D. CALTRANS, the state auditor, Federal Government, (if the PROJECT utilizes federal funds), will have access to all PROJECT-related records and any party hired by AGENCY to participate in PROJECT, for audit, examination, excerpt, or transcription.
- E. The examination of any records will take place in the offices and locations where said records are generated and/or stored and will be accomplished during reasonable hours of operation.
- F. Upon completion of the final audit, AGENCY has thirty (30) calendar days to refund or invoice as necessary in order to satisfy the obligation of the audit.

7. DISPUTES

- A. PARTIES will first attempt to resolve Agreement disputes at the PROJECT team level. If they cannot resolve the dispute themselves, the CALTRANS Chief Environmental Engineer and the executive officer of AGENCY will attempt to negotiate a resolution.
- B. If PARTIES do not reach a resolution, AGENCY's legal counsel will initiate mediation. PARTIES agree to participate in mediation in good faith and will share equally in its costs.

- C. Neither the dispute nor the mediation process relieves PARTIES from full and timely performance of OBLIGATIONS in accordance with the terms of this Agreement. However, if either PARTY stops fulfilling OBLIGATIONS, the other PARTY may seek equitable relief to ensure that OBLIGATIONS continue.
- D. Except for equitable relief, no PARTY may file a civil complaint until after mediation, or 45 calendar days after filing the written mediation request, whichever occurs first.
- E. PARTIES will file any civil complaints in the Superior Court of the county in which the CALTRANS district office signatory to this Agreement resides or in the Superior Court of the county in which the PROJECT is physically located. The prevailing PARTY will be entitled to an award of all costs, fees, and expenses, including reasonable attorney fees as a result of litigating a dispute under this Agreement or to enforce the provisions of this article including equitable relief.
- F. Additional Dispute Remedies. PARTIES maintain the ability to unanimously pursue alternative or additional dispute remedies if a previously selected remedy does not achieve resolution.

8. RELATIONSHIP OF PARTIES

It is expressly understood that this AGREEMENT is an agreement executed by and between two independent governmental entities and is not intended to, and shall not be construed to, create the relationship of agent, servant, employee, partnership, joint venture or association, or any other relationship whatsoever other than that of an independent party.

9. NOTIFICATION OF PARTIES

- A. AGENCY Project Manager name, title and phone number
- B. CALTRANS's Contract Manager name, title and phone number
- C. All notices herein provided to be given, or which may be given, by either party to the other, shall be deemed to have been fully given when made in writing and received by the parties at their respective addresses:

City of Carson
Maria Slaughter – Director of Public Works
701 E Carson St.
PO Box 6234
Carson, CA 90745

California Department of Transportation
043/Environmental
Attention: Constantine N. Kontaxis
1120 N. St. MS 27
Sacramento, CA 95814
Mail to: P.O. Box 942874, 92427

SECTION III - ATTACHMENTS

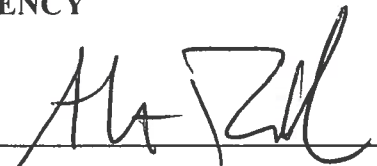
The following attachments are incorporated into and are made a part of this AGREEMENT by this reference and attachment.

- I. AGENCY Resolution, Certification of Approval, order, motion, ordinance or other similar document from the local governing body authorizing execution of the agreement
- II. Scope of Work, Description, Timeline, Location and Budget

SECTION IV- SIGNATURES

Signatories may execute this AGREEMENT through individual signature pages provided that each signature is an original. This AGREEMENT is not fully executed until all original signatures are attached. PARTIES are empowered by California Streets and Highways Code (SHC) sections 114 and 130 to enter into this AGREEMENT and have delegated to the undersigned the authority to execute this AGREEMENT on behalf of the respective agencies and covenant to have followed all the necessary legal requirements to validly execute this AGREEMENT.

AGENCY

By: 

Albert Robles, Chairman

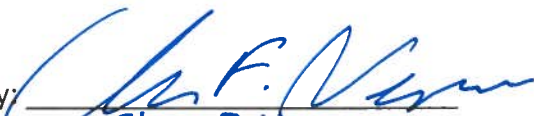
ATTEST:

By: 

Donesia L. Gause, CMC
Agency Secretary

APPROVED AS TO FORM:

Aelshire & Wynder, LLP

By: 
for Chris F. Neumeier
Sunny K. Soltani, Agency Counsel
(Asst Agency Counsel)

DEPARTMENT TRANSPORTATION

Signature 

Date 6-20-16

Print Name Constantine W. Kortzik Title Worshiped Manager

ATTACHMENT II – SCOPE SUMMARY

Carson Water Capture Project

Description and Scope of Work

The City of Carson is now a member of the Dominguez Channel Watershed Management Area Group. An Addendum to Enhanced Watershed Management Program for the Dominguez Channel Watershed Management Area Group to incorporate Carson was approved by the Los Angeles Regional Water Quality Control Board (Los Angeles Regional Water Board, or Regional Board) on April 21, 2016. This Addendum includes the portions of Carson that discharge directly to Machado Lake (560.8 acres) and indirectly to Machado Lake through the Wilmington Drain (657.7 acres). The Basin Plan defines the beneficial use of Machado Lake as Warm Freshwater Habitat (WARM), Wildlife Habitat (WILD), Wetlands Habitat (WET), Water Contact Recreation (REC1), and Non-Contact Water Recreation (REC2). Beneficial uses for Wilmington Drain are not specifically defined in the Basin Plan. However, based on the tributary rule, they are assumed to be the same as Machado Lake. Three TMDLs have been adopted for Machado Lake: a Trash TMDL, a Nutrient TMDL, and a Pesticides and PCBs TMDL. The City of Carson is subject to all three TMDLs. The Reasonable Assurance Analysis (RAA) prepared for the Enhanced Watershed Management Program for the Dominguez Channel Watershed Management Area Group, which includes the Machado Lake Watershed, indicates that the limiting pollutant for the Wilmington Drain is nutrients.

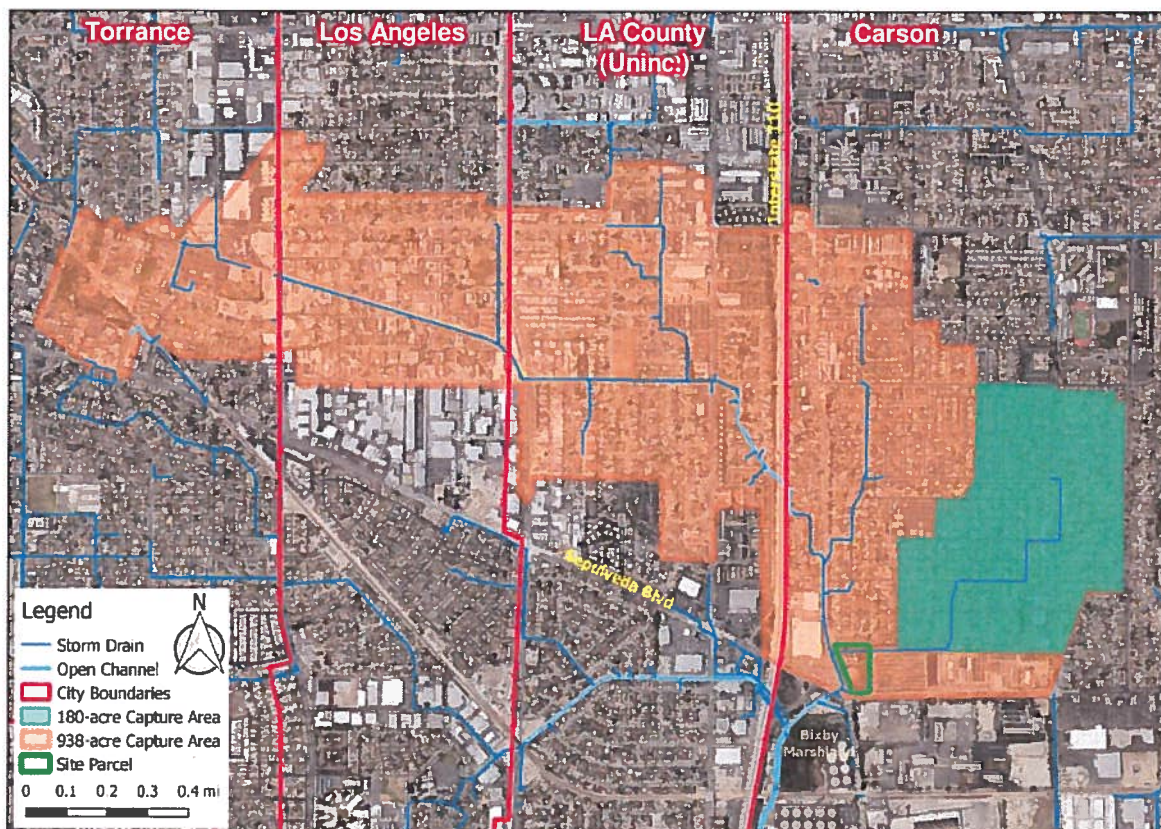
The Watershed Management Area Group has decided to address water quality impairments through a combination of institutional BMPs, low impact development, green streets, and regional BMPs. One of the regional BMPs in the Addendum to Enhanced Watershed Program for the Dominguez Channel Watershed Management Area Group that incorporated Carson is Carriage Crest Park. It was identified as a high priority site for a regional stormwater capture project due to its proximity to two large storm drains with a total drainage area of 1,118 acres. This area discharges to Machado Lake via the Wilmington Drain. The original concept for this project was to capture all dry-weather runoff and the 85th percentile, 24-hour runoff event from a 180-acre drainage area entirely within the City of Carson, as well as all dry-weather flows from a 938-acre drainage area that includes acreage in the City of Carson, the City of Los Angeles, the City of Torrance, and unincorporated Los Angeles County. This concept would require two separate diversion structures. An alternative design that would use a single diversion structure that would capture discharges from both the 180-acre and the 938-acre drainage areas, and maximize the total runoff captured from the combined drainage area, has been proposed and discussed with Regional Water Board staff.

The original concept for this project was to capture water in an off-line cistern below the ball field at Carriage Crest Park and to infiltrate the captured water into a perched aquifer. Preliminary investigation indicated that infiltration may not be a viable option. An alternative and preferable plan is now under development. Rather than attempting to infiltrate the captured water, the water will either be treated for irrigation uses on the park or be transferred to the nearby Joint Water Pollution Control Plant (JWPCP) where it would receive primary and secondary treatment and be available for a proposed advanced treatment facility to be operated by the Metropolitan Water District. The water produced by the Metropolitan Water District would augment drinking water supplies through recharge of groundwater basins in Los Angeles and Orange Counties.

The Carriage Crest project will initially involve an evaluation of how to best achieve the objective of capturing the most runoff using the space and budget available. A cost-benefit analysis of treating the water on-site versus sending the water to the JWPCP will be performed.

The Carriage Crest Park site (see Figure 1) would capture discharges from approximately 1,118 acres of the Wilmington Drain subwatershed of the Machado Lake Watershed. A water capture facility at this site could greatly assist Caltrans and the municipalities to come into compliance with the applicable TMDLs by reducing the transport of pollutants downstream to Machado Lake. A water capture facility at this site with a capacity of 11-13 acre-feet would capture wet-weather discharges equivalent to a site of approximately 232-275 acres.

Figure 1. Carriage Crest Project Capture Area



Site Information

Land Owner	City of Carson
Street Address	23800 Figueroa St, Carson, CA 90745
Latitude/Longitude	33° 48' 32.2" N / 118° 17' 5.1" W
Assessor's Identification Number (AIN)	7330007905
Watershed Management Area	Dominguez Channel Watershed
Receiving Water	Wilmington Drain/Machado Lake

The project involves initial engineering and geotechnical assessments, detailed design, environmental compliance, permitting, construction of a diversion structure and piping, construction of a pre-treatment facility, excavation and construction of a high void underground storage/infiltration

chamber, disposal of excavated soil, and reconstruction of disturbed portions of the site. In addition, the project includes development and approval of a Memorandum of Understanding for the long-term management, operation, and maintenance of the constructed water capture facility.

The City of Carson will enter into a Cooperative Implementation Agreement with Caltrans and Carson will enter into an agreement with the Los Angeles County Sanitation Districts (LACSD) to manage the project, conduct engineering and geotechnical investigations, and assist with environmental clearance, permitting, design, and construction management. City staff assigned to manage the project will charge hours to the project in accordance with the Caltrans requirements under this agreement.

Cost Estimate

A planning-level cost estimate is presented for a water capture facility serving the portion of the Wilmington Drain subwatershed that is tributary to Carriage Crest Park. During the preliminary concept phase, it is difficult to produce a precise cost estimate because the specific details pertaining to the project have not been determined; therefore, the costs are presented as preliminary estimates. The cost estimates consider the costs associated with planning, design, permits, an environmental assessment, construction, construction administration, contingency, and mobilization. Land acquisition costs may be of importance for other projects, but are not considered in the cost estimates presented because the site is on publically controlled land. The following generally accepted costs were used for cost estimates presented:

- Project Management – 5.5% of construction cost
- Preliminary Engineering Study – 7.5% of construction cost
- Environmental Documents – 2% of construction cost
- Plans, Specifications, & Estimate– 10% of construction cost
- Permitting – 2.5% of construction cost
- Construction Administration and Inspection – 6% of construction cost
- Contingency – 15% of construction cost

The cost estimate will be subject to adjustment as more information becomes available during the course of the preliminary design report and additional project concept details are developed.

Preliminary Budget

These preliminary costs will be adjusted after the Project Approval & Environmental Documents and additional project concept details are developed.

• Project Management	\$478,000
• Preliminary Engineering Study	\$652,000
• Environmental Documents	\$174,000
• Plans, Specifications, & Estimate	\$869,000
• Permitting	\$217,000
• Construction Administration	\$521,000
• Construction	\$8,691,000
• Contingency	<u>\$1,304,000</u>
	\$12,906,000

The construction costs are based on the following cost estimates for the major construction components:

Mobilization/Demobilization	\$253,000
Diversion and Pretreatment	\$444,000
Pump Station and Conveyance	\$1,181,000
Storage/Infiltration Chamber	\$5,812,000
Electrical Service, Controls, Instrumentation	\$258,000
Athletic Field Restoration	\$223,000
Water Treatment System	<u>\$520,000</u>
	\$8,691,000

Preliminary Timeline

These dates are subject to refinement as the project gets underway. The complete construction dates will be dependent on receipt of the balance of the project funding from Caltrans.

Approve Agreement with LACSD	08/02/16
Prepare Preliminary Engineering Design Report (10%)	09/01/16 – 12/01/16
Commence CEQA Process	11/07/16
Council Approval for Preparation of the Construction Drawings	12/06/16
Construction Drawings – 30% Milestone	02/09/17
Construction Drawings – 60% Milestone	04/13/17
Complete CEQA Process	05/15/17
Construction Drawings – 90% Milestone	06/15/17
Construction Drawings – 100% Complete	07/13/17
Advertise for Bids	07/19/17
Award Construction Contract	09/19/17
Commence Construction (22 months)	10/19/17
*Deadline to Bill Caltrans for FY15-16 Funding Allocation	04/30/18
*Deadline to Bill Caltrans for FY16-17 funding allocation	04/30/19
Complete Construction	08/30/19
*Deadline to Bill Caltrans for FY17-18 funding allocation	04/30/20

**City may request adjustments to the schedule line items except for the deadlines to expend Caltrans funding allocations.*