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Historical Resources Inventory Report for the

Municipal Waterways Maintenance Plan City of San Diego San Diego County, California PTS #616992

Prepared for:



Transportation & Storm Water Department Storm Water Division – Operations & Maintenance Section

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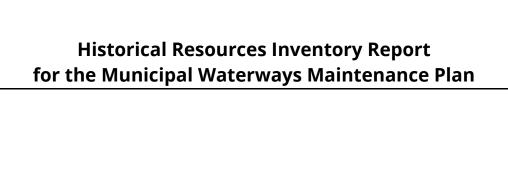
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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
APE	area of potential effect
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
City	City of San Diego
CM	Construction Manager
CRHR	California Register of Historical Resources
DPR	California Department of Parks and Recreation
EIR	Environmental Impact Report
FMP	Facility Maintenance Plan
HRG	Historical Resources Guidelines
MMP	Master Storm Water System Maintenance Program
MWMP	Municipal Waterways Maintenance Plan
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
PA	Programmatic Agreement
PI	Principal Investigator
RE	resident engineer
SHPO	State Historic Preservation Officer



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MANAGEMENT SUMMARY

The City of San Diego (City) Transportation & Storm Water Department is preparing an Environmental Impact Report (EIR) to address the potential significant environmental effects resulting from the implementation of the proposed *Municipal Waterways Maintenance Plan* (MWMP). The proposed MWMP is intended to establish an effective and streamlined program that allows for waterway facilities to be maintained, thus reducing flood risk while minimizing impacts and potential adverse effects of maintenance. The City contracted Dudek to initiate the processing of an EIR. As a requirement of the EIR, this historic resources inventory was conducted for the MWMP's area of potential effect (APE), which includes a 100-foot buffer around all potential MWMP project facilities, staging areas, and access (69 facility groups). The archaeological resources are addressed in the companion report prepared by Dudek's cultural resources staff, *Cultural Resources Inventory Report for the Municipal Waterways Maintenance Plan, City of San Diego, San Diego County, California* (DeCarlo et al. 2019).

Maintenance of the waterway facilities was governed by the Master Storm Water System Maintenance Program (MMP). In 2013, the City developed the MMP to govern channel operation and maintenance activities. Since the MMP was last updated, the *Madera Oversight Coalition vs. County of Madera* court ruling determined that, under the California Environmental Quality Act (CEQA), identification of potential historical resources and evaluation of their significance cannot be deferred. To comply with these new regulations, Dudek has updated the MMP's technical report. The MWMP and this Historical Resources Inventory Report (report) replace the MMP and its governing historic property analysis, respectively.

This inventory included a records search of data obtained from the South Coastal Information Center at San Diego State University. The records search found that 1,179 studies have been previously conducted within 0.25 miles of the MWMP APE. Of these, 314 studies inventoried portions of the MWMP APE. These previous studies have identified 347 cultural resources within 0.25 miles of the MWMP APE. Of these, 24 archaeological resources and 7 historic-era addresses fall within the APE.

Depending on the type of resource and the invasiveness of the maintenance activity, many facilities can undergo specific maintenance activities without risk of impact to historic properties. Dudek has developed an inventory of all resources more than 45 years old within the APE and the types of maintenance activities proposed for specific infrastructure. Based on this information, a qualified architectural historian who meets the Secretary of the Interior's Professional Qualification Standards for architectural history assessed the potential of each proposed maintenance activity to adversely affect historical resources under CEQA or historic properties under Section 106 of the National Historic Preservation Act. Dudek used the results of this inventory to design a MWMP Facility Maintenance Plan and review matrix that identifies which facilities and maintenance activities do not require further historic property review (see Table 2, Historical Resources Review Matrix, in Chapter

5 of this report). The historical resources review matrix would help to streamline the City's historic property review process for all facilities discussed in this report. The review matrix eliminates much of the historic property review required for routine maintenance of facilities.

1 PROJECT DESCRIPTION AND LOCATION

The City of San Diego (City) Transportation & Storm Water Department is preparing an Environmental Impact Report (EIR) to address the potential significant environmental effects resulting from the implementation of the proposed *Municipal Waterways Maintenance Plan* (MWMP). The proposed MWMP is intended to establish an effective and streamlined program that allows for waterway facilities (channels/ditches, basins, and structures) to be maintained, thus reducing flood risk, while minimizing impacts and potential adverse effects of maintenance. The MWMP outlines specific activities, maintenance methods, and procedures to guide future maintenance and repair activities.

The City contracted Dudek to initiate the processing of an EIR. As a requirement of the EIR, this historical resources inventory was conducted for the area of potential effect (APE) for facilities identified as potentially requiring project-level maintenance (i.e., facility selection list). This report describes the results of that inventory and analyzes the proposed MWMP maintenance activities to determine their potential to impact historic properties. The potential for impact would determine the level of further historic property review necessary before conducting future maintenance activities. In accordance with the City's Historical Resources Guidelines (City of San Diego 2001), separate technical reports are required for cultural and historic resources.

Because the U.S. Army Corps of Engineers is expected to require that the City obtain authorization for most MWMP proposed activities under Section 404 of the federal Clean Water Act, the U.S. Army Corps of Engineers may be required to consult with the State Historic Preservation Office (SHPO) in accordance with federal environmental laws and regulations. As such, MWMP-related activities with the potential to affect historic properties may be subject to compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and its implementing regulations (36 CFR Part 800). Therefore, this report considers whether MWMP-related activities would result in a significant impact to a historical resource under CEQA or an adverse effect to a historic property under Section 106 of the NHPA.

Maintenance of the waterway facilities was governed by the Master Storm Water System Maintenance Program (MMP). In 2013, the City developed the MMP to govern channel operation and maintenance activities in an efficient, economic, and environmentally and aesthetically acceptable manner to provide flood control for the protection of life and property. The cultural resources report for the MMP (Affinis 2011) identifies a specific planning, impact assessment, and mitigation process for channel maintenance activities within portions of the jurisdiction of the City. Since the Affinis report was last updated, the *Madera Oversight Coalition vs. County of Madera* court ruling determined that, under CEQA, identification of potential historical resources and evaluation of their significance cannot be deferred. To comply with these new regulations, Dudek updated the technical report to

include a screening matrix to identify maintenance activities that have the potential to cause impacts to historic properties and that would require additional identification, evaluation, and potential treatment measures. The MWMP matrix also identifies those activities that would not require additional historical review. Archaeological resources are addressed in the companion report prepared by Dudek, *Cultural Resources Inventory/Evaluation Report for the Municipal Waterways Maintenance Plan, City of San Diego, San Diego County, California* (DeCarlo et al. 2019). The MWMP and the aforementioned cultural resources report prepared by Dudek and this Historical Resources Inventory Report replace the MMP and its governing Archaeological Resources Analysis (Affinis 2011), respectively.

The City's municipal storm water system is distributed throughout the 342-square-mile metropolitan area (Figure 1, Overview, and Figures 1-1 through 1-12, Location Map, provided at the end of this report). The system conveys storm water runoff from natural and developed areas to receiving waters. Major drainage systems include (from north to south) Peñasquitos Creek, Rose Creek, San Diego River, Alvarado Creek, Chollas Creek, Otay River, Nestor Creek, and Tijuana River. The City's jurisdiction spans eight watersheds: San Dieguito River, Los Peñasquitos, Mission Bay, San Diego River, Pueblo San Diego, Sweetwater, Otay and Tijuana River. The MWMP APE is located in the following California U.S. Geological Survey 7.5-minute topographic quadrangles: Del Mar, Escondido, Imperial Beach, La Jolla, La Mesa, National City, Otay Mesa, Point Loma, and Poway.

Maintenance and repairs are an important component of operating the storm water conveyance system and providing reliable flood risk reduction throughout the City. Many storm water facilities were originally designed to require ongoing maintenance and repair. For example, concrete-lined trapezoidal channels are often designed to convey the 100-year storm event. However, if sediment accumulates in the channels and vegetation establishes within the sediment, the conveyance capacity is often reduced, and adjacent developed properties are at greater risk of flooding. In other cases, storm water facilities damaged during large storm events require repair (e.g., replacement of broken concrete lining or dislodged riprap) to continue to provide safe storm water conveyance according to the original facility design. Finally, there are areas of the City where development or conditions have changed within the watershed, resulting in greater or faster storm water flows than predicted during the facility's design, or the original design does not meet current standards. In these cases, a Capital Improvement Program project is often needed to address the potential flood risk that exists or erosion potential due to a design that no longer meets the needs of the surrounding area; however, maintenance (removal of accumulated vegetation and sediment) may help alleviate the flood risk on an interim basis until a capital project is designed and constructed.

The following are the primary objectives of the MWMP:

- Public safety and flood risk reduction
 - o Protect life and property adjacent to, downstream, and upstream of affected channels from flooding and environmental degradation.
- Responsiveness to reduce flood risk
 - Provide for timely and consistent routine operations and maintenance in the affected channels and associated storm water conveyance infrastructure.
- Avoid, minimize, and/or mitigate potential effects to environmental resources
 - Avoid, minimize, and/or mitigate significant adverse environmental effects resulting from routine maintenance of storm water facilities.
 - o Incorporate and adapt to water quality management strategies intended to protect water quality and address flooding impacts.
- Proactive and timely approval process
 - Provide project-level analysis upfront to expedite subsequent authorizations for routine and preventive maintenance activities within storm water facilities.
 - o Identify a review-and-approval process to include additional storm water facilities and maintenance activities that follow the protocols and requirements of the MWMP.
- Reduce the need to conduct emergency maintenance during significant storm events by implementing preventive maintenance activities

The objectives of the MWMP require the ability of the City's Transportation & Storm Water Department to be responsive to newly identified flood risks while also streamlining approvals for routine preventive maintenance that reduces flood risks. To accomplish this, the MWMP identifies the following:

- A range of plan-wide activities that may occur throughout the storm water system where flood risks may arise and that would be conducted in accordance with a regulatory framework identified under the MWMP and associated permits.
- 2. A list of Facility Maintenance Plans (FMPs) that provide specific details and requirements for the majority of facilities that are likely to require routine maintenance and repair.

Together, these two components provide operational flexibility while also providing specific detailed analysis for the majority of anticipated maintenance and repair activities to streamline the review and approval process.

This technical report was drafted to evaluate potential historic properties at each of the 69 facility groups identified in the MWMP facility evaluation list. Of those facility groups, the MWMP proposes FMPs for 66 facility groups. This technical report provides a project-level analysis for those proposed FMPs. The conclusions of this project-level analysis may be used to analyze additional, similar or related activities identified for a program-level analysis in the MWMP; however, such program-level analysis is not included in this technical report.

Figure 1 and Figures 1-1 through 1-12 illustrate two groups of facilities: those on the facility evaluation list and additional facilities within the storm water conveyance system, as follows:

- 1. Facility Evaluation List. These are facilities where routine maintenance is most likely to be needed (potential MWMP project facilities). All of these facilities were evaluated to determine if an FMP would be proposed under the MWMP. The historical APE encompasses all of these facilities plus associated staging, access, loading, and stockpiling areas. These facilities are represented in Figures 1-1 through 1-12 as follows:
 - a. Project FMPs (identified in yellow)
 - b. Project Facilities Evaluated (No FMP Proposed) (identified in blue with black outline)
- 2. Additional Facilities Subject to Limited Program-Level_Activities. These are additional facilities monitored annually that are the most likely locations where additional programmatic activities may occur. These facilities are identified in blue in Figures 1-1 through 1-12. These facilities are not analyzed in this technical report, but the conclusions of this report may be used to develop a program-level analysis for similar or related activities.

In addition to the footprint of the potential MWMP project facilities, work staging areas and crew access routes were also inventoried. To ensure that all potentially impacted historic properties are identified, the current APE includes a 100-foot-wide buffer around all potential project facilities, staging areas, and access routes (see Figures 2-A through 2-C, APE Map Overview, and Figures 2-1 through 2-68, APE Maps, provided at the end of this report). Large portions of the APE are located within highly developed areas, and access to the entirety of the linear facilities was not possible. Site visits were not conducted for this analysis, but are recommended for facilities built prior to 1973 that would be subject to potential historic property impacts.

This report documents the results of the MWMP historical resources inventory, including a records search and historical research. The goal of this inventory is to provide data to the City to aid in the development of the MWMP and determine which MWMP project facilities and maintenance activities require further historic property review.

1.1 REGULATORY CONTEXT

The proposed MWMP is subject to federal, state, and local regulations regarding cultural resources. This section provides a summary of the applicable regulations, policies, and guidelines relating to the proper management of cultural resources for the MWMP.

1.1.1 FEDERAL

36 CFR 800 and Section 106 of the National Historic Preservation Act

The National Historic Preservation Act (NHPA) established the National Register of Historic Places (NRHP) and the President's Advisory Council on Historic Preservation, and provided that states may establish State Historic Preservation Offices (SHPOs) to carry out some of the functions of the NHPA. Most significantly for federal agencies responsible for managing cultural resources, Section 106 of the NHPA directs that "the head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the NRHP" (16 USC 470f). Section 106 also affords the President's Advisory Council on Historic Preservation a reasonable opportunity to comment on the undertaking (16 USC 470f).

Title 36 of the Code of Federal Regulations (CFR), Part 800, implements Section 106 of the NHPA. It defines the steps necessary to identify historic properties (those cultural resources listed in or eligible for listing in the NRHP), including consultation with federally recognized Native American tribes to identify resources with important cultural values; to determine whether they may be adversely affected by a proposed undertaking; and to outline the process for eliminating, reducing, or mitigating the adverse effects.

The content of Title 36 CFR, Part 60.4, defines criteria for determining eligibility for listing in the NRHP. The significance of cultural resources identified during an inventory must be formally evaluated for historical significance in consultation with the California SHPO to determine whether the resources are eligible for inclusion in the NRHP. Cultural resources may be considered eligible for listing if they possess integrity of location, design, setting, materials, workmanship, feeling, and association.

Regarding the eligibility criteria of Section 106, the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, cultural resources,

buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that (36 CFR 60.4):

- A. Are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. Are associated with the lives of persons significant in our past; or
- C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. Have yielded or may be likely to yield, information important in prehistory or history.

The President's Advisory Council on Historic Preservation provides methodological and conceptual guidance for identifying historic properties. In Title 36 CFR Part 800.4, the steps necessary for identifying historic properties include:

- Determine and document the APE (36 CFR 800.16(d)).
- Review existing information on historic properties within the APE, including preliminary data.
- Confer with consulting parties to obtain additional information on historic properties or concerns about effects to these.
- Consult with Native American tribes (36 CFR 800.3(f)) to obtain knowledge on resources that are identified with places to which they attach cultural or religious significance.
- Conduct appropriate fieldwork (including phased identification and evaluation).
- Apply NRHP criteria to determine a resource's eligibility for NRHP listing.

Fulfilling these steps is generally thought to constitute a reasonable effort to identify historic properties within the APE for an undertaking. The obligations of a federal agency must also assess whether an undertaking will have an adverse effect on cultural resources. An undertaking will have an adverse effect when (36 CFR Part 800.5(1)):

An undertaking may alter, directly or indirectly, any of the characteristics of an historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of an historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the

National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

The process of determining whether an undertaking may have an adverse effect requires the federal agency to confer with consulting parties to appropriately consider all relevant stakeholder concerns and values. Consultation regarding the treatment of a historic property may result in a Programmatic Agreement and/or Memorandum of Agreement between consulting parties that typically include the lead federal agency, SHPO, and Native American tribes if they agree to be signatories to these documents. Treatment documents—whether resource-specific or generalized—provide guidance for resolving potential or realized adverse effects to known historic properties or to those that may be discovered during implementation of the undertaking. In all cases, avoidance of adverse effects to historic properties is the preferred treatment measure and it is generally the burden of the federal agency to demonstrate why avoidance may not be feasible. Avoidance of adverse effects may not be feasible if it would compromise the objectives of an undertaking that can be reasonably said to have public benefit. Other non-archaeological considerations about the benefit of an undertaking may also apply, resulting in the determination that avoidance is not feasible. In general, avoidance of adverse effects is most difficult when a permitted undertaking is being implemented, such as identification of an NRHP-eligible archaeological resource during earthmoving activities.

Because the U.S. Army Corps of Engineers is expected to require that the City obtain authorization for most MWMP proposed activities under Section 404 of the federal Clean Water Act, the U.S. Army Corps of Engineers may be required to consult with the SHPO in accordance with federal environmental laws and regulations. As such, MWMP-related activities with the potential to affect historic properties may be subject to compliance with Section 106 of the NHPA of 1966, as amended, and its implementing regulations (36 CFR Part 800).

National Register of Historic Places

The NRHP is the nation's master inventory of known historic resources and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level. As described in *National Register Bulletin* 15, How to Apply the National Register Criteria for Evaluation, a property must have both historical significance and integrity to be eligible for listing in the NRHP. The NRHP identifies four criteria for evaluating historical significance. A property must be significant under at least one of these criteria at the national, state, or local level:

• The property is associated with events that have made a significant contribution to the broad patterns of our history.

- The property is associated with the lives of persons significant to our past.
- The property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possess high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- The property has yielded, or is likely to yield, information important to prehistory or history.

In addition to meeting at least one of these four criteria, listed properties must also retain sufficient physical integrity of those features necessary to convey historic significance. The NRHP has identified the following seven aspects of integrity: (1) location, (2) design, (3) setting, (4) materials, (5) workmanship, (6) feeling, and (7) association.

Properties are nominated to the NRHP by the SHPO of the state in which the property is located by the Federal Historic Preservation Officer for properties under federal ownership or control, or by the Tribal Historic Preservation Officer if on tribal lands. Listing in the NRHP provides formal recognition of a property's historic, architectural, or archaeological significance based on national standards used by every state. Once a property is listed in the NRHP, it becomes searchable in the NRHP database. Documentation of a property's historic significance helps encourage preservation of the resource.

1.1.2 **STATE**

California Register of Historical Resources

In California, the term "cultural resource" includes, but is not limited to, "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (PRC Section 5020.1(j)). In 1992, the California legislature established the California Register of Historical Resources (CRHR) "to be used by state and local agencies, private groups, and citizens to identify the state's cultural resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1(a)). A resource is eligible for listing in the CRHR if the State Cultural Resources Commission determines that it is a significant resource and that it meets any of the following NRHP criteria (PRC Section 5024.1(c)):

- 1. Associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- 2. Associated with the lives of persons important in our past.

- 3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- 4. Has yielded, or may be likely to yield, information important in prehistory or history.

Resources less than 50 years old generally are not considered for listing in the CRHR, but may be considered if it can be demonstrated that sufficient time has passed to understand the historical importance of the resource (14 CCR 4852(d)(2)).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing on the NRHP are automatically listed on the CRHR, as are state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local cultural resource surveys. The SHPO maintains the CRHR.

California Environmental Quality Act

As described further below, the following CEQA statutes and CEQA Guidelines are relevant to the analysis of archaeological and historic resources:

- 1. California Public Resources Code Section 21083.2(g) defines "unique archaeological resource."
- 2. California Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5(a) define cultural resources. In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change" in the significance of a cultural resource. It also defines the circumstances when a project would materially impair the significance of a cultural resource.
- 3. California Public Resources Code Section 21074 (a) defines "tribal cultural resources" and Section 21074(b) defines a "cultural landscape."
- 4. California Public Resources Code Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- 5. California Public Resources Code Sections 21083.2(b)–(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including options of preservation-in-place mitigation measures, and

identify preservation in place as the preferred manner of mitigating impacts to significant archaeological sites.

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (PRC Section 21084.1; 14 CCR 15064.5(b)). If a site is either listed or eligible for listing in the CRHR, if it is included in a local register of historic resources, or if it is identified as significant in a historical resources survey (meeting the requirements of PRC Section 5024.1(q)), it is a historical resource and is presumed to be historically or culturally significant for the purposes of CEQA (PRC Section 21084.1; 14 CCR 15064.5(a)). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (PRC Section 21084.1; 14 CCR 15064.5(a)).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (14 CCR 15064.5(b)(1); PRC Section 5020.1(q)). In turn, according to the CEQA Guidelines Section 15064.5(b)(2), the significance of a historical resource is materially impaired when a project:

- (1) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
- (2) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- (3) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any historical resources, then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require that reasonable efforts be made to permit any or all of these resources to

be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2(a)–(c)).

California Public Resources Code Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts to non-unique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2(a); 14 CCR15064.5(c)(4)). However, if a non-unique archaeological resource qualifies as tribal cultural resource (PRC 21074(c), 21083.2(h)), further consideration of significant impacts is required.

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed in California Public Resources Code Section 5097.98.

1.1.3 LOCAL

City of San Diego Historical Resources Regulations

The purpose and intent of the Historical Resources Regulations of the City's Land Development Code (Chapter 14, Article 3, Division 2) is to protect, preserve, and, where damaged, restore San Diego's historical resources. The regulations apply to all proposed development within the City of San Diego when historical resources are present on the premises, regardless of the requirement to obtain a Neighborhood Development Permit or Site Development Permit. When any portion of a site contains historical resources, as defined in Land Development Code Chapter 11, Article 3, Division 1, the regulations apply to the entire site, and any proposed activities that could adversely affect a designated resource requires review by qualified staff for conformance with the City's Historical Resources Regulations and the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties.

City of San Diego Historical Resources Board

The City's Historical Resources Board was established by the City Council as an advisory board to identify, designate, and preserve the City's historical resources; to review and make a recommendation to the appropriate decision-making authority on applications for permits and other matters relating to the demolition, destruction, substantial alteration, removal, or relocation of designated historical resources; to establish criteria and provide for a historical resources inventory of properties within City boundaries; and to recommend procedures to the City Council and Planning Commission to facilitate the use of the historical resources inventory results in the City's planning process, in accordance with Section 111.0206 of the Land Development Code.

City of San Diego Historical Resources Board Designation Criteria

The Historical Resources Guidelines of the City of San Diego's Land Development Manual identifies the criteria under which a resource may be historically designated. It states that any improvement, building, structure, sign, interior element and fixture, site, place, district, area, or object may be designated a historical resource by the City of San Diego Historical Resources Board if it meets one or more of the following designation criteria (City of San Diego 2001):

- 1. Exemplifies or reflects special elements of the City's, a community's, or a neighborhood's historical, archaeological, cultural, social, economic, political, aesthetic, engineering, landscaping or architectural development;
- 2. Is identified with persons or events significant in local, state or national history;
- 3. Embodies distinctive characteristics of a style, type, period or method of construction or is a valuable example of the use of indigenous materials or craftsmanship;
- 4. Is representative of the notable work of a master builder, designer, architect, engineer, landscape architect, interior designer, artist or craftsman;

Is listed or has been determined eligible by National Park Service for listing on the National Register of Historic Places or is listed or has been determined eligible by the State Historical Preservation Office for listing on the State Register of Historical Resources; or

5. Is a finite group of resources related to one another in a clearly distinguishable way or is a geographically definable area or neighborhood containing improvements which have a special character, historical interest or aesthetic value or which represent one or more architectural periods or styles in the history and development of the City.

City of San Diego General Plan

The Historic Preservation Element of the City's General Plan was adopted in 2008 and amended in 2015. The relevant goals of the Historic Preservation Element are as follows (City of San Diego 2015):

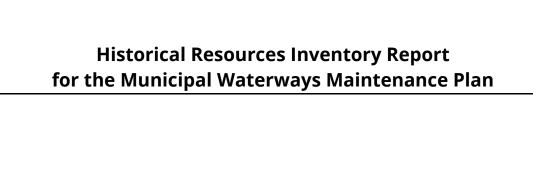
- A.1 Strengthen historic preservation planning.
- A.2 Fully integrate the consideration of historical and cultural resources in the larger land use planning process.
- A.3 Foster government-to-government relationships with the Kumeyaay/Diegueño tribes of San Diego.
- A.4 Actively pursue a program to identify, document and evaluate the historical and cultural resources in the City of San Diego.
- A.5 Designate and preserve significant historical and cultural resources for current and future generations.

1.2 PROJECT PERSONNEL

Senior historic preservation specialist and architectural historian Kara R. Dotter, MSHP, conducted archival research and analysis and authored this Historical Resources Inventory Report. Senior architectural historian Samantha Murray, MA, reviewed the report for quality assurance/quality control.

1.3 REPORT STRUCTURE

Following this introduction, an environmental and historic context is provided for characterizing historic properties (Chapter 2, Setting). Next, inventory methods are reviewed (Chapter 3, Methods). A description of the records search and site visit results follow, including descriptions of facility-adjacent historic properties (Chapter 4, Results). Chapter 5, Historic Property Review Exemptions, discusses the potential impacts that would result from different maintenance activities across all of the facilities identified in the MWMP; findings for potential project facilities are presented in the historical resources review matrix in Chapter 5. Recommendations and management considerations follow in Chapter 6. References cited in this report are provided in Chapter 7. The appendices consist of Appendix A, Project Personnel Qualifications, and Appendix B, Historic Properties in APE Location Maps.



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2 SETTING

2.1 NATURAL SETTING

MWMP facilities are located throughout the City of San Diego. The MWMP APE extends from its southwestern boundary in the Tijuana River Valley to its northeastern boundary in Rancho Bernardo. The elevation of the MWMP program area ranges from approximately 40 feet above mean sea level at facilities on the La Jolla shoreline to 500 feet above mean sea level at channels near the base of Cowles Mountain. Each of the waterway channels and drain structures are associated with larger watersheds, including the Mission Bay Watershed, Otay Watershed, Peñasquitos Watershed, Pueblo San Diego Watershed, San Diego River Watershed, Sweetwater Watershed, and Tijuana Watershed. The MWMP facilities are located in or immediately adjacent to developed urban areas.

For detailed discussion relating to the environmental context of this area, please consult the biological, geological, and other technical studies prepared for the MWMP.

2.2 CULTURAL SETTING

Evidence for continuous human occupation in the San Diego region spans the last 10,000 years. Various attempts to parse out variability in archaeological assemblages over this broad time frame have led to the development of several cultural chronologies; most are based on temporal trends in archaeological assemblages, some are based on geologic time, and others are interpretive reconstructions. Each of these reconstructions describes essentially similar trends in assemblage composition in more or less detail. This research employs a common set of generalized terms used to describe chronological trends in assemblage composition: Paleoindian (pre-5500 BC), Archaic (8000 BC-AD 500), Late Prehistoric (AD 500–1769), and Ethnohistoric (post-AD 1769).

2.2.1 PALEOINDIAN (PRE-5500 BC)

Evidence for Paleoindian occupation in coastal Southern California is tenuous, especially considering the fact that the oldest dated archaeological assemblages look nothing like the Paleoindian artifacts from the Great Basin. One of the earliest dated archaeological assemblages in coastal Southern California (excluding the Channel Islands) derives from SDI-4669/W-12, in La Jolla. A human burial from SDI-4669 was radiocarbon dated to 9,590–9,920 years before present (approximately 95% probability) (Hector 2007). The burial is part of a larger site complex that contained more than 29 human burials associated with an assemblage that fits the Archaic profile (i.e., large amounts of groundstone, battered cobbles, and expedient flake tools). In contrast, typical Paleoindian assemblages include large stemmed projectile points, high proportions of formal lithic tools, bifacial

lithic reduction strategies, and relatively small proportions of groundstone tools. Prime examples of this pattern are sites that Davis (1978) studied on China Lake Naval Air Weapons Station near Ridgecrest, California. These sites contained fluted and unfluted stemmed points and large numbers of formal flake tools (e.g., shaped scrapers, blades). Other typical Paleoindian sites include the Komodo site (MNO-679)—a multicomponent fluted point site—and MNO-680—a single component Great Basin stemmed point site (Basgall et al. 2002). At MNO-679 and MNO-680, groundstone tools were rare, while finely made projectile points were common.

Turning back to coastal Southern California, the fact that some of the earliest dated assemblages are dominated by processing tools runs counter to traditional notions of mobile hunter–gatherers traversing the landscape for highly valued prey. Evidence for the latter—that is, typical Paleoindian assemblages—may have been located along the coastal margin at one time, prior to glacial desiccation and a rapid rise in sea level during the early Holocene (pre-7500 BP) that submerged as much as 1.8 km of the San Diego coastline. If this were true, however, it would also be expected that such sites would be located on older landforms near the current coastline. Some sites, such as SDI-210 along Agua Hedionda Lagoon, contained stemmed points similar in form to Silver Lake and Lake Mojave projectile points (pre-8000 BP) that are commonly found at sites in California's high desert (Basgall and Hall 1990). SDI-210 yielded one corrected radiocarbon date of 8520–9520 BP (Warren et al. 2004). However, sites of this nature are extremely rare and cannot be separated from the large numbers of milling tools that intermingle with old projectile point forms.

Warren et al. (2004) claimed that a biface manufacturing tradition present at the Harris site complex (SDI-149) is representative of typical Paleoindian occupation in the San Diego region that possibly dates between 10,365 and 8200 BC (Warren et al. 2004, p. 26). Termed San Dieguito (Rogers 1945), assemblages at the Harris site are qualitatively distinct from most others in the San Diego region because the site has large numbers of finely made bifaces (including projectile points), formal flake tools, a biface reduction trajectory, and relatively small amounts of processing tools (Warren 1964, 1968). Despite the unique assemblage composition, the definition of San Dieguito as a separate cultural tradition is hotly debated. Gallegos (1987) suggested that the San Dieguito pattern is simply an inland manifestation of a broader economic pattern. Gallegos's interpretation of San Dieguito has been widely accepted in recent years, in part because of the difficulty in distinguishing San Dieguito components from other assemblage constituents. In other words, it is easier to ignore San Dieguito as a distinct socioeconomic pattern than it is to draw it out of mixed assemblages.

The large number of finished bifaces (i.e., projectile points and non-projectile blades), along with large numbers of formal flake tools at the Harris site complex, is very different than nearly all other assemblages throughout the San Diego region, regardless of age. Warren et al. (2004) made this point, tabulating basic assemblage constituents for key early Holocene sites. Producing finely made

bifaces and formal flake tools implies that relatively large amounts of time were spent on tool manufacture. Such a strategy contrasts with the expedient flake-based tools and cobble-core reduction strategy that typifies non-San Dieguito Archaic sites. It can be inferred from the uniquely high degree of San Dieguito assemblage formality that the Harris site complex represents a distinct economic strategy from non-San Dieguito assemblages.

If San Dieguito truly represents a distinct socioeconomic strategy from the non-San Dieguito Archaic processing regime, its rarity implies that not only was it short-lived, but it was not as economically successful as the Archaic strategy. Such a conclusion would fit with other trends in Southern California deserts, wherein hunting-related tools are replaced by processing tools during the early Holocene (Basgall and Hall 1993).

2.2.2 ARCHAIC (8000 BC-AD 500)

The more than 1500-year overlap between the presumed age of Paleoindian occupations and the Archaic period highlights the difficulty in defining a cultural chronology in the San Diego region. If San Dieguito is the only recognized Paleoindian component in the San Diego region, then the dominance of hunting tools implies that it derives from Great Basin adaptive strategies and is not necessarily a local adaptation. Warren et al. (2004) admitted as much, citing strong desert connections with San Dieguito. Thus, the Archaic pattern is the earliest local socioeconomic adaptation in the San Diego region (Hale 2001, 2009).

The Archaic pattern is relatively easy to define, with assemblages that consist primarily of processing tools: millingstones, handstones, battered cobbles, heavy crude scrapers, incipient flake-based tools, and cobble-core reduction. These assemblages occur in all environments across the San Diego region, with little variability in tool composition. Low assemblage variability over time and space among Archaic sites has been equated with cultural conservatism (Byrd and Reddy 2002; Warren 1968; Warren et al. 2004). Despite enormous amounts of archaeological work at Archaic sites, little change in assemblage composition has been found until the adoption of the bow and arrow at around AD 500, as well as ceramics at approximately the same time (Griset 1996; Hale 2009). Even then, assemblage formality remains low. After the bow is adopted, small arrow points appear in large quantities and already low amounts of formal flake tools are replaced by increasing amounts of expedient flake tools. Similarly, shaped millingstones and handstones decrease in proportion relative to expedient, unshaped groundstone tools (Hale 2009). Thus, the terminus of the Archaic period is equally hard to define as its beginning because basic assemblage constituents and patterns of manufacturing investment remain stable, complemented only by the addition of the bow and ceramics.

2.2.3 LATE PREHISTORIC (AD 500-1769)

The period following the Archaic and prior to Ethnohistoric times (AD 1769) is commonly referred to as the Late Prehistoric (Rogers 1945; Wallace 1955; Warren et al. 2004). However, several other subdivisions continue to be used to describe various shifts in assemblage composition, including the addition of ceramics and cremation practices. In northern San Diego County, the post-AD 1450 period is called the San Luis Rey Complex (True 1980), while the same period in southern San Diego County is called the Cuyamaca Complex and is thought to extend from AD 500 until Ethnohistoric times (Meighan 1959). Rogers (1929) also subdivided the last 1,000 years into the Yuman II and III cultures, based on the distribution of ceramics. Despite these regional complexes, each is defined by the addition of arrow points and ceramics and the widespread use of bedrock mortars. Vagaries in the appearance of the bow and arrow and ceramics make the temporal resolution of the San Luis Rey and Cuyamaca complexes difficult. For this reason, the term Late Prehistoric is well suited to describe the last 1,500 years of prehistory in the San Diego region.

Temporal trends in socioeconomic adaptations during the Late Prehistoric period are poorly understood. This is partly due to the fact that the fundamental Late Prehistoric assemblage is very similar to the Archaic pattern but includes arrow points and large quantities of fine debitage from producing arrow points, ceramics, and cremations. The appearance of mortars and pestles is difficult to place in time because most mortars are on bedrock surfaces; bowl mortars are actually rare in the San Diego region. Some argue that the Ethnohistoric intensive acorn economy extends as far back as AD 500 (Bean and Shipek 1978). However, there is no substantial evidence that reliance on acorns, and the accompanying use of mortars and pestles, occurred prior to AD 1400. True (1980) argued that acorn processing and ceramic use in the northern San Diego region did not occur until the San Luis Rey pattern emerged after approximately AD 1450. For southern San Diego County, the picture is less clear. However, the Cuyamaca Complex is the southern counterpart to the San Luis Rey pattern, and is most recognizable after AD 1450 (Hector 1984). Similar to True (1980), Hale (2009) argued that an acorn economy did not appear in the southern San Diego region until just prior to Ethnohistoric times, and that when it did occur, a major shift in social organization followed.

2.2.4 ETHNOHISTORIC (POST-AD 1769)

The history of the Native American communities prior to the mid-1700s has largely been reconstructed through later mission-period and early ethnographic accounts. The first records of the Native American inhabitants of the San Diego region come predominantly from European merchants, missionaries, military personnel, and explorers. These brief, and generally peripheral, accounts were prepared with the intent of furthering respective colonial and economic aims and were combined with observations of the landscape. They were not intended to be unbiased accounts regarding the cultural structures and

community practices of the newly encountered cultural groups. The establishment of the missions in the San Diego region brought more extensive documentation of Native American communities, though these groups did not become the focus of formal and in-depth ethnographic study until the early twentieth century (Boscana 1846; Fages 1937; Geiger and Meighan 1976; Harrington 1934; Laylander 2000). The principal intent of these researchers was to record the precontact, culturally specific practices, ideologies, and languages that had survived the destabilizing effects of missionization and colonialism. This research, often understood as "salvage ethnography," was driven by the understanding that traditional knowledge was being lost due to the impacts of modernization and cultural assimilation. Kroeber applied his "memory culture" approach (Lightfoot 2005, p. 32) by recording languages and oral histories within the San Diego region. Kroeber's 1925 assessment of the impacts of Spanish missionization on local Native American populations supported Kumeyaay traditional cultural continuity (Kroeber 1925, p. 711):

San Diego was the first mission founded in upper California; but the geographical limits of its influence were the narrowest of any, and its effects on the natives comparatively light. There seem to be two reasons for this: first, the stubbornly resisting temper of the natives; and second, a failure of the rigorous concentration policy enforced elsewhere.

In some ways this interpretation led to the belief that many California Native American groups simply escaped the harmful effects of contact and colonization all together. This, of course, is untrue. Ethnographic research by Dubois, Kroeber, Harrington, Spier, and others during the early twentieth century seemed to indicate that traditional cultural practices and beliefs survived among local Native American communities. These accounts supported, and were supported by, previous governmental decisions that made San Diego County the location of more federally recognized tribes than anywhere else in the United States: 18 tribes on 18 reservations that cover more than 116,000 acres (CSP 2009).

The traditional cultural boundaries between the Luiseño and Kumeyaay Native American tribal groups have been well defined by Shipek (1991, as summarized in County of San Diego 2007, p. 6):

In 1769, the Kumeyaay national territory started at the coast about 100 miles south of the Mexican border (below Santo Tomas), thence north to the coast at the drainage divide south of the San Luis Rey River including its tributaries. Using the U.S. Geological Survey topographic maps, the boundary with the Luiseño then follows that divide inland. The boundary continues on the divide separating Valley Center from Escondido and then up along Bear Ridge to the 2240 contour line and

then north across the divide between Valley Center and Woods Valley up to the 1880-foot peak, then curving around east along the divide above Woods Valley.

Based on ethnographic information, it is believed that at least 88 different languages were spoken from Baja California Sur to the southern Oregon state border at the time of Spanish contact (Johnson and Lorenz 2006, p. 34). The distribution of recorded Native American languages is dispersed as a geographic mosaic across California through six primary language families (Golla 2007, p. 71). Based on the location of the MWMP facilities, the Native American inhabitants of the region would have likely spoken both the Ipai and Tipai language subgroup of the Yuman language group. Ipai and Tipai, spoken respectively by the northern and southern Kumeyaay communities, are mutually intelligible. For this reason, these two are often treated as dialects of a larger Kumeyaay tribal group rather than as distinctive languages, though this has been debated (Laylander 2010; Luomala 1978).

Victor Golla has contended that one can interpret the amount of variability within specific language groups as being associated with the relative "time depth" of the speaking populations (Golla 2007, p. 80) A large amount of variation within the language of a group represents a greater time depth than a group's language with less internal diversity. One method that he has employed is drawing comparisons with historically documented changes in Germanic and Romantic language groups. Golla has observed that the "absolute chronology of the internal diversification within a language family" can be correlated with archaeological dates (Golla 2007, p. 71). This type of interpretation is modeled on concepts of genetic drift and gene flow that are associated with migration and population isolation in the biological sciences.

Golla suggested that there are two language families associated with Native American groups who traditionally lived throughout the San Diego County region. The northern San Diego tribes have traditionally spoken Takic languages, which may be assigned to the larger Uto–Aztecan family (Golla 2007, p. 74). These groups include the Luiseño, Cupeño, and Cahuilla. Golla has interpreted the amount of internal diversity within these communities to reflect a time depth of approximately 2,000 years. Other researchers have contended that Takic may have diverged from Uto–Aztecan ca. 2600 BC–AD 1, which was followed by the diversification within the Takic-speaking San Diego tribes, occurring approximately 1500 BC–AD 1000 (Laylander 2010). The majority of Native American tribal groups in the southern San Diego region have traditionally spoken Yuman languages, a subgroup of the Hokan phylum. Golla has suggested that the time depth of Hokan is approximately 8,000 years (Golla 2007, p. 74). The Kumeyaay tribal communities share a common language group with the Cocopa, Quechan, Maricopa, Mojave, and others to the east and the Kiliwa to the south. The time depth for both the Ipai (north of the San Diego River, from Escondido to Lake Henshaw) and the Tipai (south of the San Diego River, the Laguna Mountains through Ensenada) is estimated to be

2,000 years at the most. Laylander has contended that previous research indicates a divergence between Ipai and Tipai to have occurred approximately AD 600–1200 (Laylander 1985). Despite the distinct linguistic differences between the Takic-speaking tribes to the north, the Ipai-speaking communities in central San Diego, and the Tipai-speaking southern Kumeyaay, attempts to illustrate the distinctions between these groups based solely on cultural material alone have had only limited success (Pigniolo 2004; True 1966).

The Kumeyaay generally lived in smaller family subgroups that would inhabit two or more locations over the course of the year. While less common, there is sufficient evidence that there were also permanently occupied villages, and that some members may have remained at these locations throughout the year (Owen 1965; Shipek 1982, 1985; Spier 1923). Each autonomous triblet was internally socially stratified, commonly including higher-status individuals such as a tribal head (Kwaaypay), shaman (Kuseyaay), and general members with various responsibilities and skills (Shipek 1982). Higher-status individuals tended to have greater rights to land resources and owned more goods, such as shell money and beads, decorative items, and clothing. To some degree, titles were passed along family lines; however, tangible goods were generally ceremonially burned or destroyed following the deaths of their owners (Luomala 1978). Remains were cremated over a pyre and then relocated to a ceramic cremation vessel that was placed in a removed or hidden location. A broken metate was commonly placed at the location of the cremated remains, with the intent of providing aid and further use after death. At maturity, tribal members often left, going to other bands to find a partner. The families formed networks of communication and exchange around such partnerships.

Areas or regions, identified by known physical landmarks, could be recognized as band-specific territories that might be violently defended against use by other members of the Kumeyaay. Other areas or resources, such as water sources and other locations that were rich in natural resources, were generally understood as communal land to be shared among all the Kumeyaay (Luomala 1978). The coastal Kumeyaay exchanged a number of local goods, such as seafood, coastal plants, and various types of shell, for items including acorns, agave, mesquite beans, gourds, and other more interior plants of use (Luomala 1978). Shellfish would have been procured from three primary environments: the sandy open coast, bay and lagoon, and rocky open coast. The availability of these marine resources changed with the rising sea levels, siltation of lagoon and bay environments, changing climatic conditions, and intensity of use by humans and animals (Gallegos and Kyle 1988; Pigniolo 2005; Warren 1964). Shellfish from sandy environments included Donax, Saxidomus, Tivela, and others. Rocky coast shellfish dietary contributions consisted of Pseudochama, Megastraea, Saxidomus, Protothaca, Megathura, Mytilus, and others. Lastly, the bay environment would have provided Argopecten, Chione, Ostrea, Neverita, Macoma, Tagelus, and others. Although marine resources were obviously consumed, terrestrial animals and other resources likely provided a large proportion of sustenance. Game animals consisted of rabbits, hares (Leporidae), birds, ground squirrels, woodrats (Neotoma sp.), deer, bears, mountain lions (Puma concolor),

bobcats (*Lynx rufus*), coyotes (*Canis latrans*), and others. In lesser numbers, reptiles and amphibians may have been consumed.

A number of local plants were used for food and medicine. These were exploited seasonally, and were both traded between regional groups and gathered as a single triblet moved between habitation areas. Some of the more common of these that might have been procured locally or as higher-elevation varieties would have included buckwheat (*Eriogonum fasciculatum*), *Agave*, *Yucca*, lemonade sumac (*Rhus integrifolia*), sugarbush (*Rhus ovata*), sage scrub (*Artemisia californica*), yerba santa (*Eriodictyon* sp.), sage (*Salvia* sp.), *Ephedra*, prickly pear (*Opuntia* sp.), mulefat (*Baccharis salicifolia*), chamise (*Adenostoma fasciculatum*), elderberry (*Sambucus nigra*), oak (*Quercus* sp.), willow (*Salix* sp.), and *Juncus* grass among many others (Wilken 2012).

2.2.5 HISTORIC PERIOD (POST-AD 1542)

San Diego history can be divided into the Spanish Period (1769–1821), Mexican Period (1821–1846), and American Period (1846–Present). European activity in the region began as early as AD 1542, when Juan Rodríguez Cabrillo landed in San Diego Bay. Sebastián Vizcaíno returned in 1602, and it is possible that there were subsequent contacts that went unrecorded. These brief encounters made the local native people aware of the existence of other cultures that were technologically more complex than their own. Epidemic diseases may also have been introduced into the region at an early date, either by direct contact with the infrequent European visitors or through waves of diffusion emanating from native peoples farther to the east or south (Preston 2002). It is possible, but as yet unproven, that the precipitous demographic decline of native peoples had already begun prior to the arrival of Gaspar de Portolá and Junípero Serra in 1769.

The Spanish colonization of Alta California began in 1769 with the founding of Mission San Diego de Alcalá by Father Junípero Serra. Concerns over Russian and English interests in California motivated the Spanish government to send an expedition of soldiers, settlers, and missionaries to occupy and secure the northwestern borderlands of New Spain through the establishment of a presidio, mission, and pueblo. The Spanish explorers first camped on the shore of the bay in the area that is now downtown San Diego. Lack of water at this location, however, led to moving the camp on May 14, 1769, to a small hill closer to the San Diego River and near the Kumeyaay village of Cosoy. Father Junípero Serra arrived in July of the same year to find the presidio serving mostly as a hospital. The Spanish built a primitive mission and presidio structure on the hill near the river.

Bad feelings soon developed between the native Kumeyaay and the soldiers, resulting in construction of a stockade that, by 1772, included barracks for the soldiers, a storehouse for supplies, a house for the missionaries, and the chapel, which had been improved. The log and brush huts were gradually replaced

with buildings made of adobe bricks. Flat earthen roofs were eventually replaced by pitched roofs with rounded roof tiles. Clay floors were eventually lined with fired brick.

In August 1774, the Spanish missionaries moved the Mission San Diego de Alcalá to its current location 6 miles up the San Diego River Valley (modern Mission Valley) near the Kumeyaay village of Nipaguay. Begun as a thatched chapel and compound built of willow poles, logs, and tules, the new mission was sacked and burned in the Kumeyaay uprising of November 5, 1775. The first adobe chapel was completed in October 1776 and the present-day church was begun the following year. A succession of building programs through 1813 resulted in the final rectilinear plan that included the church, bell tower, sacristy, courtyard, residential complex, workshops, corrals, gardens, and cemetery. Orchards, reservoirs, and other agricultural installations were built to the south on the lower San Diego River alluvial terrace and were irrigated by a dam and aqueduct system. The initial Spanish occupation and mission system brought about profound changes in the lives of the Kumeyaay people. Substantial numbers of the coastal Kumeyaay were forcibly brought into the mission or died from introduced diseases.

As early as 1791, presidio commandants in California were given the authority to grant small house lots and garden plots to soldiers and their families. Sometime after 1800, soldiers and their families began to move down the hill near the San Diego River. Historian William Smythe noted that Don Blas Aguilar, who was born in 1811, remembered at least 15 such grants below Presidio Hill by 1821, of which only five grant lands—within the boundaries of what would become Old Town San Diego—had houses in 1821. These included the retired commandant Francisco Ruiz Adobe (now known as the Carrillo Adobe); another building later owned by Henry Fitch on Calhoun Street; the Ybanes and Serrano houses on Juan Street near Washington Street; and a small adobe house on the main plaza owned by Juan Jose Maria Marron.

In 1822, the political situation changed as Mexico won its independence from Spain and San Diego became part of the Mexican Republic. The Mexican government opened California to foreign trade; began issuing private land grants in the early 1820s, creating the rancho system of large agricultural estates; secularized the Spanish missions in 1833; and oversaw the rise of the civilian pueblo. By 1827, as many as 30 homes existed around the central plaza and in 1835, Mexico granted San Diego official pueblo (town) status. At this time, the town had a population of nearly 500 residents, later reaching a peak of roughly 600. By 1835 the presidio, once the center of life in Spanish San Diego, had been abandoned and lay in ruins. Mission San Diego de Alcalá fared little better. The town and the ship landing area at La Playa were now the centers of activity in Mexican San Diego. However, the new Pueblo of San Diego did not prosper as did some other California towns during the Mexican Period.

The secularization in San Diego County triggered increased Native American hostilities against the Californios during the late 1830s. The attacks on outlying ranchos, along with unstable political and economic factors, helped San Diego's population decline to around 150 permanent residents by 1840. San Diego's official pueblo status was removed by 1838 and it was made a subprefecture of the Los Angeles Pueblo. When the Americans took over after 1846, the situation had stabilized somewhat, and the population had increased to roughly 350 non-Native American residents. The Native American population continued to decline, as Mexican occupation brought about continued displacement and acculturation of Native American populations.

The American Period began in 1846 when United States military forces occupied San Diego; this period continues today. When United States military forces occupied San Diego in July 1846, the town's residents split on their course of action. Many of the town's leaders sided with the Americans, while other prominent families opposed the United States invasion. In December 1846, a group of Californios under Andres Pico engaged U.S. Army forces under General Stephen Kearney at the Battle of San Pasqual and inflicted many casualties. However, the Californio resistance was defeated in two small battles near Los Angeles and effectively ended by January 1847. The Americans assumed formal control with the Treaty of Guadalupe-Hidalgo in 1848 and introduced Anglo culture and society, American political institutions, and especially American entrepreneurial commerce. In 1850, the Americanization of San Diego began to develop rapidly.

On February 18, 1850, the California State Legislature formally organized San Diego County. The first elections were held at San Diego and La Playa on April 1, 1850, for county officers. San Diego grew slowly during the next decade. San Diegans attempted to develop the town's interests through a transcontinental railroad plan and the development of a new town closer to the bay. The failure of these plans, a severe drought that crippled ranching, and the onset of the Civil War left San Diego as a remote frontier town. The troubles led to an actual drop in the town's population from 650 in 1850 to 539 in 1860. Not until land speculator and developer Alonzo Horton arrived in 1867 did San Diego begin to develop fully into an active American town.

Alonzo Horton's development of a New San Diego (modern downtown) in 1867 began to swing the community focus away from Old Town and began the urbanization of San Diego. Expansion of trade brought an increase in the availability of building materials. Wood buildings gradually replaced adobe structures. Some of the earliest buildings to be erected in the American Period were prefabricated houses that were built on the east coast of the United States, shipped in sections around Cape Horn, and reassembled in San Diego. Development spread from downtown based on a variety of factors, including the availability of potable water and transportation corridors. Factors such as views and access to public facilities affected land values, which in turn affected the character of neighborhoods that developed. During the Victorian Era of the late 1800s and early 1900s, the areas

of Golden Hill, Uptown, Banker's Hill, and Sherman Heights were developed. Examples of the Victorian Era architectural styles remain in these communities, as well as in Little Italy, which developed at the same time. At the time downtown was being built, there began to be summer cottage/retreat development in what are now the beach communities and La Jolla area. The early structures in these areas were not of substantial construction; they were primarily for temporary vacation housing.

Development also spread to the Greater North Park and Mission Hills areas during the early 1900s. The neighborhoods were built as small lots, a single lot at a time; there was not large tract housing development of those neighborhoods. It provided affordable housing away from the downtown area, and development expanded as transportation improved. Barrio Logan began as a residential area, but because of proximity to rail freight and shipping freight docks, the area became more mixed with conversion to industrial uses. This area was more suitable to industrial uses because land values were not as high; topographically, the area is more level, and it is not as interesting in terms of views as are the areas north of downtown. Various ethnic groups settled in the area because of the availability of land ownership.

San Ysidro began to be developed at about the turn of the twentieth century. The early settlers were followers of the Little Landers movement. There, the pattern of development was designed to accommodate small plots of land for each homeowner to farm as part of a farming-residential cooperative community. Nearby Otay Mesa–Nestor began to be developed by farmers of Germanic and Swiss background. Some of the prime citrus groves in California were in the Otay Mesa–Nestor area; in addition, there were grape growers of Italian heritage who settled in the Otay River Valley and tributary canyons and produced wine for commercial purposes.

San Diego State University was established as the State Normal School in the 1920s, followed by development of the College and Navajo communities. Farming and ranching was active in Mission Valley until the middle portion of the twentieth century, when the uses were converted to commercial and residential. Dairy farms and chicken ranches could be found adjacent to the San Diego River where motels, restaurants, office complexes, and regional shopping malls exist today. There was little development north of the San Diego River until Linda Vista was developed as military housing in the 1940s. The federal government improved public facilities and extended water and sewer pipelines to the area. From Linda Vista, development spread north of Mission Valley to the Clairemont Mesa and Kearny Mesa areas with commercial, mixed-use, and residential development on moderate size lots.

Tierrasanta, previously owned by the United States Navy, was developed in the 1970s and was one of the first planned unit developments with segregation of uses. Tierrasanta and many of the communities that have developed since, such as Rancho Peñasquitos and Rancho Bernardo, represent the typical

development pattern in San Diego in the last 25 to 30 years: uses are well segregated, with commercial uses located along the main thoroughfares and residential uses located in between. Industrial uses are located in planned industrial parks.

Examples of almost every major period and style remain in San Diego, including Spanish Colonial, Pre-Railroad New England, National Vernacular, Victorian Italianate, Stick, Queen Anne, Colonial Revival, Neoclassical, Shingle, Folk Victorian, Mission, Craftsman, Prairie, French Eclectic, Italian Renaissance, Spanish Eclectic, Egyptian Revival, Tudor Revival, Modernistic, and International.

3 METHODS

3.1 SOUTH COASTAL INFORMATION CENTER RECORDS SEARCH

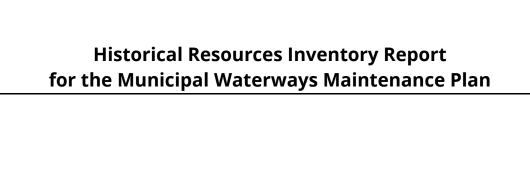
An examination of existing maps, records, and reports was conducted to ensure that the MWMP avoided potential impacts to previously recorded cultural properties. Dudek conducted records searches on April 17, 2017, and April 11, 2018, of data obtained from the South Coastal Information Center at San Diego State University. The search encompassed the APE and a 0.25-mile buffer around the APE. The purpose of the records search is to identify any previously recorded properties that may be located in or adjacent to the MWMP program area and to identify previous studies in the MWMP vicinity. In addition to a review of previously prepared site records and reports, the records search also reviewed historical maps of the MWMP program area, ethnographies, the NRHP, the CRHR, the California Historic Property Data File, and the lists of California State Historical Landmarks, California Points of Historical Interest, and Archaeological Determinations of Eligibility. Historic-era built environment results are discussed below; the full search results are discussed in the *Cultural Resources Inventory/Evaluation Report* for the MWMP (DeCarlo et al. 2019).

3.2 AERIAL PHOTOGRAPH ANALYSIS

Dudek conducted an examination of the MWMP facilities on aerial photographs and satellite images. This analysis showed the current level of development surrounding the MWMP facilities and adjacent property, in addition to assisting with age determinations and tracking large-scale changes to linear MWMP facilities over time. The aerials available for this research spanned from 1939 to 2012, and were accessed via NETR Online and the University of California Santa Barbara Library.

3.3 SITE VISITS

Site visits of the MWMP facilities were not conducted. However, should work on a facility built prior to 1973 trigger a need for further historical review, a site visit would be conducted to document the facility in question, identify its existing condition, and evaluate it for significance, as needed.



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4 RESULTS

4.1 SOUTH COASTAL INFORMATION CENTER RECORDS SEARCH

The search of the South Coastal Information Center records identified 347 cultural resources within 0.25 miles of the APE, 209 of which are historic addresses. Of the 347 identified, 15 historic properties fall within the APE (Table 1). The historic properties include two railroad tracks; a road; a bridge; a ranch or homestead complex; a redwood flume segment; a sidewalk stamp; a locally designated pottery site that includes a kiln, two single-family residences, a pottery production building, and a drying shed; and seven historic-era addresses (over 45 years old). Two of the resources were previously evaluated and recommended eligible for listing on the CRHR or NRHP, one was listed on the City of San Diego's Register of Historical Resources, one was determined not eligible, one was recommended not eligible, and the remaining historic properties were not evaluated.

Table 1
Historic Properties in Area of Potential Effect

Label	Trinomial	Intersects APE?	Era	Description	Evaluation Status
P-37-013072	CA-SDI-13072	Yes	Historic	Historical residential/ ranch complex	Not evaluated
P-37-016659		Within 100 feet	Historic	San Diego Flume System	Recommended eligible
P-37-024739	CA-SDI-16385	Yes	Historic	BNSF Railway	Recommended not eligible
P-37-025680		Yes	Historic	Union Pacific Railroad	Determined not eligible
P-37-025924	CA-SDI-17240	Yes	Historic	Hollister Street Bridge	Recommended eligible
P-37-031491		Yes	Historic	Otay Mesa Road	Not evaluated
P-37-033516		Within 100 feet	Historic	Sidewalk stamp	Not evaluated
P-37-034756	CA-SDI-21620	Within 100 feet	Historic	Kiln, two single- family residences, pottery production building, drying shed	Locally designated, HRB #108

Table 1
Historic Properties in Area of Potential Effect

Label	Trinomial	Intersects APE?	Era	Description	Evaluation Status
3715 India St		Within 100 feet	Historic	Historic address	Not evaluated
3717 India St		Within 100 feet	Historic	Historic address	Not evaluated
3731 India St		Within 100 feet	Historic	Historic address	Not evaluated
3735 India St		Within 100 feet	Historic	Historic address	Not evaluated
3737 India St		Within 100 feet	Historic	Historic address	Not evaluated
3741 India St		Within 100 feet	Historic	Historic address	Not evaluated
3344 Industrial Ct		Within 100 feet	Historic	Historic address	Not evaluated

APE = area of potential effect; BNSF = Burlington Northern Santa Fe

4.2 PREVIOUS STORM WATER STUDIES

Prior to the implementation of the proposed MWMP, cultural resource reviews of maintenance to the MWMP facilities were conducted under the Master Storm Water System Maintenance Program (MMP) (Affinis 2011). The MMP stipulates mitigation measures to manage the possible impacts to archaeological resources adjacent to the MWMP facilities. However, the mitigation measures proposed in the MMP do not specifically address historic properties; rather, the focus is on archaeological resources. As such, neither the MMP Programmatic EIR or subsequent Individual Historic Assessments provide site-specific information or evaluation of potentially significant historic properties that may be affected by maintenance activities.

4.3 AERIAL PHOTOGRAPH ANALYSIS

Analysis of the MWMP facilities on aerial photographs and satellite images indicated that the general trend of development surrounding the MWMP facilities and adjacent properties was an increase in urbanization and population density. Additionally, the images facilitated age determinations, as detailed in the Site Description column of Table 2. The images also allowed for tracking large-scale changes over time, which assisted with identifying MWMP facilities that have been altered since their initial construction.

5 HISTORIC PROPERTIES REVIEW EXEMPTIONS

Depending on the type of resource and the invasiveness of the maintenance activity, many facilities can undergo specific maintenance activities without risk of impact to historic properties. This negates the need to conduct additional historic property review to identify and mitigate potential historic property impacts for those particular facilities. By conducting this inventory, Dudek has determined the potential of each proposed maintenance activity to historic property. Dudek used the results of this inventory to design an MWMP FMP that identifies which facilities and maintenance activities do not require further historic property review.

The Section 106 regulations, specifically Title 36 CFR, Part 800.14(c), allow for the development of historic property review maintenance plans by stipulating the identification of classes or categories of activities and/or facilities that would be exempt from Section 106 or historic property review. Maintenance plans have been applied to similar projects in the past, including the statewide California Department of Transportation Section 106 Programmatic Agreement and the U.S. Army Corps of Engineers Section 106 Programmatic Agreement for the Columbia River Power System Projects in northwestern United States.

5.1 HISTORIC PROPERTY SENSITIVITY

The majority of historic properties within the MWMP APE are the facilities themselves, plus five previously documented historic properties (see Table 1). The facilities are either earthen-bottom or concrete-lined, and typically follow existing drainage routes. Approximately 62% of the facilities were constructed prior to 1973, more than 45 years from the initiation of environmental review for the MWMP, and as such require documentation and evaluation for historical significance.

Many ground-disturbing maintenance activities associated with the proposed MWMP (e.g., grubbing/clearing/blading, grading, trenching, boring, disking) have a low potential to adversely impact historic properties due to their distance from potential built-environment resources and the lack of groundborne vibration associated with such activities. However, invasive ground-disturbing maintenance activities such as major or minor concrete maintenance and repair and riprap replacement do have the potential to adversely affect/impact historic properties. Proposed maintenance activities that do not include ground disturbance (hand removal or trimming of vegetation, graffiti removal, herbicide and rodenticide application) do not have the potential to impact historic properties. Maintenance activity staging areas and crews accessing the facilities can impact historic properties within or adjacent to the areas. While there is a potential for activity staging areas and crew access to cause an adverse effect, development of FMPs that consider avoidance and minimization of sensitive resources (including historic properties) can reduce the potential to no adverse effect.

5.2 PROPOSED MWMP ACTIVITIES

The following is a description of MWMP maintenance activities that may occur at the MWMP facilities. The activity describes the purpose of the maintenance or repair (e.g., manage vegetation, remove sediment, clear outlet/inlet drain structures, repair infrastructure).

Maintenance Activities

- Vegetation Management. Vegetation management refers to the grubbing, blading, mowing, trimming, and removal of vegetation. Vegetation management activities include vegetation removal and vegetation control activities such as mowing and/or herbicide application. Grubbing and mowing include the removal of aboveground vegetation, leaving root systems mostly intact. Trimming is the removal of limbs or branches from select vegetation that is generally above waist height and limited to woody vegetation or cutting overhanging vegetation. Removal is the complete removal of aboveground vegetation and roots, up to the as-built sediment depth. Removal could be conducted through a variety of methods, including mechanized removal, hand removal, and/or herbicide application.
- Invasive Plant Species Management. In facilities that contain substantial stands of invasive plant species, efforts would be made to remove and eradicate invasive vegetation communities using mechanized, hand, or herbicide treatment methods within the limits of the permitted work area. Varied methods may be used to accomplish invasive species management, including mechanized removal that involves removal of root structures and sediment, mechanized grubbing or mowing that leaves roots and sediment intact, and/or hand removal.
- Sediment and Debris Removal. Sediment and debris removal involves the removal of excess accumulated sediment and/or debris (i.e., trash and other waste materials). Accumulated sediment can reduce the flow capacity of a facility and increase the potential for flooding. Sediment removal under the MWMP would only be allowed up to the asbuilt/original design or established maintenance baseline of the facility, and would not include expansion of the facility capacity beyond the original design. Direct methods used for sediment removal include excavation (both with equipment in the channel and equipment staged outside the channel) and dredging.
- Structural Clearing/Trash Fences. Structural clearing involves the removal of built-up debris and vegetation from within or areas directly adjacent to an outlet/inlet structure and/or trash fence. Channels/ditches often occur directly adjacent to the outlet/inlet structure. Direct methods used for structural clearing include excavation (both with equipment in the channel/ditch adjacent to the outlet/inlet structure and equipment staged

outside the channel/ditch adjacent to the outlet/inlet structure); hand removal of vegetation, trash, or debris; and Vactor trucks staged outside the channel/ditch adjacent to the outlet/inlet, which can vacuum small amounts of sediment or standing water from within an outlet/inlet structure.

Repair Activities

- Concrete Repair (Major and Minor). Concrete, including shotcrete or gunite repair and replacement activities, involves maintenance within developed concrete-lined channels or structures where the concrete lining or structure's form is damaged, cracked, or eroded based on existing constructed or original as-built conditions. Typical minor concrete repair activities include spot repairs to damaged concrete panels (channel lining), barrier walls, or headwall structures. Typical major concrete repair activities include reconstructing the channel lining, barrier walls, or headwall structures because they are missing or damaged enough that they need to be removed and replaced entirely. The terms "repair" and "replacement" are often referenced interchangeably; however, the extent to which the lining or form is damaged or compromised would determine whether the activity is considered a minor or major repair.
- **Bank Repair.** Bank repair activities occur in channels along stream banks. Bank repair involves the repair and stabilization of banks when a weakened, unstable, or failing bank causes or threatens damage to an adjacent property; increases the flood risk; threatens public safety; impacts roads, transportation, or access; generates erosion; increases downstream sediment yields; or impacts riparian habitat and/or other natural resource values. Methods for bank repair include bank regrading (involving equipment within or outside the channel); installation of engineered backfilled soils; use of erosion-control fabric; planting of native vegetation; and, where existing riprap is damaged, replacement of riprap.

All associated maintenance and repair activities include temporary access/loading, temporary staging, temporary stockpiling, temporary flow diversion, post-maintenance erosion control, and water pollution control plans. Specific access points, routes, and loading areas for each of the facilities are included in the MWMP. Access and loading locations were determined by using previous access routes selected to limit disturbance to adjacent properties and provide safe access for maintenance crews. Where a ramp is not present, a temporary ramp may be built for channel access either by using approved fill material brought from off site or by collecting and contouring sediment from the channel itself.

5.3 ACTIVITIES THAT DO NOT REQUIRE REVIEW

Dudek has analyzed the proposed maintenance activities and determined that some activities do not have the potential to impact historic properties. If a particular maintenance activity does not have the potential to impact a historic property, then the activity does not require further historic property review. If it does have the potential to impact a historic property, then some level of historical review is required. It is possible for the same maintenance activity to be exempt from further review at one MWMP facility while requiring further review at another facility. For example, mechanical vegetation clearing from the bottom of an earthen-bottom facility is usually exempt from further review. If, however, a previously recorded historic property is adjacent to the facility, further historical review would be required to assure that activity staging and crew members avoid impacts to the resource. A discussion of this sensitivity is provided in Section 5.1, Historic property Sensitivity, justifying the variation of required historical review.

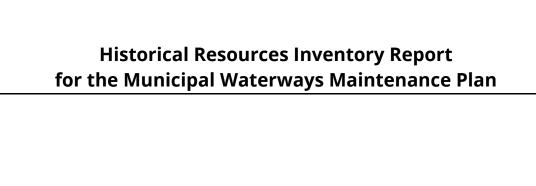
Other system-wide projects in the northwestern United States have proposed lists of maintenance activities that would not require review provided that no extenuating circumstances existed. These lists have been approved by multiple lead federal agencies and SHPOs. Such a list of activities classified as "Routine Activities" was included as part of an executed Section 106 systemwide Programmatic Agreement for the multipurpose operations of 14 projects of the federal Columbia River Power System in the northwestern United States. The Columbia River Power System included the acquisition of lands within the Columbia River Basin by the U.S. Army Corps of Engineers and the U.S. Bureau of Reclamation to construct 14 dams and their associated lakes or reservoirs (USACE 2009). The current Historic Resources Inventory Report proposes that the MWMP FMP reflect this approved list of exempt activities.

5.4 HISTORICAL RESOURCES REVIEW MATRIX

The level of required historic property review varies depending on the MWMP facility and the invasiveness of the proposed maintenance activity. Due to the complex variables that must be considered, a list of maintenance activities not requiring review would not be sufficient to identify activities with the potential for an adverse effect at each MWMP facility. Therefore, Dudek has designed a historical resources review matrix to specify which maintenance activities are exempt at particular MWMP facilities (Table 2). Due to the complexity of variables involved in a general activity like vegetation management, the matrix provides more detailed activity descriptions that account for different methods used to accomplish each task. For example, mechanized vegetation removal may occur through excavation with equipment in the facility, excavation with equipment staged outside the facility, or by hand.

Facilities where activities are marked with an "X" do not require further evaluation. Where earthen-bottom facilities are identified as needing review under the "Bank Repair (Earthen Grading Only)" column, verification that the proposed activity would maintain the historic shape and design of the channel would be warranted. Maintaining the historic shape and design of earthen-bottom facilities would conform with the Secretary of the Interior's Standards for the Treatment of Historic Properties, and as such would comply with Section 106 and CEQA. However, should a change in shape and/or design be required, then the earthen-bottom facility in question would be subject to the mitigation measures described in Section 6.2, Mitigation Measures. Where concrete-lined channels or other facilities are identified as needing review under the "Concrete Repair (Major)," "Concrete Repair (Minor)," and/or "Riprap Replacement" columns, the facility in question would be subject to the mitigation measures described in Section 6.2.

The historical resources review matrix would help streamline the City's historic property review process for all facilities mentioned in this report. Historical constraints are indicated where properties or resources are more than 45 years of age and previously were not documented and/or evaluated for significance. The historical resources review matrix eliminates some of the historic property review required for routine maintenance of the identified facilities.



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Table 2
Historic Resources Review Matrix

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Facility Group Name	Facility Number	Segment Name – Number	Historical Constraint	Excavation (Previous Disturbance) - Equipment In Facility	Excavation (Previous Disturbance) - Equipment Outside Facility	Dredging	Bank Repair (Earthen Channels Only)	Concrete Repair (Major)	Concrete Repair (Minor)	Riprap Replacement	Temporary Access/ Loading, Staging or Stockpiling	Temporary Diversions (Dams, Pumps, Discharge)	Hand-Removal of Vegetation	Mowing/trimming of Vegetation	Property*	Proximity	Site Description
					S	โลท Diegu	uito Wate	rshed									
	1					Co	oncrete		T	ı							
Green Valley Creek – Pomerado	1-04-030	Pomerado – 1	Yes	X	Х	Х	N/A	Review	Review	Review	Х	Х	Х	Х	Channel	Intersects	c. 1963 concrete channel
Green Valley Creek – Pomerado	1-04-033	Pomerado – 2	Yes	X	Х	Х	N/A	Review	Review	Review	X	Х	Χ	Х	Channel	Intersects	c. 1963 concrete channel
	T					E	arthen	ľ				1				T	
Green Valley Creek – Paseo del Verano	1-04-200	Paseo del Verano – 1 (basin)	None	Х	Х	Х	X	N/A	N/A	N/A	Х	Х	X	Х	None		
					Los	s Peñasq	uitos Wa	tershed									
						Co	oncrete				v	v					
Los Peñasquitos Lagoon – Industrial	2-01-122	Industrial – 2	None	Х	X	Х	N/A	Х	Х	Х	Х	X	Х	Х	Channel	Intersects	1963 concrete channel
Los Peñasquitos Lagoon – Tripp	2-01-130	Tripp – 1	None	Х	X	Х	N/A	Х	Х	Х	Х	Х	Х	Х	None		
Soledad Canyon Creek – Sorrento	2-03-002	Roselle – 2	None	Х	Х	Х	N/A	Х	Х	Х	X	Х	Х	Х	Channel		c. 1963–1974 concrete channel
Soledad Canyon Creek – Flintkote	2-03-100	Flintkote – 1	None	Х	Х	Х	N/A	Х	х	Х	х	Х	Х	Х	Channel		c. 1963–1974 concrete channel
Chicarita Creek – Via San Marco	2-05-140	Via San Marco – 1	None	Х	Х	Х	N/A	Х	Х	Х	Х	х	Х	Х	Channel	Intersects	c. 1972 concrete channel
10405 Sorrento Valley	HW04220	10405 Sorrento Valley	None	Х	Х	Х	N/A	Х	х	Х	×	Х	Х	Х	None		
						E	arthen										
Los Peñasquitos Canyon Creek – Sorrento	2-01-000	Sorrento Valley – 1	Yes	×	X	Х	Review	N/A	N/A	N/A	×	×	Х	X	Channel		c. 1953–1964 earthen channel
Los Peñasquitos Lagoon – Industrial	2-01-120	Industrial – 1	Yes	Х	Х	Х	Review	N/A	N/A	N/A	Х	X	Х	Х	Channel	Intersects	c. 1963 earthen channel
Los Peñasquitos Canyon Creek – Black Mountain	2-01-200	Black Mountain – 1	None	Х	Х	Х	Х	N/A	N/A	N/A	Х	х	Х	Х	None		
Los Peñasquitos Canyon Creek – Black Mountain	2-01-210	Black Mountain – 2	None	Х	Х	Х	х	N/A	N/A	N/A	Х	×	Х	х	None		
Los Peñasquitos Canyon Creek – 5-805 Basin	2-01-900	5-805 Fwys – 1 (basin)	Yes	Х	Х	Х	Review	N/A	N/A	N/A	Х	×	Х	х	Basin		1960; c. 1963–1974 earthen basin

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Table 2
Historic Resources Review Matrix

Facility Group Name	Facility Number	Segment Name – Number	Historical Constraint	Excavation (Previous Disturbance) – Equipment In Facility	Excavation (Previous Disturbance) – Equipment Outside Facility	Dredging	Bank Repair (Earthen Channels Only)	Concrete Repair (Major)	Concrete Repair (Minor)	Riprap Replacement	Temporary Access/ Loading, Staging or Stockpiling	Temporary Diversions (Dams, Pumps, Discharge)	Hand-Removal of Vegetation	Mowing/trimming of Vegetation	Property*	Proximity	Site Description
Soledad Canyon Creek – Sorrento	2-03-000	Roselle – 1	None	Х	Х	X	Х	N/A	N/A	N/A	X	Х	X	Х	Channel		c. 1963–1974 earthen channel
Soledad Canyon Creek – Sorrento	2-03-004	SorValRd – 1	None	Х	Х	Х	x	N/A	N/A	N/A	Х	Х	Х	Х	None		
Soledad Canyon Creek – Sorrento	2-03-006	SorValRd – 2	None	X	Х	Х	Х	N/A	N/A	N/A	Х	Х	Х	Х	None		
Carroll Canyon Creek – Carroll	2-03-012	Carroll Canyon – 1	None	X	Х	Х	Х	N/A	N/A	N/A	Х	Х	Х	Х	None		
Soledad Canyon Creek – Dunhill	2-03-150	Dunhill – 1	None	X	Х	Х	Х	N/A	N/A	N/A	X	Х	Х	Х	Channel	Intersects	1962 earthen channel
					M	lission E	ay Wate	rshed									
		1				Co	ncrete									1	
Mission Bay – MBHS	3-02-103	MBHS – 1	None	X	Х	Х	N/A	Х	Х	Х	Х	Х	X	Х	Channel		1961, 1963 concrete channel
Miramar – Engineer	3-03-901	Engineer – 1	Yes	X	X	X	N/A	Review	Review	Review	X	X	X	X	Channel; 7969 Engineer Rd.; 7988 Engineer Rd.; 8025 Engineer Rd.; 8123 Engineer Rd.; 8133- 8141 Engineer Rd.; 8159 Engineer Rd	Adjacent; Adjacent; Adjacent; Adjacent; Adjacent Adjacent	1962 concrete channel; seven buildings more than 45 years old (not previously evaluated)
Tecolote Creek – Chateau	3-04-055	Chateau – 1	None	Х	Х	Х	N/A	х	Х	Х	Х	х	Х	Х	Channel		c. 1963–1969 concrete channel
Tecolote Creek – Chateau	3-04-250	Chateau – 2	None	Х	Х	X	N/A	X	X	Х	×	х	X	X	Channel		c. 1963–1969 concrete channel

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Table 2
Historic Resources Review Matrix

Facility Group Name	Facility Number	Segment Name – Number	Historical Constraint	Excavation (Previous Disturbance) - Equipment In Facility	Excavation (Previous Disturbance) - Equipment Outside Facility		Bank Repair (Earthen Channels Only)	Concrete Repair (Major)	Concrete Repair (Minor)	Riprap Replacement	Temporary Access/ Loading, Staging or Stockpiling	Temporary Diversions (Dams, Pumps, Discharge)	Hand-Removal of Vegetation	Mowing/trimming of Vegetation	Property*	Proximity	Site Description
T. D. T.		T - 5: 4	, I			1	arthen		.	21/4		<u> </u>					1050
Torrey Pines – Torrey	3-00-120	Torrey Pines – 1	Yes	Review	Review	Review	Review	N/A	N/A	N/A	Review	Review	Review	Review	Channel; P-37- 034756; 2725 Torrey Pines Rd.	Adjacent; cl Adjacent b ye P lis	re-1953 earthen hannel; pottery kiln; uildings more than 45 ears old (designated). ottery Canyon Park is sted on the City's egister of Historical esources (HRB #108)
Alta La Jolla – Vickie	3-00-150	Vickie – 1 (basin)	Yes	Х	×	X	Review	N/A	N/A	N/A	Х	X	X	Х	Channel; 5354 Vickie Rd.	Adjacent cl	. 1964–1966 earthen hannel; building more nan 45 years old (not reviously evaluated)
Mission Bay – MBHS	3-02-101	PB-Olney – 1	None	Х	Х	Х	X	N/A	N/A	N/A	х	Х	Х	×	Channel		961, 1963 earthen hannel
Mission Bay – Mission Bay Drive	3-02-130	Mission Bay Drive – 1	None	Х	Х	Х	х	N/A	N/A	N/A	х	Х	Х	Х	Channel	Intersects 1	956 earthen channel
Tecolote Creek – Morena	3-04-101	Morena – 1	Yes	Х	х	Х	Review	N/A	N/A	N/A	х	Х	Х	Х	Channel		. 1953–1963 earthen hannel
Tecolote Creek – Genesee	3-04-160	Genesee – 1	Yes	Х	х	х	Review	N/A	N/A	N/A	х	х	Х	X	Channel; 3406 Aveley Place	Adjacent b	. 1964 earthen channel; uilding more than 45 ears old (not previously valuated)
					Sa	ın Diego	River Wat	ershed									
			,			Co	oncrete										
San Diego River – Nimitz	4-01-105	Nimitz – 2	None	Х	Х	Х	N/A	Х	Х	Х	Х	Х	Х	Х	None		
San Diego River – Valeta	4-01-120	Valeta – 1	Yes	Х	Х	Х			Review		Х	Х	Х	Х	Channel		969 concrete channel
San Diego River – Camino del Rio	4-03-101	Camino del Arroyo – 1	Yes	Х	Х	Х	N/A	Review	Review	Review	Х	Х	X	X	Channel		re-1964 concrete hannel

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Table 2
Historic Resources Review Matrix

Facility Group Name	Facility Number	Segment Name – Number	Historical Constraint	Excavation (Previous Disturbance) – Equipment In Facility	Excavation (Previous Disturbance) – Equipment Outside Facility	Dredging	Bank Repair (Earthen Channels Only)	Concrete Repair (Major)	Concrete Repair (Minor)	Riprap Replacement	Temporary Access/ Loading, Staging or Stockpiling	Temporary Diversions (Dams, Pumps, Discharge)	Hand-Removal of Vegetation	Mowing/trimming of Vegetation	Property*	Proximity Site Description
San Diego River – Camino del Rio	4-03-103	Camino del Rio – 1	Yes	Х	X	Х	N/A	Review	Review	Review	X	Х	Х	Х	Channel	Intersects 1961, 1966 concrete channel
Murphy Canyon Creek – Stadium	4-04-002	Stadium – 2	Yes	Х	X	Х	N/A	Review	Review	Review	Х	Х	Х	Х	Channel	Intersects c. 1963–1974 concrete channel
Murphy Canyon Creek – Stadium	4-04-006	Murphy Canyon – 1	None	Х	Х	X	N/A	х	X	Х	Х	Х	X	X	None	
Alvarado Canyon Creek - Mission Gorge	4-07-002	Mission Gorge – 1	None	Х	Х	Х	N/A	Х	×	Х	Х	х	Х	Х	None	
Alvarado Canyon Creek - Mission Gorge	4-07-004	Mission Gorge – 2	None	Х	Х	Х	N/A	Х	х	Х	Х	х	Х	Х	None	
Alvarado Canyon Creek – Mission Gorge	4-07-009	Mission Gorge – 3	Yes	Х	Х	х	N/A	Review	Review	Review	Х	Х	Х	х	Channel	Intersects c. 1965 concrete channel (segment under Waring Road)
Alvarado Canyon Creek - Mission Gorge	4-07-011	Mission Gorge – 4	Yes	Х	X	Х	N/A	Review	Review	Review	×	Х	X	X	Channel	Intersects c. 1965 concrete channel (segment under Waring Road)
Alvarado Canyon Creek – Alvarado	4-07-023	Alvarado – 2	None	Х	Х	Х	N/A	Х	х	Х	Х	Х	Х	Х	None	
Alvarado Canyon Creek – Alvarado	4-07-250	Alvarado – 3	None	Х	Х	Х	N/A	Х	×	Х	Х	Х	Х	Х	None	
Murray Reservoir – Cowles Mountain	4-07-901	Cowles Mountain – 1	Yes	Х	Х	Х	N/A	Review	Review	Review	Х	Х	Х	X	Channel	Intersects c. 1953–1963 concrete channel
Murray Reservoir – Cowles Mountain	4-07-911	Cowles Mountain – 2	Yes	Х	Х	Х	N/A	Review	Review	Review	Х	Х	Х	Х	Channel	Intersects c. 1953–1963 concrete channel
Norfolk Canyon Creek – Fairmount	4-08-008	Fairmount – 1	Yes	Х	Х	Х	N/A	Review	Review	Review	Х	Х	Х	X	Channel	Intersects c. 1953–1964 concrete channel
Norfolk Canyon Creek – Fairmount	4-08-011	Fairmount – 2	Yes	Х	Х	Χ	N/A	Review	Review	Review	Х	Х	Х	Х	Channel	Intersects 1960 concrete channel
Norfolk Canyon Creek – Fairmount	4-08-017	Fairmount – 4	Yes	Х	Х	Х	N/A	Review	Review	Review	Х	Х	Х	Х	Channel	Intersects c. 1953–1964 concrete channel
Norfolk Canyon Creek – Fairmount	4-08-105	Baja – 1	None	Х	Х	Χ	N/A	Х	Х	Х	Х	х	Х	Х	None	
1331 Washington	OT03537	1331 Washington	Yes	Х	Х	Х	N/A	Review	Review	Review	Х	х	Х	Х	Facility	Intersects 1947 structural facility

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1277 Camino Del Rio South	IN10399	1277 Camino Del Rio South	Yes	Х	X	X	N/A	Review	Review	Review	Х	Х	Х	Х	Facility	Intersects c. 1966–1974 structural facility
5505 Friars Road	OT05573	5505 Friars Road	Yes	Х	X	X	N/A	Review	Review	Review	X	Х	Х	X	Facility	Intersects c. 1966–1972 structural facility
1660 Hotel Circle North	003321	1660 Hotel Circle North	Yes	Х	X	X	N/A	Review	Review	Review	X	Х	X	X	Facility	Intersects 1969 structural facility
901 Hotel Circle South	HW02440	901 Hotel Circle South	None	Х	X	X	N/A	X	X	Х	X	Х	X	Х	None	
2087 Hotel Circle South	HW02437	2087 Hotel Circle South	None	Х	Х	X	N/A	х	Х	Х	Х	Х	Х	Х	None	
						E	arthen									
San Diego River – Nimitz	4-01-103	Nimitz – 1	None	Х	Х	Х	Х	N/A	N/A	N/A	Х	х	Х	Х	None	
San Diego River – Nimitz	4-01-107	Nimitz – 3	None	Х	Х	Х	x	N/A	N/A	N/A	Х	х	Х	Х	None	
Murphy Canyon Creek - Stadium	4-04-000	Stadium – 1	None	х	Х	Х	х	N/A	N/A	N/A	Х	х	Х	Х	None	
Murphy Canyon Creek – Stadium	4-04-008	Murphy Canyon – 2	Yes	Х	Х	х	Review	N/A	N/A	N/A	Х	Х	Х	Х	Channel	Intersects c. 1966–1972 earthen channel
Alvarado Canyon Creek - Alvarado	4-07-021	Alvarado – 1	None	х	Х	Х	Х	N/A	N/A	N/A	Х	х	Х	Х	None	
Norfolk Canyon Creek – Fairmount	4-08-014	Fairmount – 3	Yes	х	х	Х	Review	N/A	N/A	N/A	Х	х	Х	Х	Channel	Intersects 1960 earthen channel
Norfolk Canyon Creek – Fairmount	4-08-150	Aldine – 1	Yes	х	Х	Х	Review	N/A	N/A	N/A	Х	х	Х	Х	Channel	Intersects pre-1953 earthen channel

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Historic Resources Review Matrix

Facility Group Name	Facility Number	Segment Name – Number	Historical Constraint	Excavation (Previous Disturbance) – Equipment In Facility	Excavation (Previous Disturbance) - Equipment Outside Facility	Dredging	Bank Repair (Earthen Channels Only)	Concrete Repair (Major)	Concrete Repair (Minor) Riprap Replacement	Temporary Access/ Loading, Staging or	Temporary Diversions (Dams, Pumps, Discharge)	Hand-Removal of Vegetation	Mowing/trimming of Vegetation	Property*	Proximity	Site Description
							ncrete									
Washington Canyon Creek – Washingto	n 5-02-153	Washington – 2	Yes	х	X	х	N/A	Review	Review Revi	ew x	Х	х	х	Channel; 3715 India St.; 3717 India St.; 3731 India St.: 3735 India St.; 3737 India St.; 3741 India St.	adjacent	c. 1941–1953 concrete channel; historic properties
Powerhouse Canyon Creek – Pershing	5-03-011	Pershing – 1	Yes	Х	Х	X	N/A		Review Revi		X	Х	Х	Channel	Intersects	1964 concrete channel
Powerhouse Canyon Creek – Pershing	5-03-100	Pershing – 2	Yes	Х	Х	X	N/A		Review Revi		X	Х	Х	Channel	Intersects	1964 concrete channel
Chollas Creek – National	5-04-006	National - 2	Yes	X	Х	Х	N/A	Review	Review Revi	ew x	X	Х	Х	Channel	Intersects	c. 1953–1964 concrete channel
Chollas Creek – Rolando	5-04-044	Cartagena – 1	Yes	Х	Х	Х	N/A	Review	Review Revi	ew x	Х	Х	Х	Channel		c. 1953–1964 concrete channel
Chollas Creek – Rolando	5-04-046	Rolando – 1	Yes	Х	Х	Χ	N/A	Review	Review Revi	ew x	Х	Х	Х	Channel	Intersects	1965 concrete channel
Auburn Creek – Home	5-04-227	Home – 3	Yes	Х	Х	Х	N/A	Review	Review Revi	ew x	Х	х	Х	Channel		Pre-1963 concrete channel
Chollas Creek- Megan	5-04-260	Megan – 1	Yes	X	Х	Х	N/A	Review	Review Revi	ew x	х	Х	Х	Channel	Intersects	c. 1966 concrete channel
Chollas Creek – 54 th St	5-04-280	54 th St – 1	Yes	Х	Х	Х	N/A	Review	Review Revi	ew x	Х	х	х	Channel		c. 1966–1968 concrete channel
South Chollas Creek – Southcrest	5-05-008	Ocean View – 1	None	Х	Х	Х	N/A	Х	x x	X	х	Х	Х	None		
South Chollas Creek – Euclid	5-05-021	Euclid – 2	None	Х	x	X	N/A	X	x x	X	X	×	×	None		

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South Chollas Creek – Federal	5-05-037	Federal – 2	None	X	Х	Х	N/A	Х	Х	Х	Х	Х	Х	Х	Channel	Intersects	1972 concrete channel
South Chollas Creek Encanto Branch – Imperial	5-05-306	Imperial – 2	None	X	Х	Х	N/A	Х	Х	Х	Х	Х	Х	Х	None		
Paleta Creek – Cottonwood	5-06-005	Cottonwood – 1	Yes	Х	Х	Х	N/A	Review	Review	Review	X	Х	Х	Х	Channel	Intersects	c. 1964 concrete channel
Paleta Creek – Cottonwood	5-06-008	Cottonwood – 2	Yes	X	Х	Х	N/A	Review	Review	Review	Х	Х	Х	Х	Channel	Intersects	1969 concrete channel
Paleta Creek – Solola	5-06-020	Solola – 1	None	Х	Х	Х	N/A	Х	Х	Х	Х	Х	Х	Х	None		
Paleta Creek – Solola	5-06-023	Solola – 2	Yes	Х	Х	X	N/A	Review	Review	Review	Х	Х	X	Х	Channel	Intersects	Pre-1974 concrete channel
3644 Roselawn	OTO3694	3644 Roselawn	Yes	Х	х	Х	N/A	Review	Review	Review	X	х	Х	Х	Facility	Intersects	1951 structural facility
4202 J Street	HW04013	4202 J Street	None	X	Х	Х	N/A	Х	x	Х	X	Х	X	Х	None		
1206 Goodyear	OT04671	1206 Goodyear	None	Х	х	Х	N/A	Х	×	Х	X	х	Х	Х	None		
						Ε	arthen										
Maple Canyon Creek – Maple	5-02-140	Maple – 1 (basin)	Yes	X	Х	X	Review	N/A	N/A	N/A	×	x	X	Х	Channel	Intersects	c. 1966–1974 earthen channel
Washington Canyon Creek – Washingto	n 5-02-151	Washington – 1	Yes	Х	Х	X	Review	N/A	N/A	N/A	×	Х	X	Х	Channel	Intersects	c. 1941–1953 earthen channel
Mission Hills Canyon Creek – Titus	5-02-162	Titus – 1	Yes	X	X	X	Review	N/A	N/A	N/A	X	х	Х	X	Channel; 1850 Titus St.	-	c. 1966–1972 earthen channel; building more than 45 years old (not previously evaluated)
San Diego Bay– 28 th St	5-03-901	28 th St – 1	Yes	Х	Х	Х	Review	N/A	N/A	N/A	×	Х	Х	X	Channel	Intersects	c. 1953–1964 earthen channel
Chollas Creek – National	5-04-004	National – 1	Yes	Х	Х	Х	Review	N/A	N/A	N/A	Х	Х	Х	Х	Channel	Intersects	1954 earthen channel
Chollas Creek – Rolando	5-04-048	Rolando – 2	Yes	Х	Х	Х	Review	N/A	N/A	N/A	Х	Х	Х	Х	Channel	Intersects	1956 earthen channel
Chollas Creek- Martin	5-04-101	Martin – 1	Yes	х	х	X	Review	N/A	N/A	N/A	х	х	X	×	Channel; 3463 Martin St.;	Adjacent;	pre-1953 earthen channel; two buildings more than 45 years old (not previously evaluated)

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															St.		
Chollas Creek – J Street	5-04-163	J St – 1	Yes	X	х	X	Review	N/A	N/A	N/A	X	Х	X	X	Channel; 425-435 Toyne St.	-	pre-1953 earthen channel; two buildings more than 45 years old (not previously evaluated)
Auburn Creek – Home	5-04-220	Home – 1	None	Х	Х	Х	x	N/A	N/A	N/A	х	х	Х	Х	None		
Auburn Creek – Home	5-04-224	Home – 2	Yes	Х	Х	Х	Review	N/A	N/A	N/A	Х	Х	Х	Х	Channel	Intersects	1956 earthen channel
Auburn Creek – Home	5-04-229	Home – 4	Yes	Х	Х	Х	Review	N/A	N/A	N/A	Х	Х	Х	Х	Channel	Intersects	1956 earthen channel
Auburn Creek – Home	5-04-231	Home – 5	Yes	х	Х	Х	Review	N/A	N/A	N/A	Х	Х	Х	Х	Channel	Intersects	1956 earthen channel
Auburn Creek – Wightman	5-04-239	Wightman – 1	Yes	х	Х	Х	Review	N/A	N/A	N/A	Х	Х	Х	Х	Channel	Intersects	1968 earthen channel
Auburn Creek – Wightman	5-04-241	Wightman – 2	Yes	х	Х	Х	Review	N/A	N/A	N/A	Х	Х	Х	Х	Channel	Intersects	1968 earthen channel
Auburn Creek – Oakcrest	5-04-245	Oakcrest – 1	Yes	х	Х	Х	Review	N/A	N/A	N/A	Х	Х	Х	Х	Channel	Intersects	pre-1972 earthen channel
Chollas Creek- Megan	5-04-262	Megan – 2	Yes	Х	X	X	Review	N/A	N/A	N/A	×	х	Х	Х	Channel	Intersects	c. 1953–1964 earthen channel
South Chollas Creek – Southcrest	5-05-006	Alpha – 1	Yes	Х	X	X	Review	N/A	N/A	N/A	×	Х	X	X	Channel	Intersects	1959, 1964 earthen channel
South Chollas Creek – Euclid	5-05-019	Euclid – 1	Yes	Х	Х	Х	Review	N/A	N/A	N/A	Х	Х	Х	Х	Channel	Intersects	c. 1964 earthen channel
South Chollas Creek – Federal	5-05-035	Federal – 1	None	х	Х	Х	X	N/A	N/A	N/A	Х	Х	Х	Х	None		
South Chollas Creek Encanto Branch – Castana	5-05-205	Castana – 1	None	X	X	X	X	N/A	N/A	N/A	×	х	Х	Х	None		
South Chollas Creek Encanto Branch – Imperial	5-05-304	Imperial – 1	Yes	Х	Х	X	Review	N/A	N/A	N/A	×	х	Х	Х	Channel	Intersects	c. 1966–1972 earthen channel
South Chollas Creek Encanto Branch – Jamacha	5-05-603	Jamacha – 1	None	Х	X	×	X	N/A	N/A	N/A	×	Х	X	X	None		
South Chollas Creek Encanto Branch – Jamacha	5-05-606	Jamacha – 2	None	х	Х	Х	х	N/A	N/A	N/A	×	Х	Х	Х	None		

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South Chollas Creek Encanto Branch – Jamacha	5-05-610	Jamacha – 3	Yes	Х	X	X	Review	N/A	N/A	N/A	X	Х	X	Х	Channel	Intersects	c. 1953 earthen channel
South Chollas Creek Encanto Branch – Jamacha	5-05-702	Lobrico – 1	Yes	Х	Х	Х	Review	N/A	N/A	N/A	X	Х	Х	X	Channel	Intersects	c. 1968–1971 earthen channel
South Chollas Creek Encanto Branch – Jamacha	5-05-802	Cadman – 1	None	Х	Х	Х	Х	N/A	N/A	N/A	X	х	Х	Х	None		
Paleta Creek – Solola	5-06-025	Cervantes – 1	Yes	Х	Х	Х	Review	N/A	N/A	N/A	х	Х	Х	Х	Channel	Intersects	1954 earthen channel
					Sı	veetwa	ter Water:	shed									
		1	1			Co	oncrete				,				Ţ.		
Sweetwater River – Parkside	5-11-003	Parkside – 1	None	Х	Х	Х	N/A	Х	Х	Х	Х	Х	Х	Х	None		
							Watershe	d									
	1	1	1			Co	oncrete		1		1				Γ		
Nestor Creek – Nestor	5-22-010	Cedar – 2	None	Х	Х	Х	N/A	X	Х	Х	Х	Х	X	Х	None		
Nestor Creek – Nestor	5-22-013	Dahlia – 1	None	Х	Х	Х	N/A	Х	Х	Х	Х	Х	X	Х	None		
Nestor Creek – Nestor	5-22-028	30 th St – 1	None	Х	Х	Х	N/A	Х	Х	Х	Х	Х	Х	Х	None		
Nestor Creek – Outer	5-22-110	Outer – 1	None	X	X	Х	N/A	Χ	Х	Х	X	Х	Χ	Х	None		
		1	, ,			Ε	arthen										
Nestor Creek – Nestor	5-22-008	Cedar – 1	Yes	Х	Х	X	Review	N/A	N/A	N/A	Х	Х	X	Х	Channel		Pre-1953 earthen channel
Nestor Creek – Nestor	5-22-016	Cerissa – 1	None	Х	Х	Х	x	N/A	N/A	N/A	×	х	Х	Х	None		
Nestor Creek – Nestor	5-22-023	Grove – 1	Yes	Х	Х	Х	Review	N/A	N/A	N/A	Х	Х	Х	Х	Channel	Intersects	c. 1971 earthen channel
Nestor Creek – Outer	5-22-112	Outer – 2	Yes	Х	Х	Х	Review	N/A	N/A	N/A	Х	х	Х	Х	Channel		c. 1969–1974 earthen channel
					Tiji	uana R	iver Watei	rshed									
						С	oncrete										
Tijuana River – Tocayo	6-02-118	Tocayo – 2	None	Х	Х	Х	N/A	Х	Х	Х	Х	Х	Х	Х	None		

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Tijuana River – Smythe	6-03-138	Via Encantadoras – 2	None	Х	X	X	N/A	Х	Х	Х	X	X	х	Х	None		
Tijuana River – Smythe	6-03-143	Via Encantadoras – 3	None	Х	X	X	N/A	X	Х	Х	X	X	X	Х	None		
Tijuana River – Smythe	6-03-150	Via de la Bandola – 1	None	Х	Х	Х	N/A	Х	х	Х	х	Х	х	х	None		
						Ε	arthen			•				•			
Tijuana River – Pilot & Smugglers	6-01-020	Pilot Channel – 1	Yes	Х	Х	Х	Review	N/A	N/A	N/A	X	X	Х	Х	P-37-025924 Adj	acent	Hollister Street Bridge
Tijuana River – Pilot & Smugglers	6-01-100	Smuggler's Gulch - 1	None	Х	X	X	×	N/A	N/A	N/A	x	X	X	X	None		
Tijuana River – Tocayo	6-02-115	Tocayo – 1	None	Х	Х	Х	х	N/A	N/A	N/A	х	x	Х	Х	None		
Tijuana River – Smythe	6-03-135	Via Encantadoras – 1	None	Х	Х	Х	Х	N/A	N/A	N/A	х	Х	Х	Х	None		
Tijuana River – Smythe	6-03-147	Smythe – 1	Yes	Х	Х	Х	Review	N/A	N/A	N/A	х	х	Х	Х	P-37-031491 Inte		Historic path of Otay Mesa Road
Spring Canyon Creek – Cactus	6-04-251	Cactus – 1 (basin)	None	Х	Х	Х	х	N/A	N/A	N/A	х	х	Х	Х	None		
Spring Canyon Creek – Cactus	6-04-253	Cactus – 2 (basin)	None	Х	Х	Х	Х	N/A	N/A	N/A	×	х	Х	Х	None		
Tijuana River – Siempre Viva	6-05-110	Siempre Viva – 1 (basin)	None	Х	X	X	Х	N/A	N/A	N/A	x	Х	Х	Х	None		
Tijuana River – La Media	6-06-011	La Media – 1	None	Х	Х	Х	x	N/A	N/A	N/A	X	х	Х	Х	None		

x = Activities requiring no further review; N/A = not applicable; MBHS = Mission Bay High School; PB = Pacific Beach
 * Facilities listed as "None" under "Property" do not require additional evaluation.

6 MANAGEMENT CONSIDERATIONS

6.1 REGULATORY ANALYSIS – IMPACTS TO HISTORIC PROPERTIES

The goal of this inventory is to determine whether the implementation of routine maintenance activities on MWMP facilities has the potential to significantly impact historical resources under CEQA or to have an adverse effect on historic properties under Section 106 of the NHPA. To determine the potential for impact, Dudek considered the presence of previously recorded historic properties, potential unrecorded properties, and the type and invasiveness of the proposed maintenance activities. Cultural resources, including archaeological and tribal cultural properties, are considered in a separate report (DeCarlo et al. 2019).

An archival review was conducted to reveal the presence or absence of previously identified historic properties within the MWMP APE. The review revealed that few historic properties were previously identified near the MWMP APE. The dearth of recorded properties is likely the result of the predominantly post-war development of the area. Historical aerial photographs show that the MWMP facilities were constructed in conjunction with residential or commercial development. All but a few of the MWMP facilities are surrounded by development, including modified terrain, buildings, pavement, and landscaping.

Many of the maintenance activities proposed by the MWMP are non-invasive or require no ground disturbance. Non-invasive maintenance activities include vegetation and graffiti removal, herbicide and rodenticide activities, temporary access/loading, temporary stockpiling, and temporary water diversion. These non-invasive activities would have no potential to cause an adverse effect or to significantly impact historic properties.

Proposed ground-disturbing MWMP activities include vegetation management, sediment and debris removal, and bank repair/grading. With regard to historic properties, these activities do not have the potential to impact concrete channels or the previously identified historic properties presented in Table 1. However, there is the potential to cause an adverse effect or to significantly impact earthen-bottom facilities if the proposed ground-disturbing activities result in alteration of a facility's shape, depth, or alignment. It is anticipated that the proposed work would continue to maintain the earthen-bottom facility in its as-built condition and dimensions, thereby complying with Section 106 and CEQA. A simple verification that the proposed work would retain the as-built condition and dimensions of the earthen-bottom facility would confirm that there would be no adverse effect to the historic property in question.

Invasive ground-disturbing activities include concrete repair (major and minor) and riprap replacement. These activities would have the potential to cause an adverse effect or to significantly impact historic properties (see Table 2). However, for minor concrete repairs that are non-mechanized (i.e., done by hand) and that would be bonded to the existing concrete in a manner

consistent with the existing material and surface texture, the appearance and form of the existing channel would be maintained, thereby complying with Section 106 and CEQA. A simple verification that the proposed non-mechanized work would retain the as-built condition and texture of the concrete-lined facility would confirm that there would be no adverse effect to the historic property in question. For mechanized minor concrete repairs, major concrete repairs, and riprap replacement, at the time that specific concrete repair or riprap replacement is proposed, mitigation measures, including documentation and evaluation of the historic property on California Department of Parks and Recreation (DPR) 523 forms, would be triggered.

The majority of MWMP-proposed activities do not have the potential to significantly impact historical resources under CEQA or have an adverse effect on historic properties under Section 106 of the NHPA. There are circumstances at facilities built prior to 1973, such as invasive ground-disturbing activities, that would require further historical review prior to maintenance. Dudek has reviewed the sensitivity of the MWMP facilities and constructed the Historical Resources Review Matrix (Table 2) to guide the City's MWMP and prevent adverse effects to historic properties.

6.2 MITIGATION MEASURES

No adverse effects to historic properties that are listed in or eligible for listing in the CRHR or NRHP have been identified, including those historic properties that have not been formally evaluated. Impacts to all currently known historic properties would be avoided. However, mitigation measures were developed to reduce the potential adverse effect to historic properties should maintenance activities change. This historic property inventory was completed in compliance with federal, state, and local regulations; therefore, separate mitigation measures are not required. Rather, each mitigation measure has been designed to fulfill the requirements of Section 106 of the NHPA, the CEQA Guidelines, and the City's Historical Resources Guidelines. The City of San Diego would be the lead agency implementing historic property mitigation measures.

Implementation of the following mitigation measures (MMs) would reduce potential adverse effects to historic properties to a level of no adverse effect:

- **MM-HR-1 Avoidance of Historical Resources.** Should avoidance of an historical resource be impractical, the following shall be implemented to protect known historical resources that have not been evaluated for significance or that have been evaluated as significant under Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA):
 - Prior to Start of Activities Marked as Requiring Further Review in Table 2,
 Historical Resources Review Matrix, and as Determined Necessary by a Qualified Architectural Historian's Review of the Proposed Maintenance Activity

- A. Principal Investigator (PI) Shall Attend Pre-Construction Meetings
 - Prior to beginning any ground-disturbing work, City of San Diego (City)
 Transportation & Storm Water Department (TSW) shall arrange a preconstruction meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted),
 Mitigation Monitoring Coordination (MMC) representative, Project
 Consultant(s), TSW, Construction Manager (CM) (if applicable), Resident
 Engineer (RE) (if applicable), and other parties of interest. The principal investigator, or his/her designated representative, shall attend any ground-disturbance related preconstruction meetings to ensure that the proposed maintenance activity is exempt from further historical resource review.
- **MM-HR-2 Recording and Evaluation of Historic Properties.** Should avoidance of a historic property be impractical, the following shall be implemented to document and evaluate historical resources pursuant to Section 106 of the NHPA and CEQA, and City Historical Resources Guidelines (HRG).
 - Prior to Start of Activities Marked as Requiring Further Review in Table 2,
 Historical Resources Review Matrix, and as Determined Necessary by a Qualified Architectural Historian's Review of the Proposed Maintenance Activity
 - A. For identified historical resources that have not been documented or evaluated for significance pursuant to Section 106 of NHPA and CEQA.
 - A qualified Architectural Historian shall document and evaluate identified historical resources prior to the commencement of construction/maintenance activities. Documentation and evaluation shall be presented in an Historical Resources Technical Report as defined by the City of San Diego Historical Resources Board.
 - Documentation of historical resources shall be done on the appropriate California Department of Parks and Recreation (DPR) 523 forms, and shall include a significance evaluation. DPR 523 forms shall be appended to the Historical Resources Technical Report.
 - 3. DPR 523 forms shall be submitted to the State Historic Preservation Office (SHPO) for concurrence.
 - 4. After SHPO concurrence, the DPR forms shall be submitted to the South Coastal Information Center (SCIC).

- B. For identified historical resources previously documented and/or evaluated for significance pursuant to Section 106 of NHPA and CEQA
 - 1. A qualified Architectural Historian shall update existing DPR 523 forms for previously identified and documented historical resources prior to the commencement of maintenance activities.
 - 2. Updated DPR 523 forms with new or revised significance evaluations will be submitted to the SHPO for concurrence.
 - 3. After SHPO concurrence, the updated DPR forms will be submitted to the SCIC.

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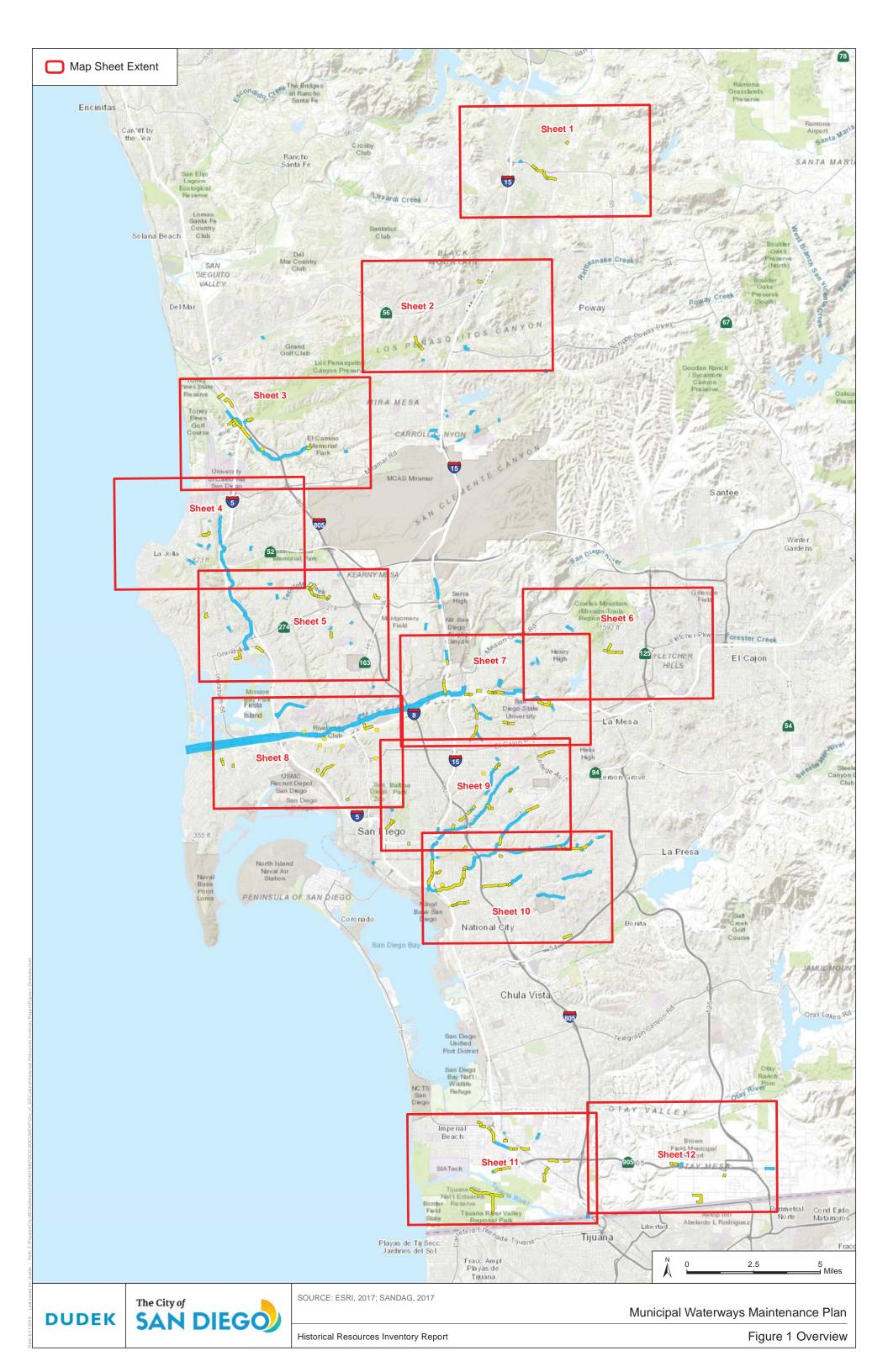
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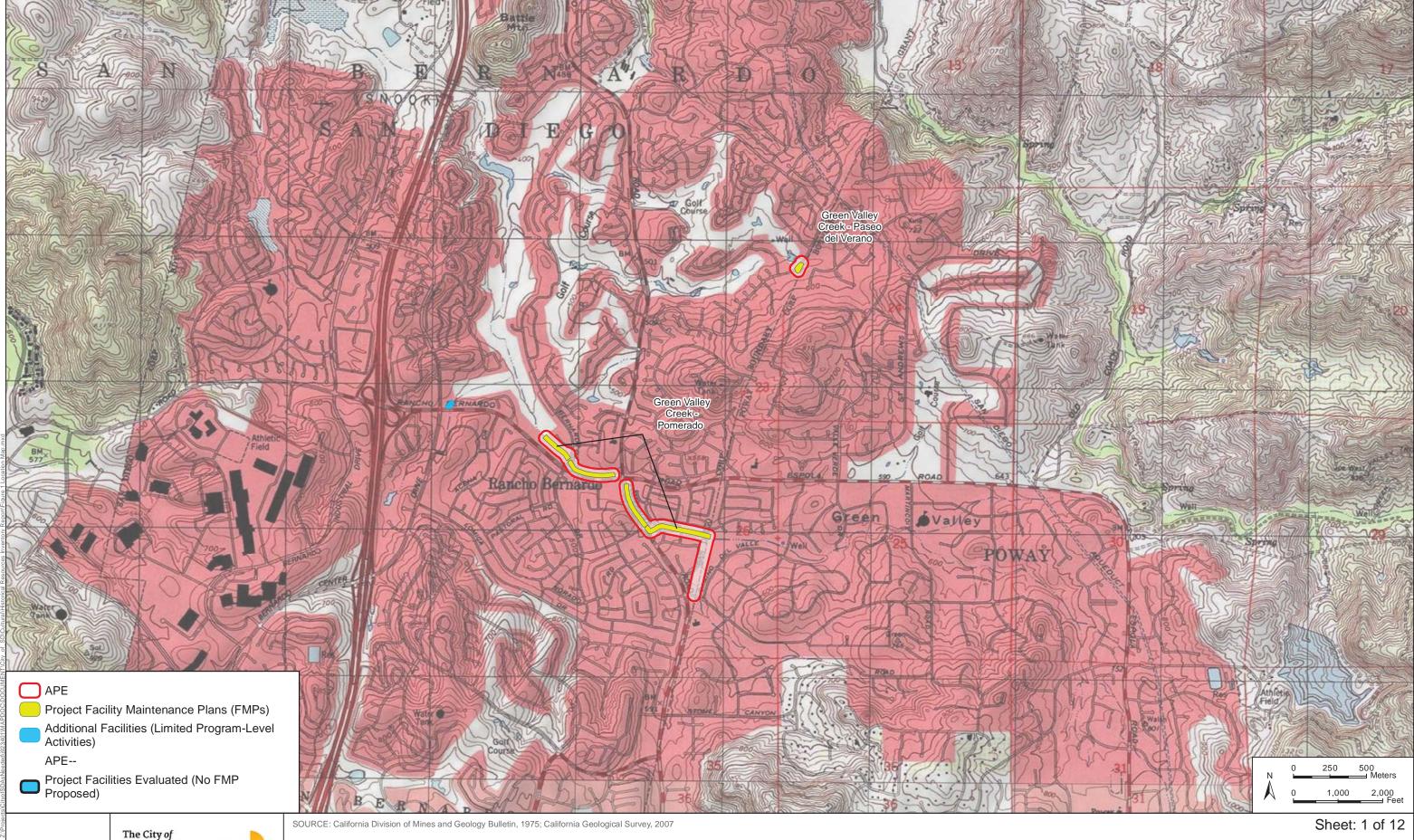
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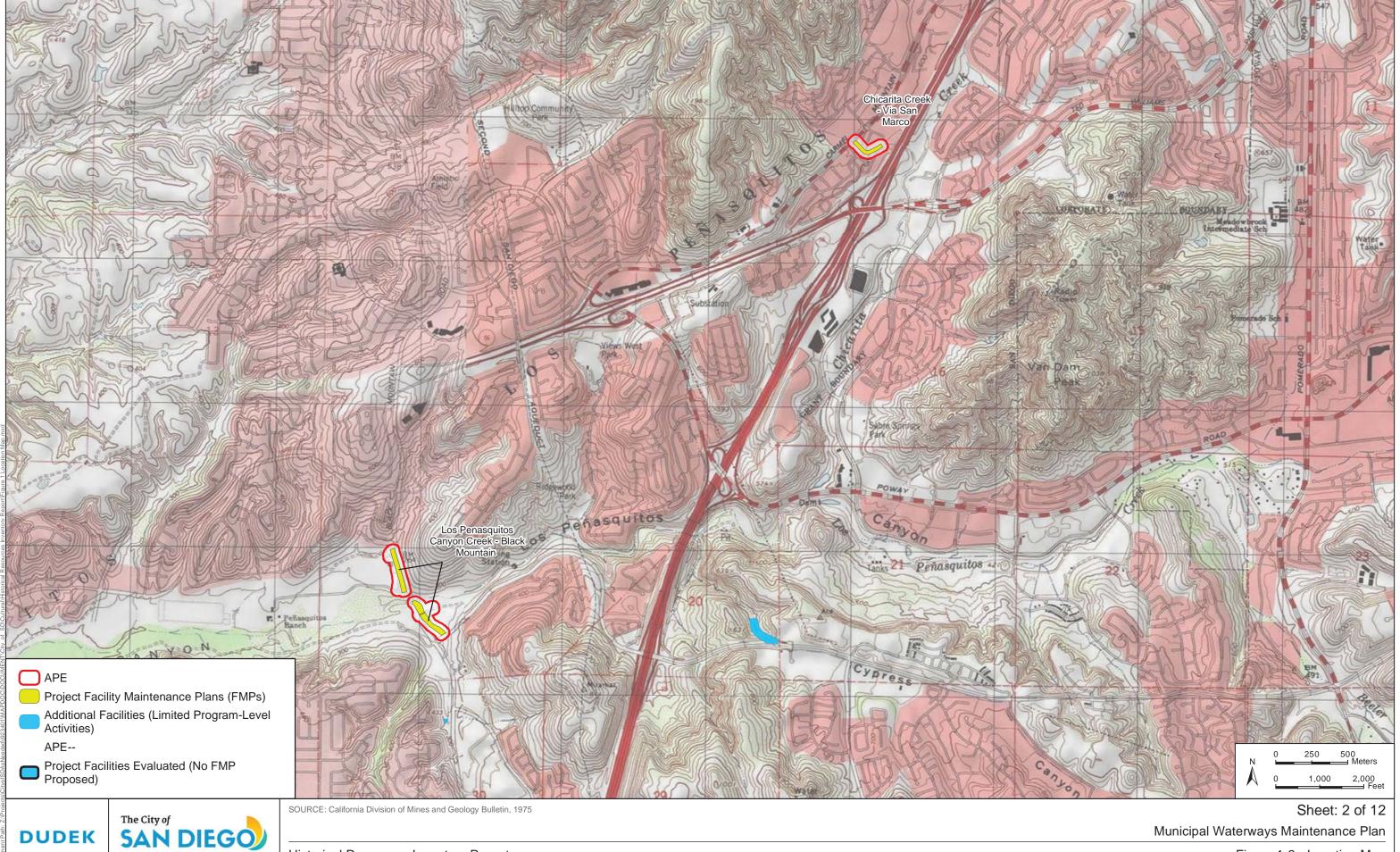
Municipal Waterways Maintenance Plan

Historical Resources Inventory Report

Figure 1-1 - Location Map

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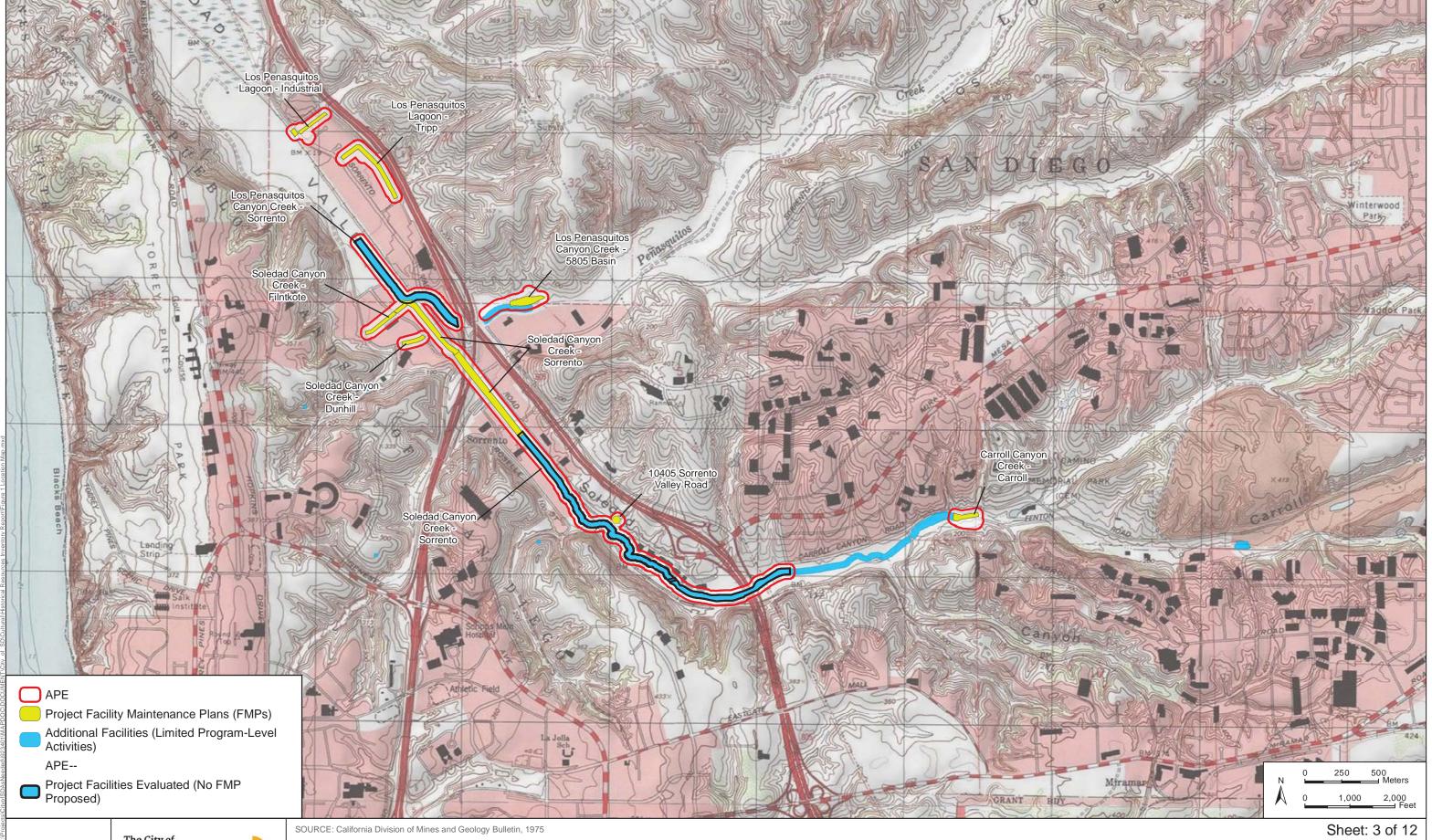
Historical Resources Inventory Report

Municipal Waterways Maintenance Plan

Figure 1-2 - Location Map

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Municipal Waterways Maintenance Plan

Historical Resources Inventory Report

Figure 1-3 - Location Map

Historical Resources Inventory Report for the Municipal Waterways Maintenance Plan

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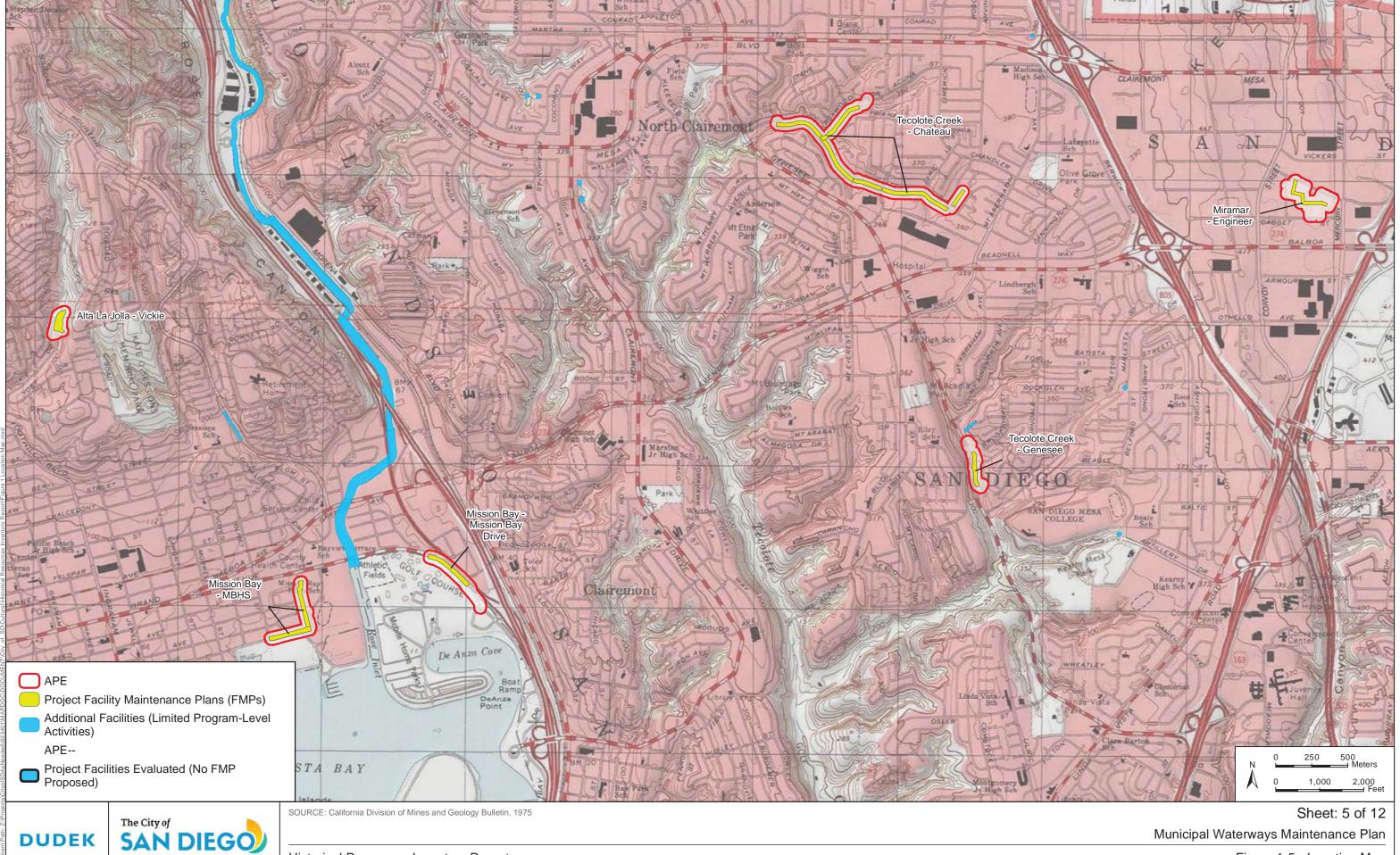


Municipal Waterways Maintenance Plan

Figure 1-4 - Location Map



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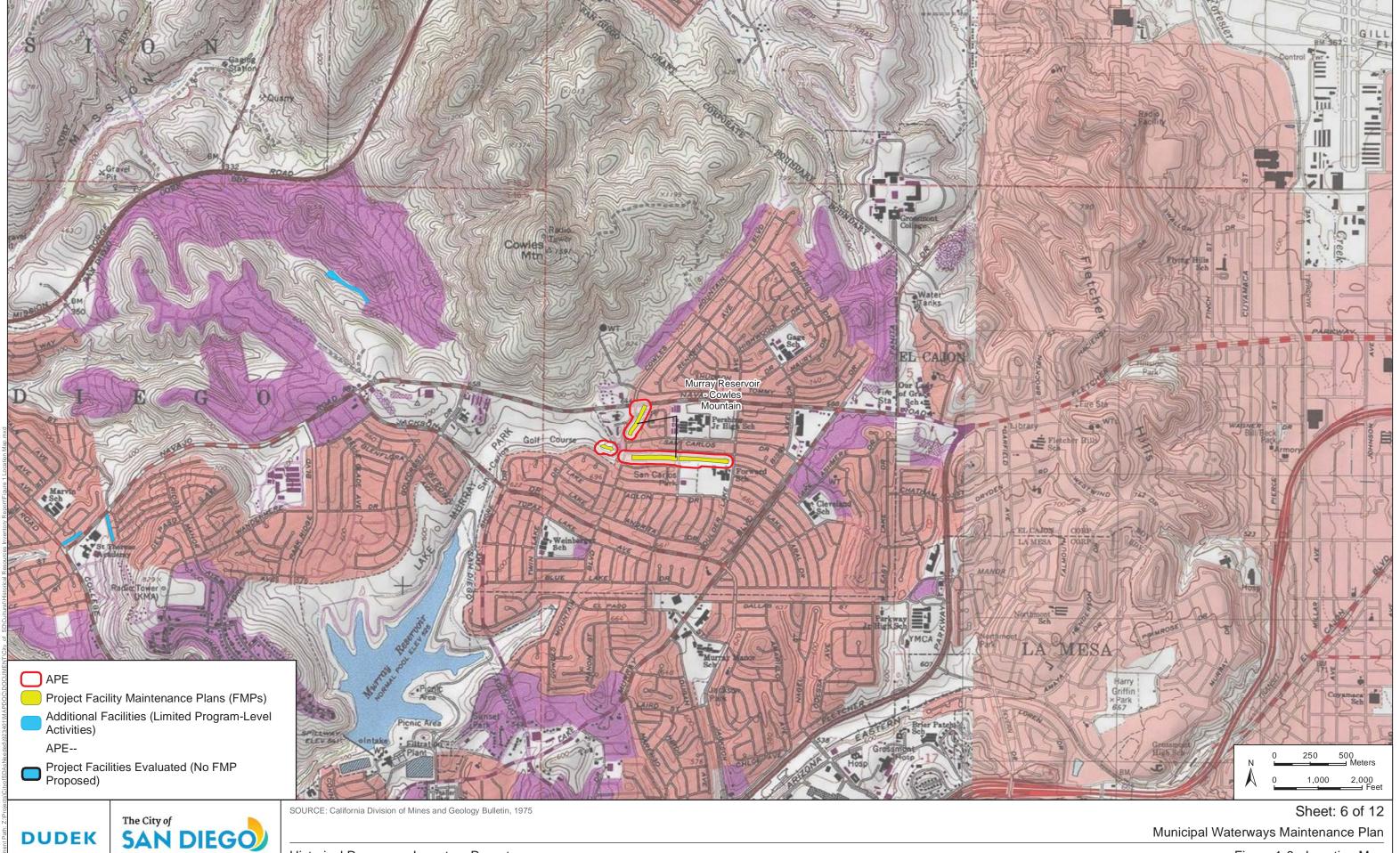


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Figure 1-5 - Location Map



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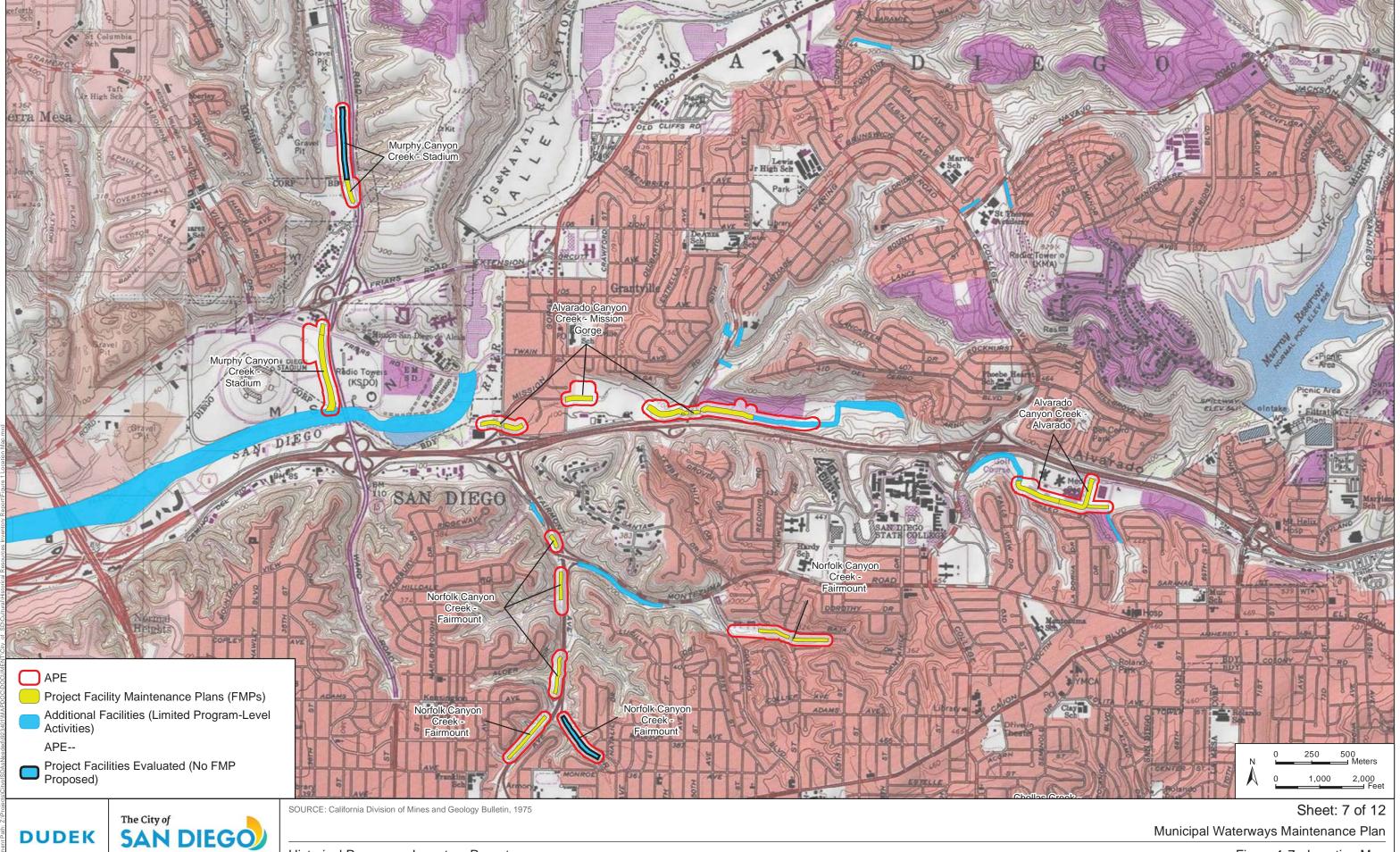
Municipal Waterways Maintenance Plan

Figure 1-6 - Location Map

Historical Resources Inventory Report for the Municipal Waterways Maintenance Plan

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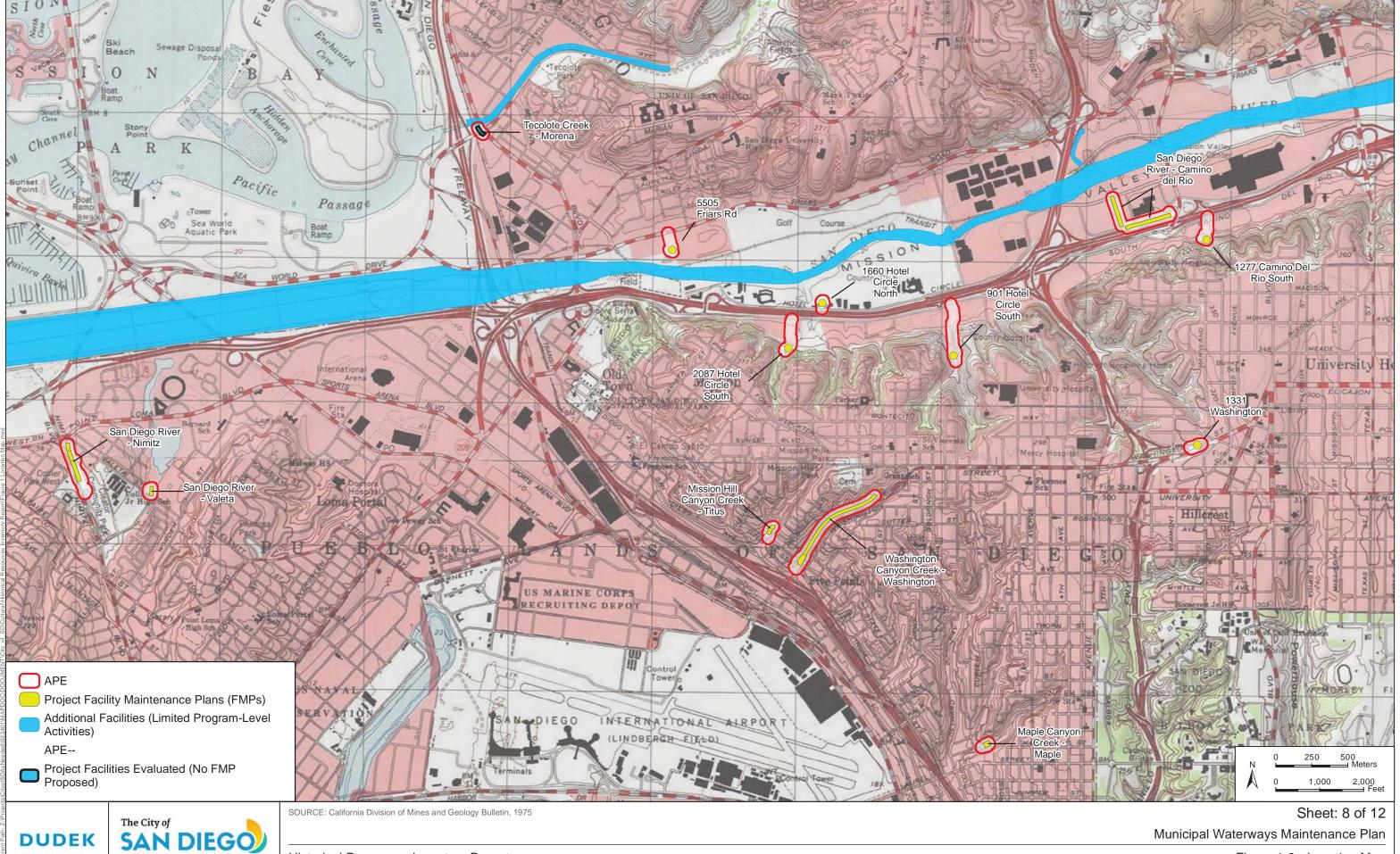
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Figure 1-7 - Location Map



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Figure 1-8 - Location Map



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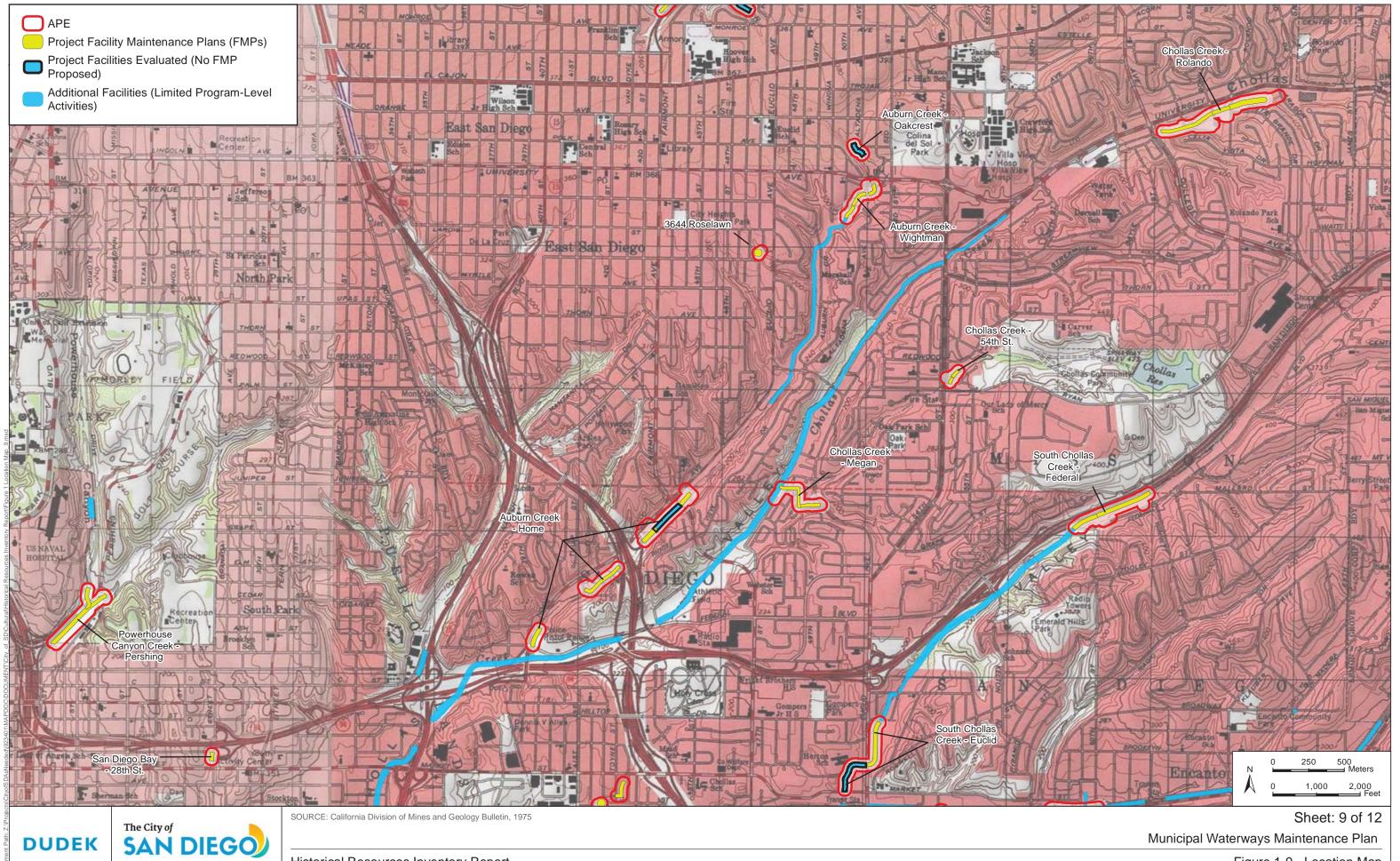
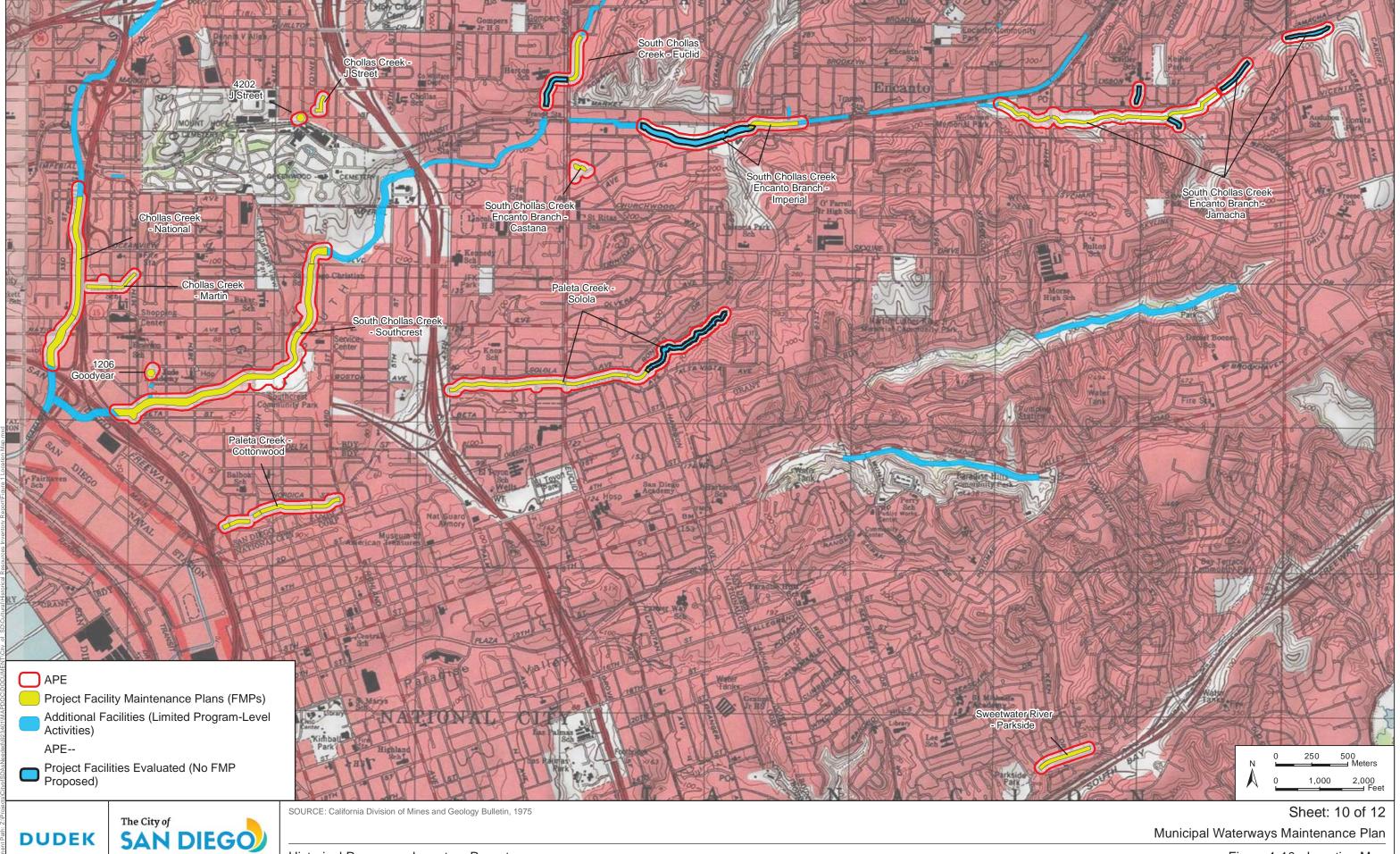


Figure 1-9 - Location Map



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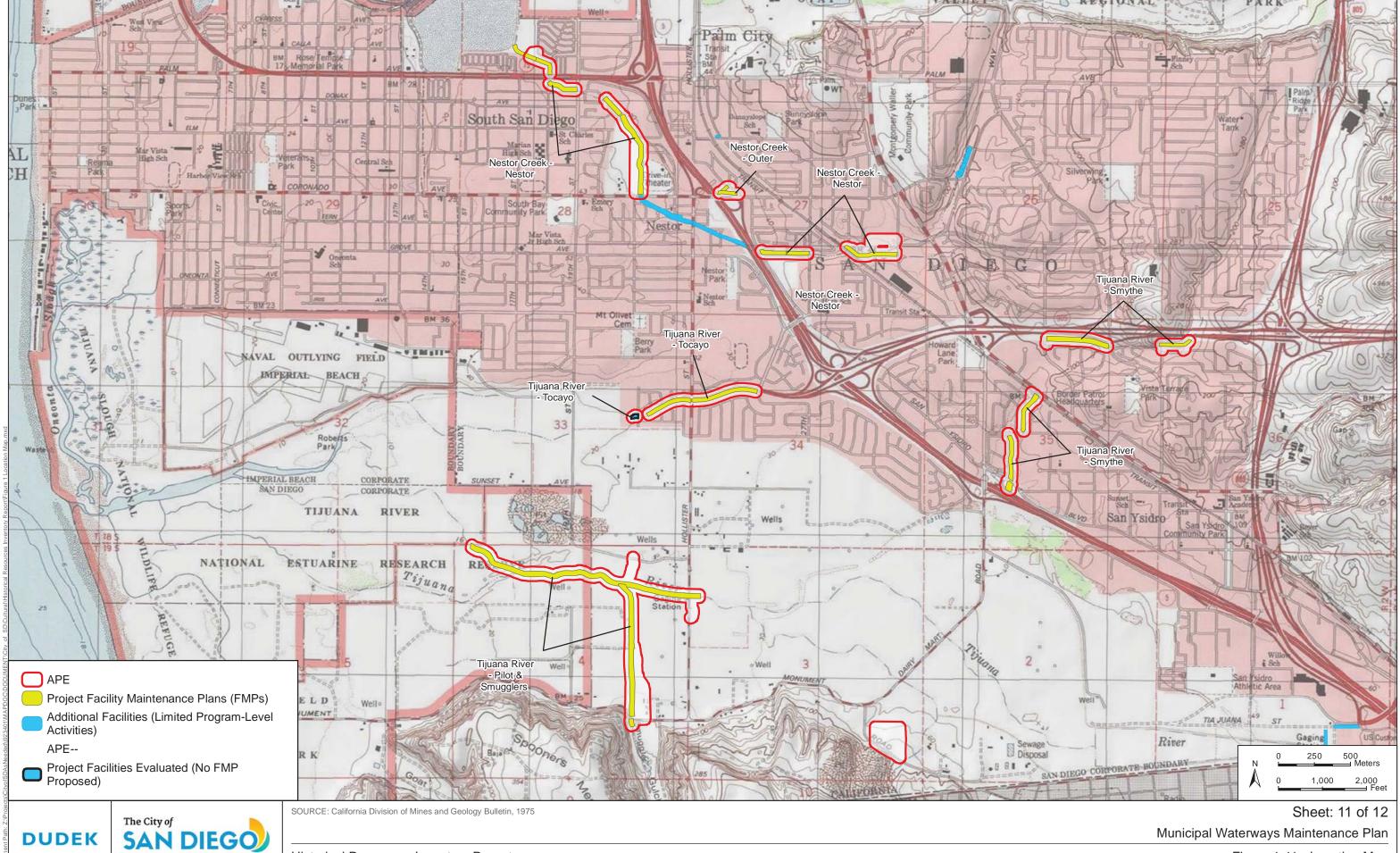


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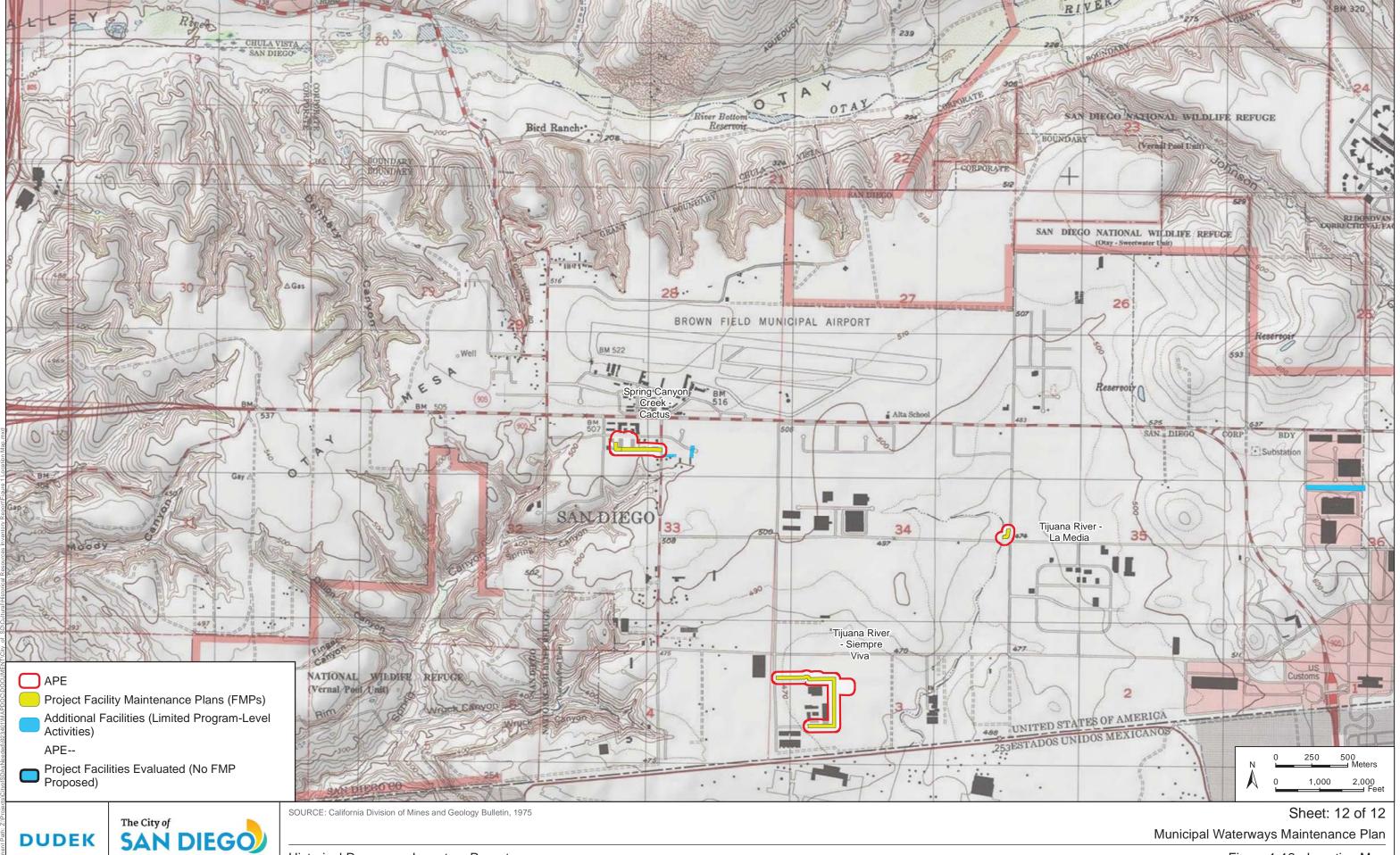
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Figure 1-11 - Location Map



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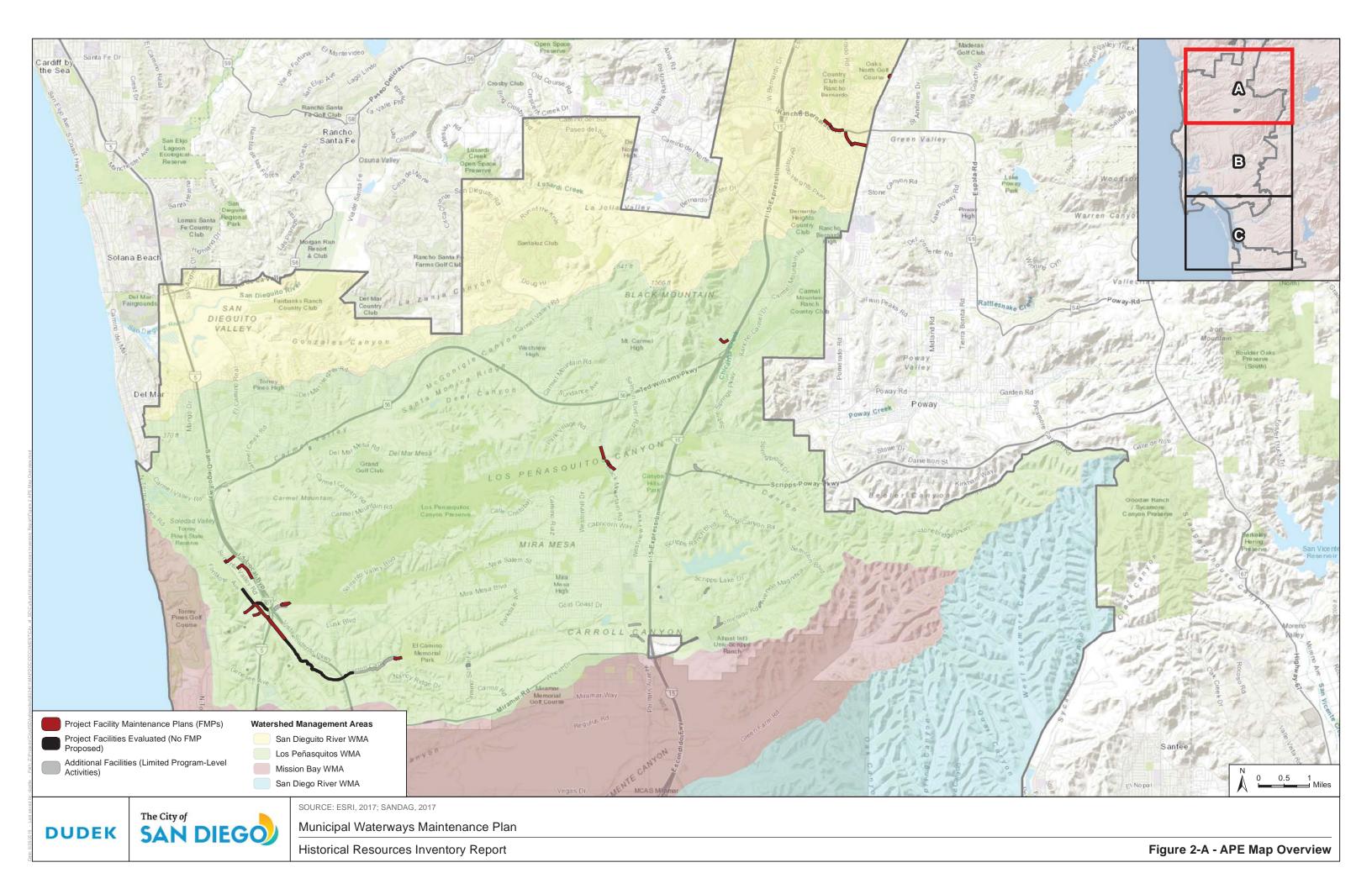
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Figure 1-12 - Location Map

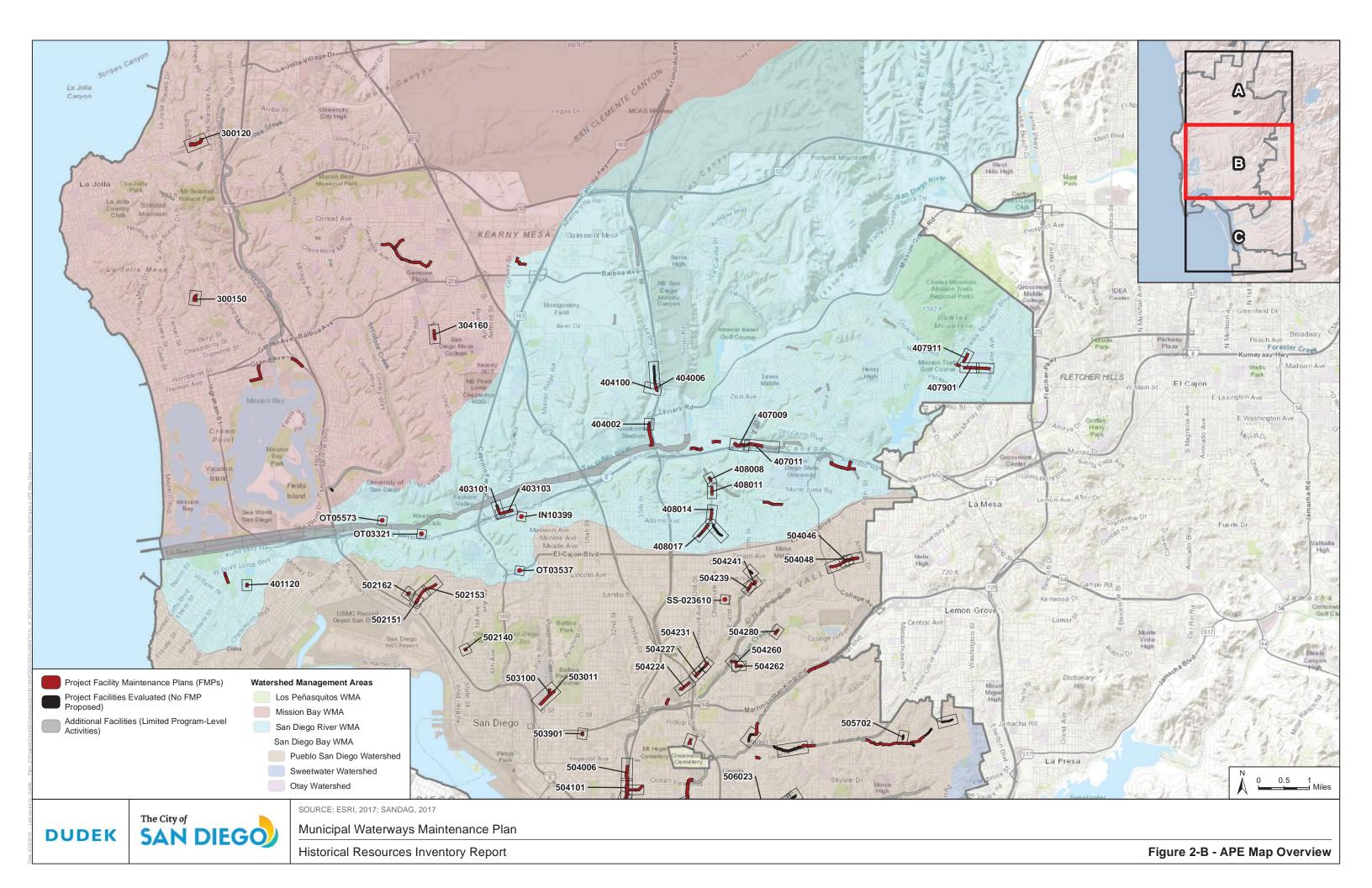


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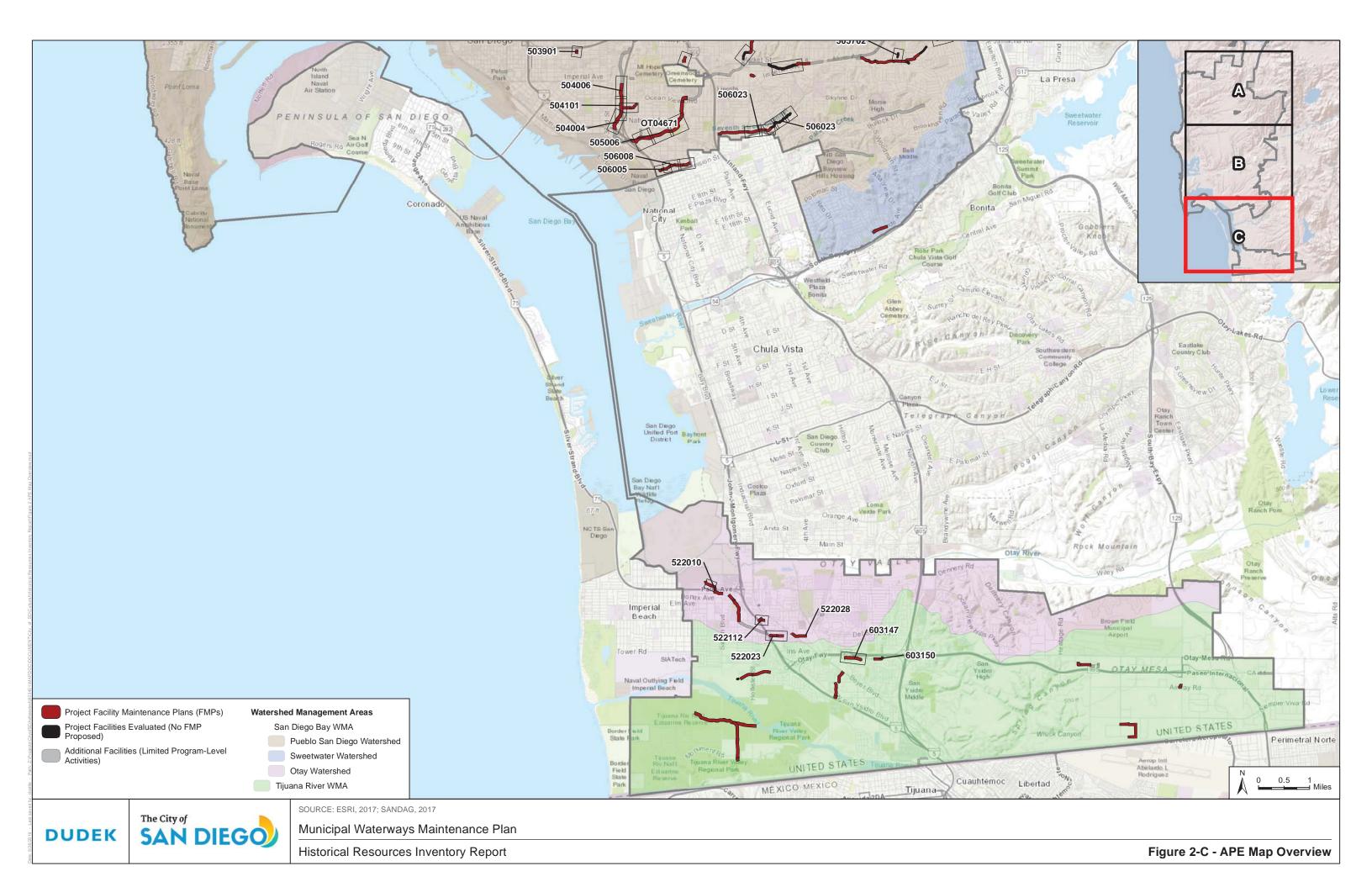


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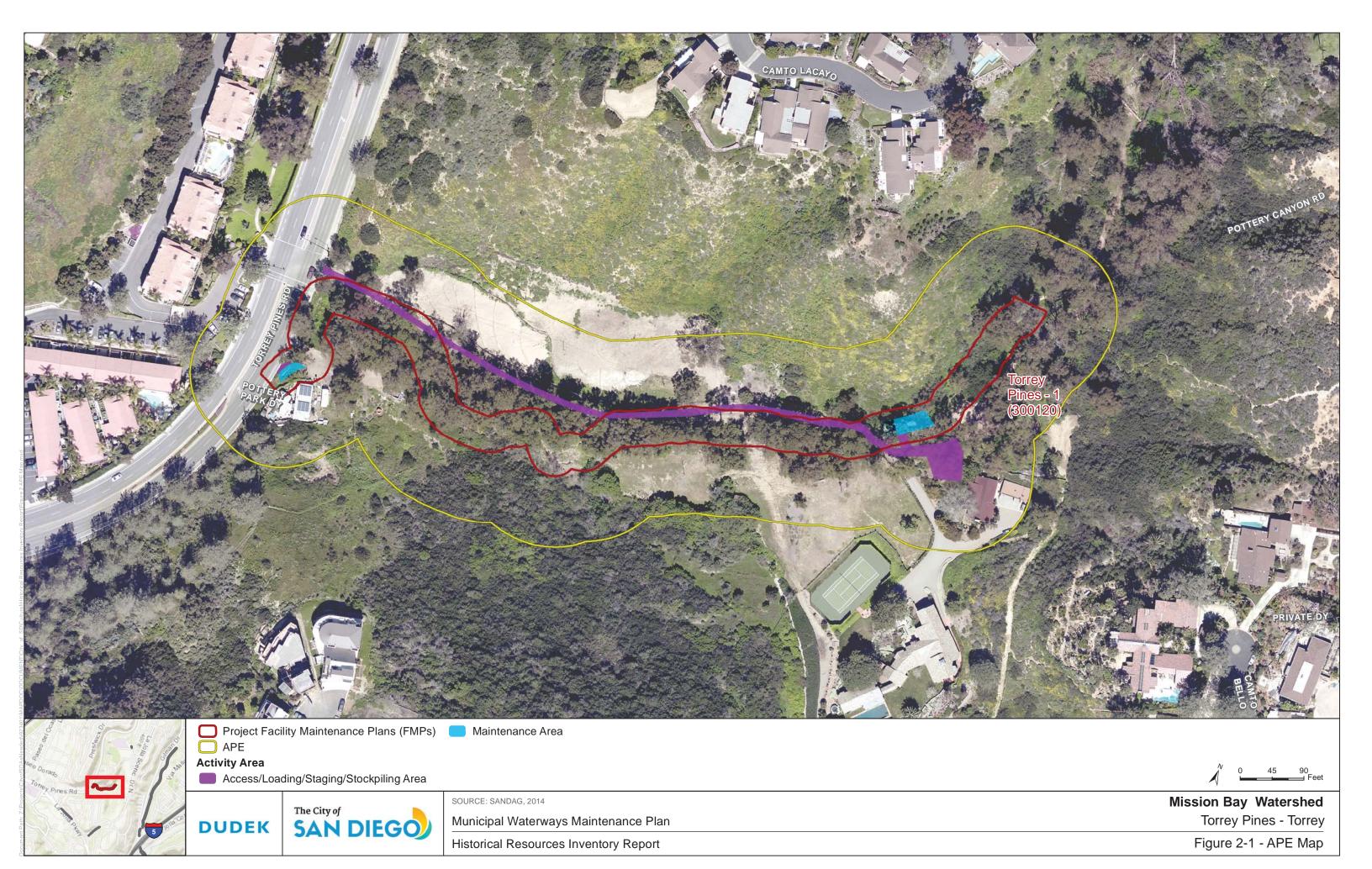


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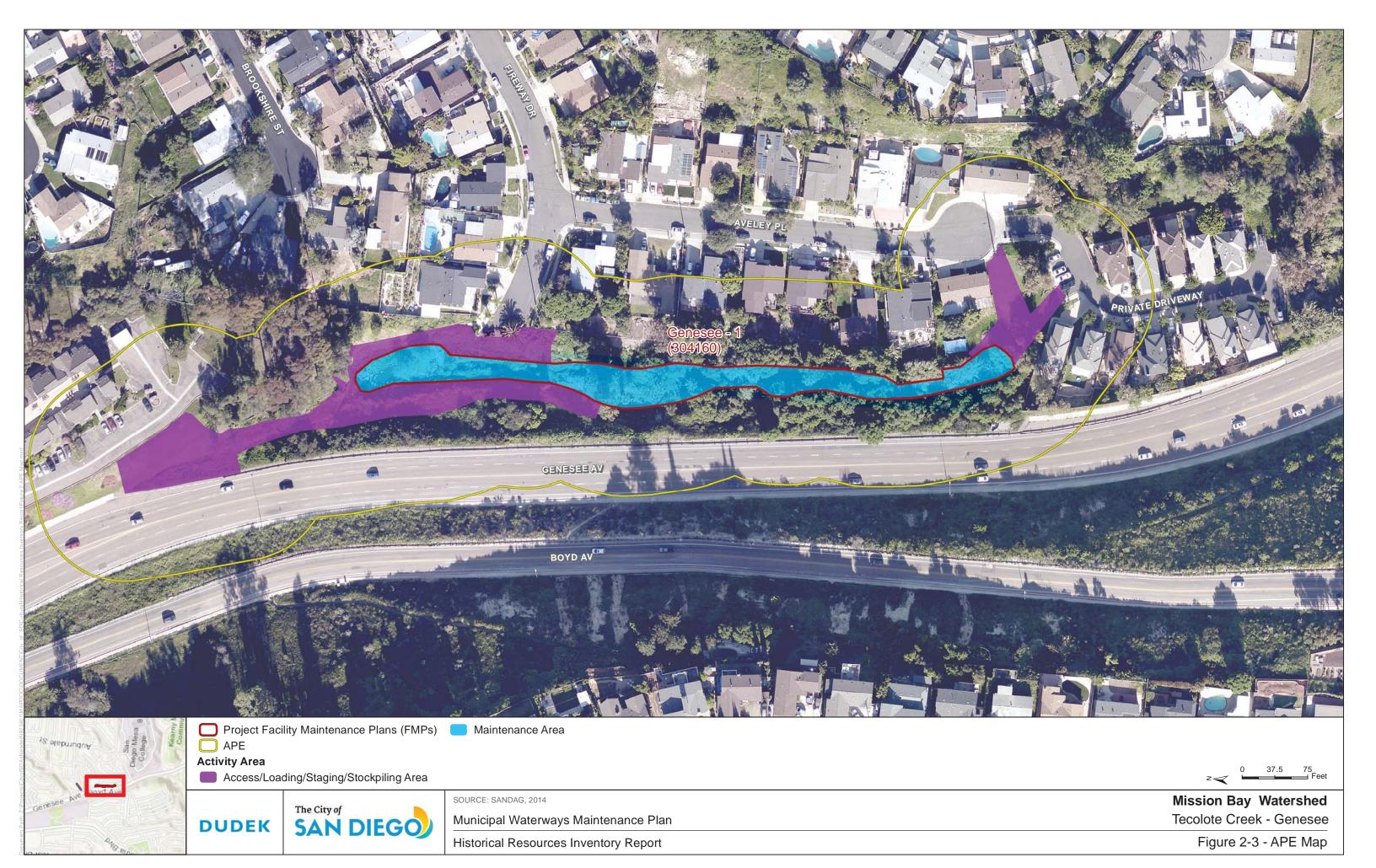
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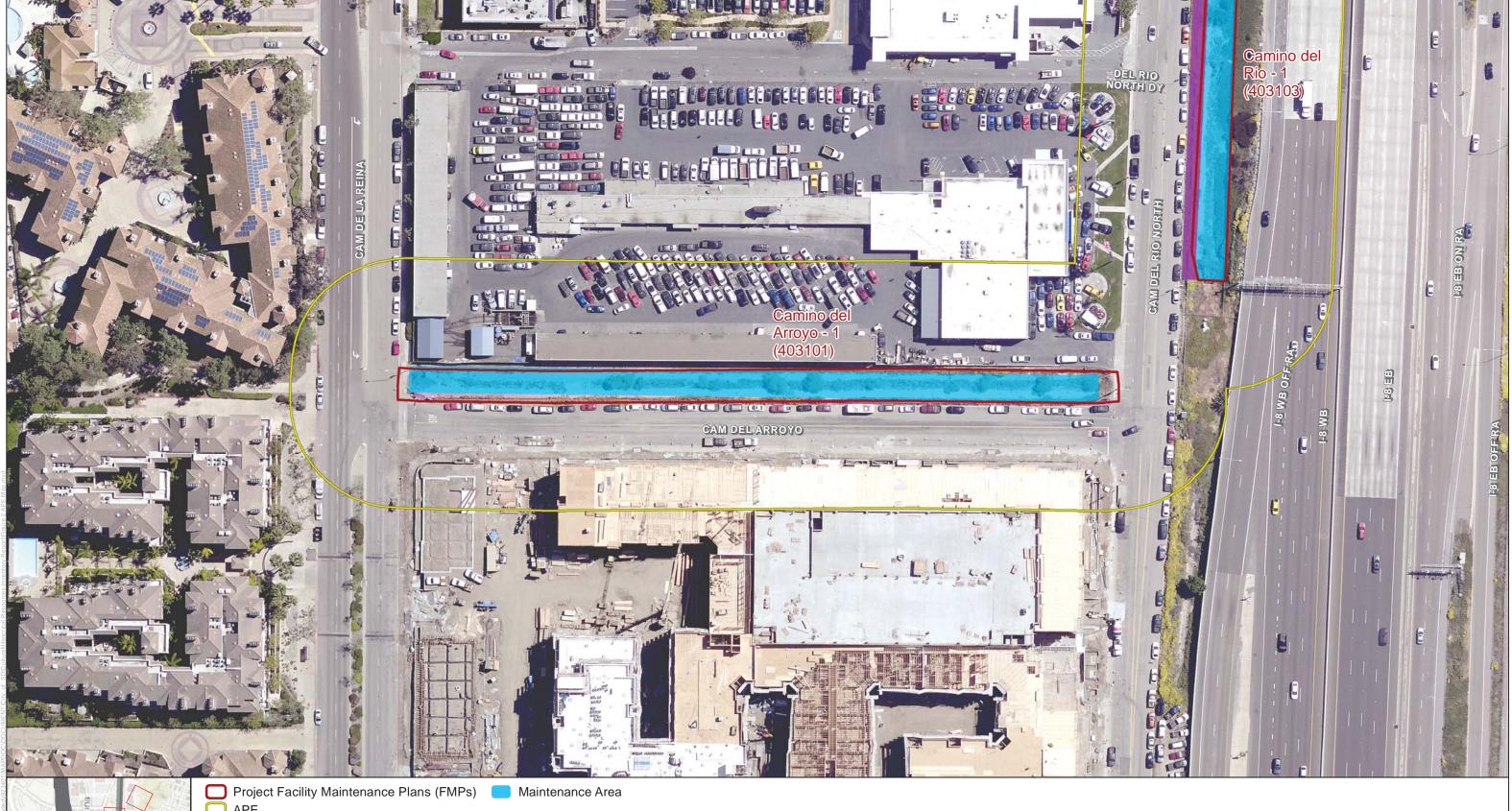


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APE

Activity Area

Access/Loading/Staging/Stockpiling Area



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SOURCE: SANDAG, 2014

Historical Resources Inventory Report

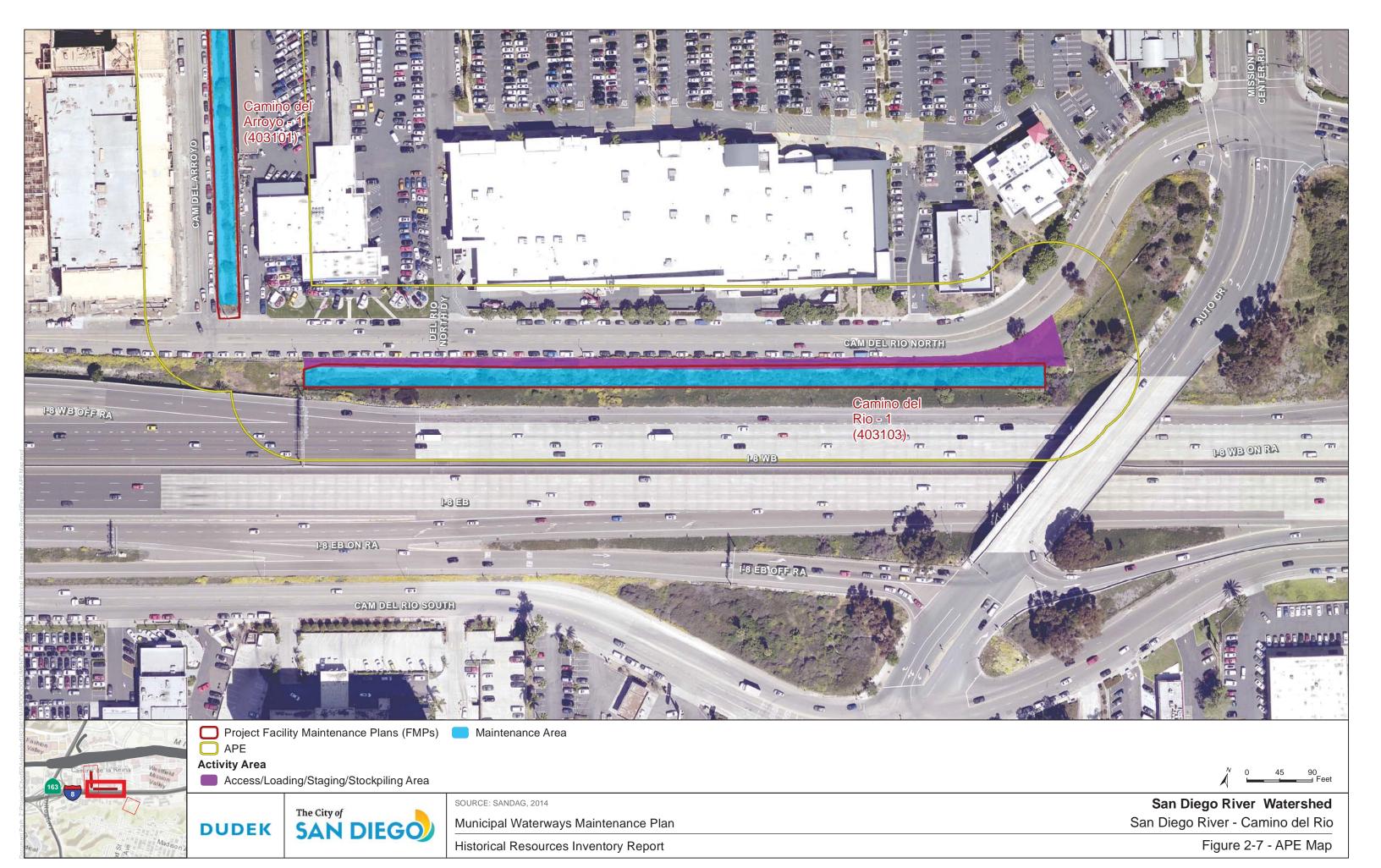
San Diego River Watershed

San Diego River - Camino del Rio Municipal Waterways Maintenance Plan

Figure 2-6 - APE Map

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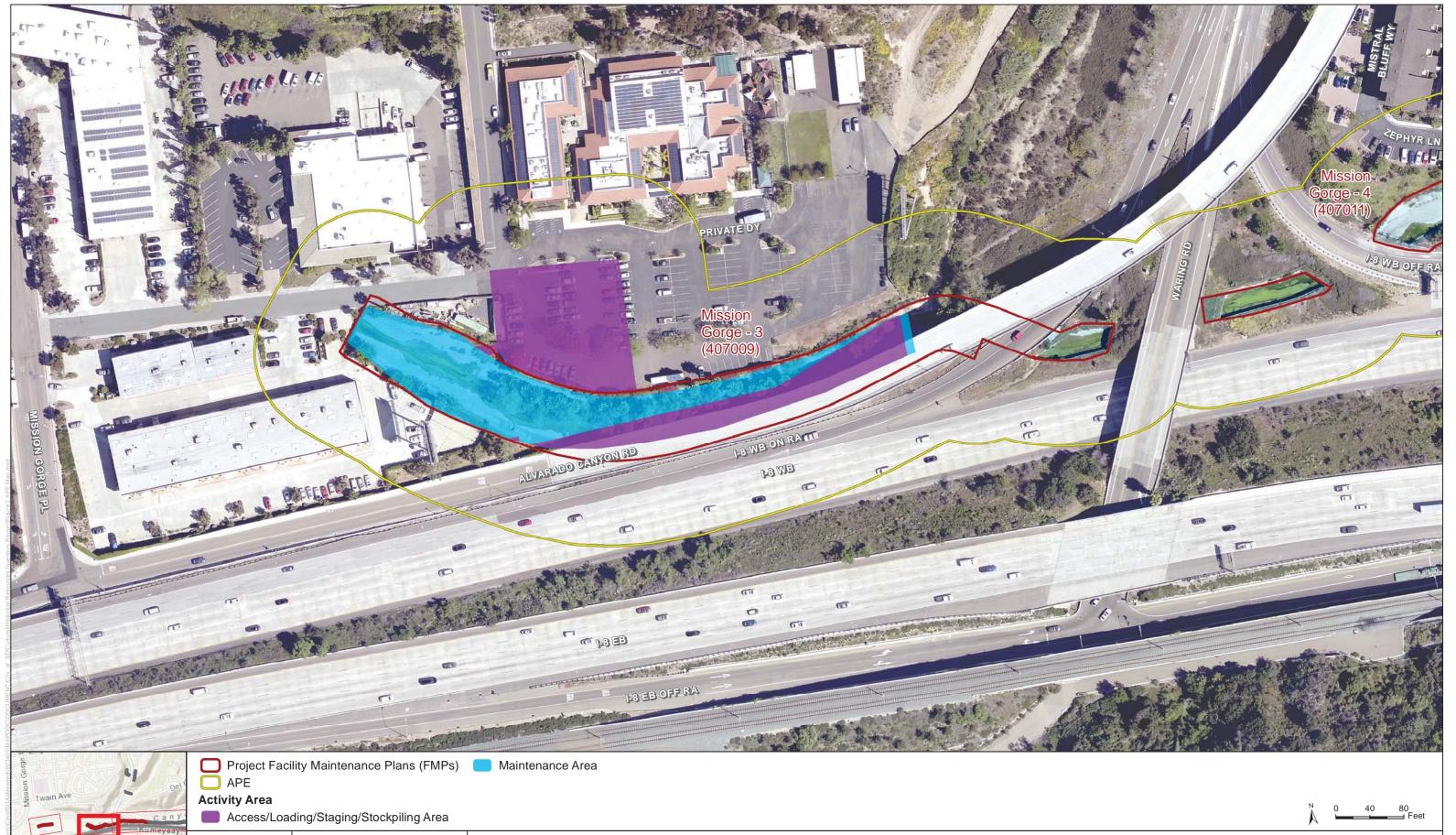
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SOURCE: SANDAG, 2014

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Historical Resources Inventory Report

San Diego River Watershed

Alvarado Canyon Creek - Mission Gorge

Figure 2-10 - APE Map

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SOURCE: SANDAG, 2014

San Diego River Watershed

Murray Reservoir - Cowles Mountain

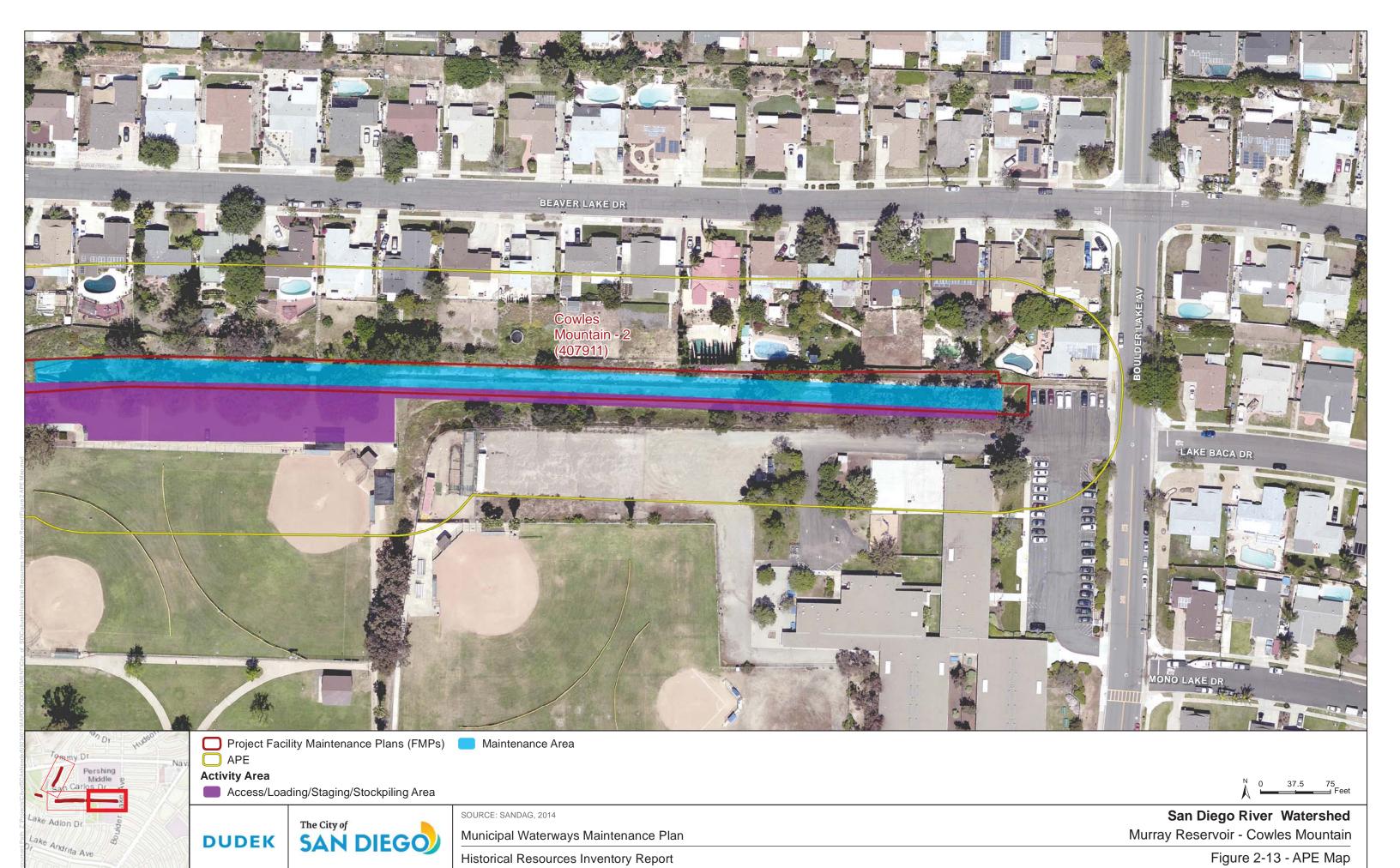
Historical Resources Inventory Report

Municipal Waterways Maintenance Plan

Figure 2-12 - APE Map

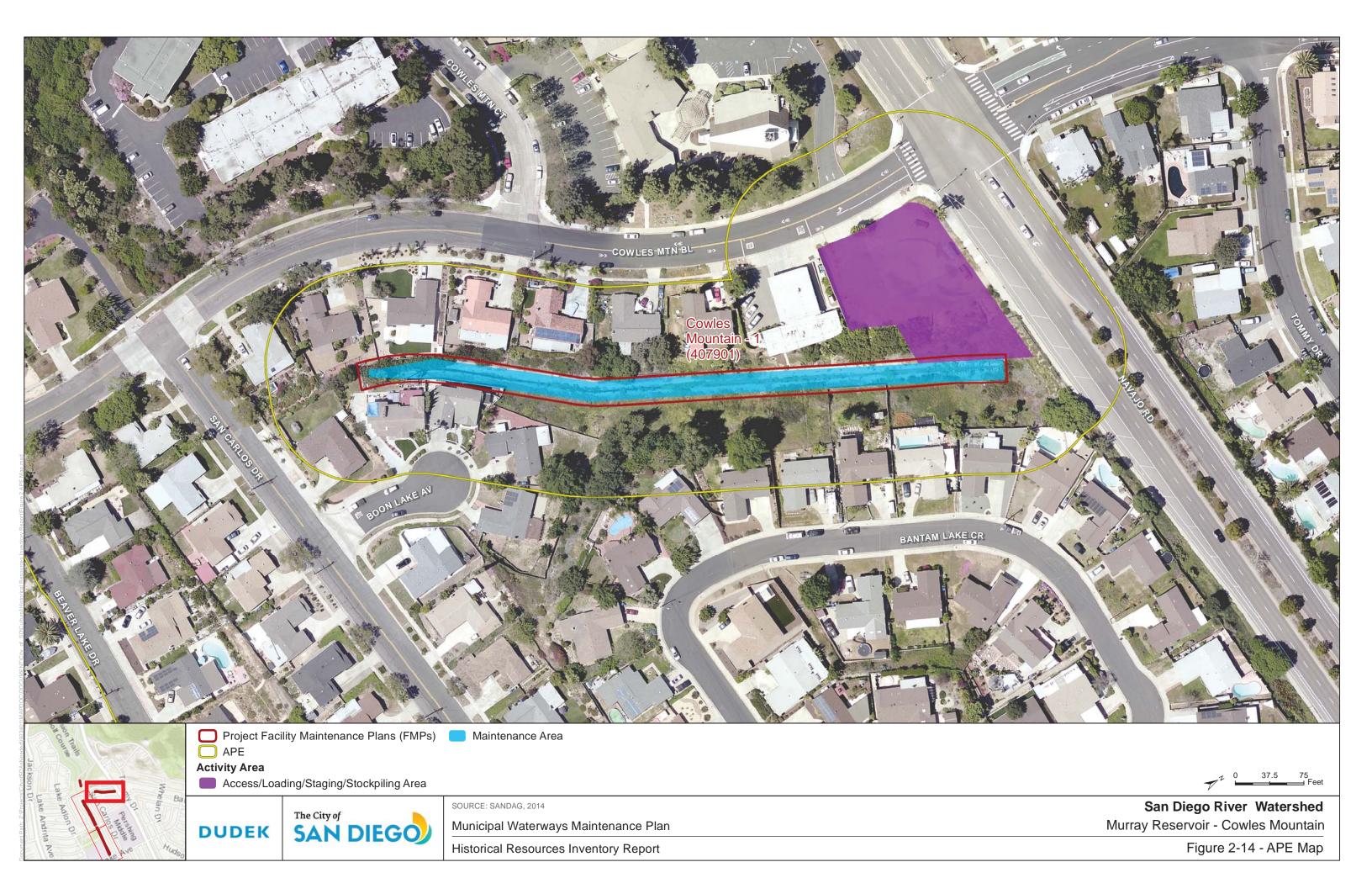
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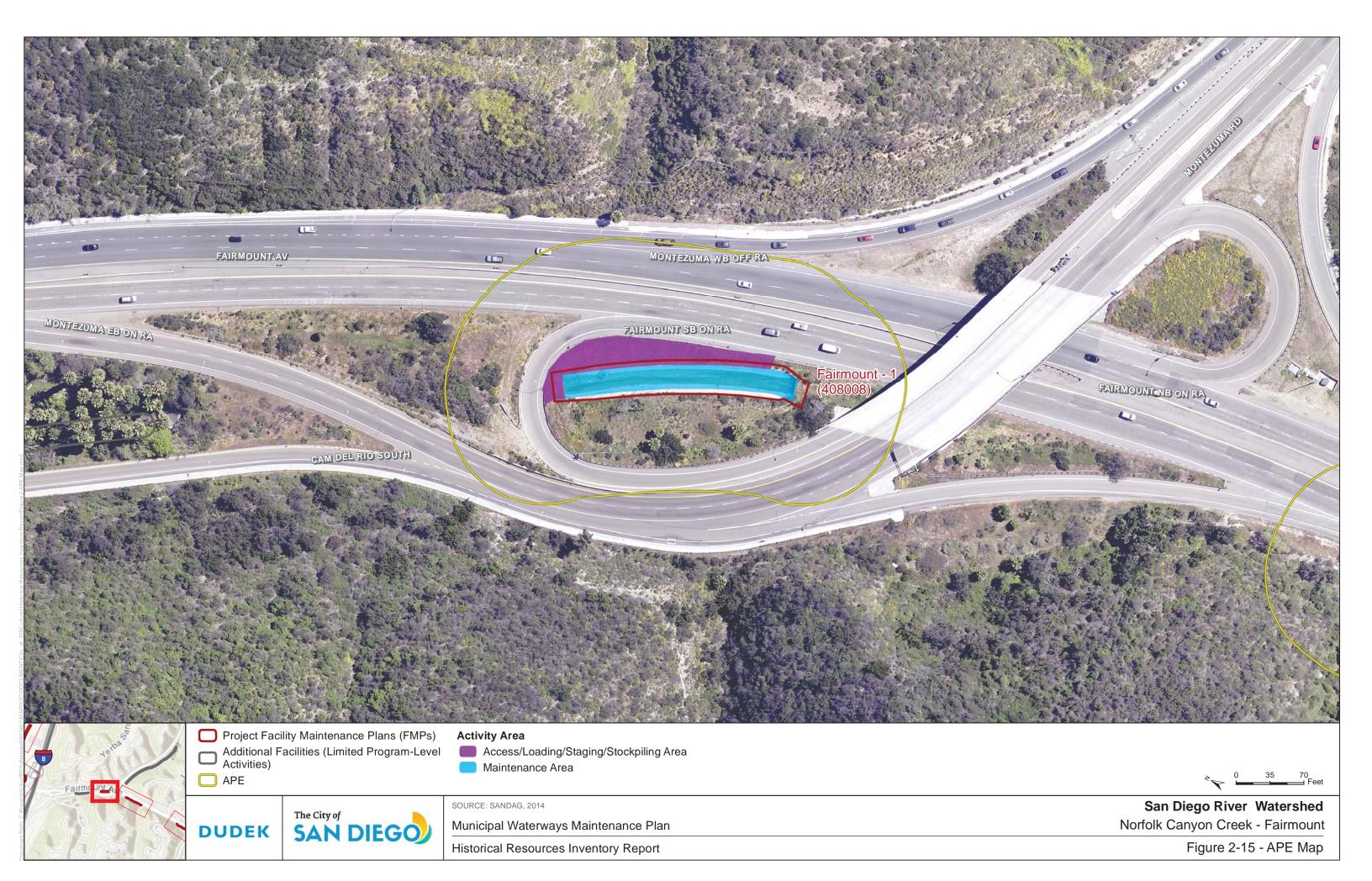
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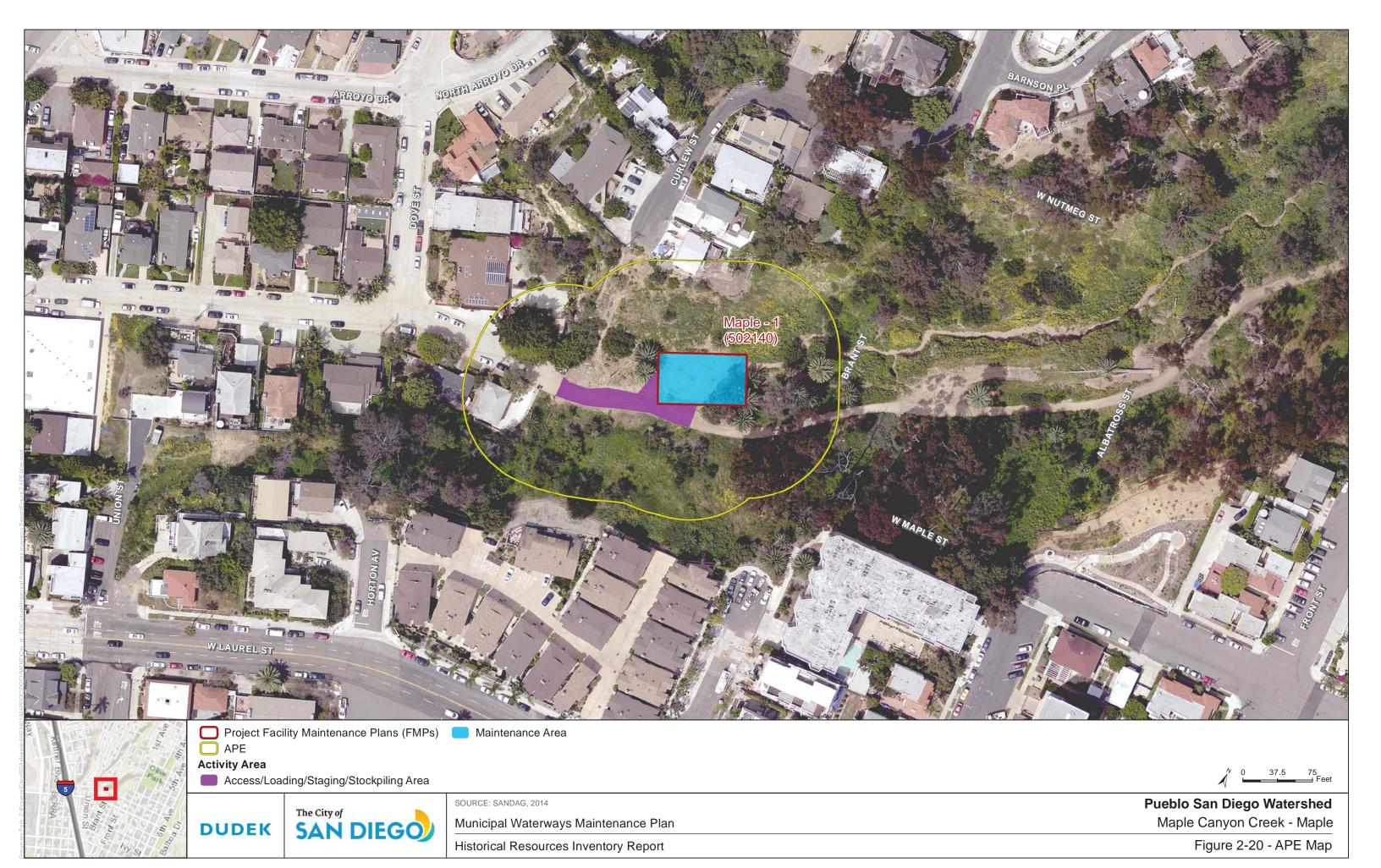
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SOURCE: SANDAG, 2014

Municipal Waterways Maintenance Plan

Historical Resources Inventory Report

Pueblo San Diego Watershed

Washington Canyon Creek - Washington

Figure 2-21 - APE Map

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The City of SAN DIEGO

Municipal Waterways Maintenance Plan

Historical Resources Inventory Report

Pueblo San Diego Watershed

Washington Canyon Creek - Washington

Figure 2-22 - APE Map

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SOURCE: SANDAG, 2014

Municipal Waterways Maintenance Plan

Historical Resources Inventory Report

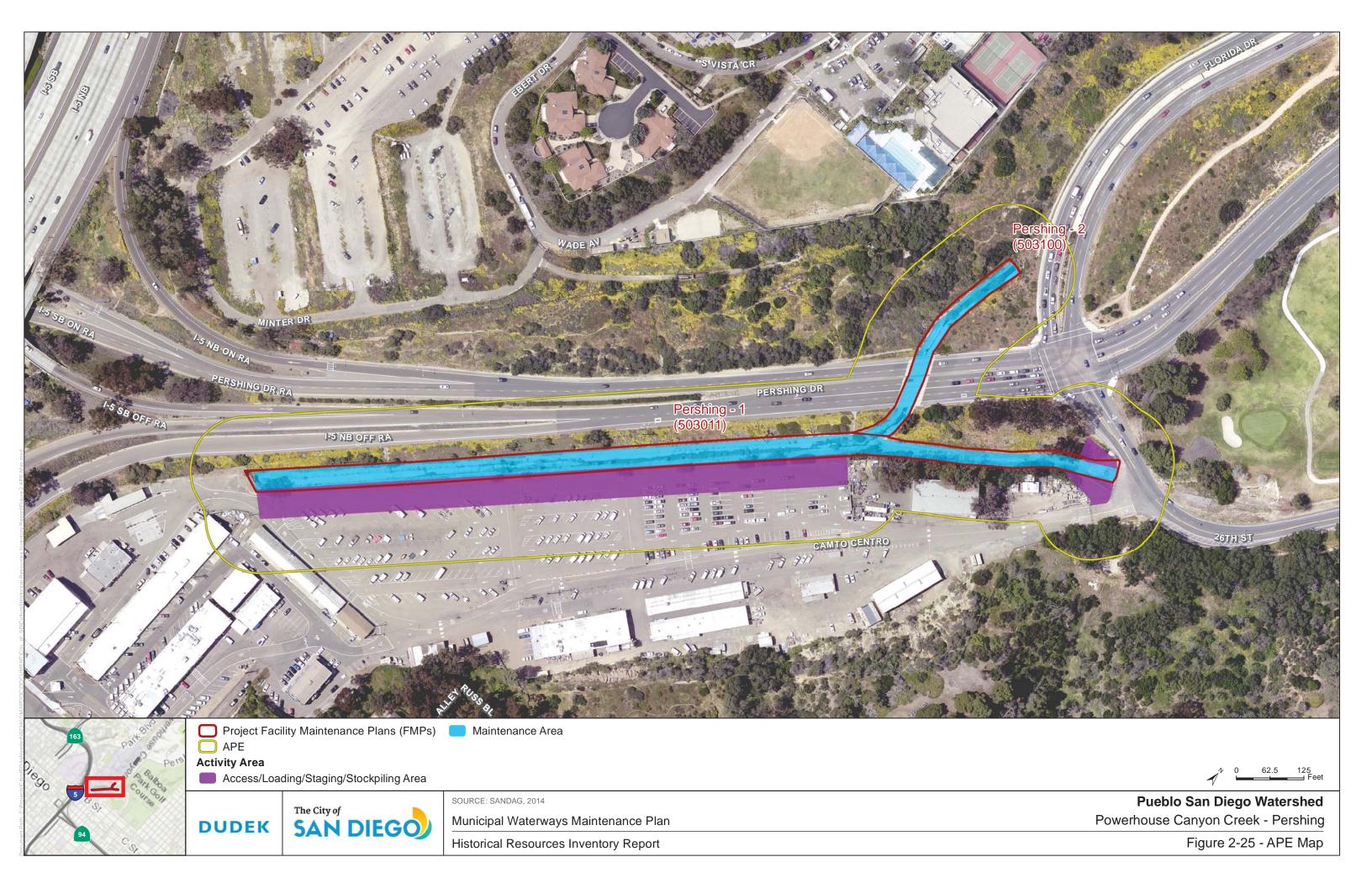
Pueblo San Diego Watershed

Mission Hill Canyon Creek - Titus

Figure 2-24 - APE Map

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30th St



SOURCE: SANDAG, 2014

Municipal Waterways Maintenance Plan

Historical Resources Inventory Report

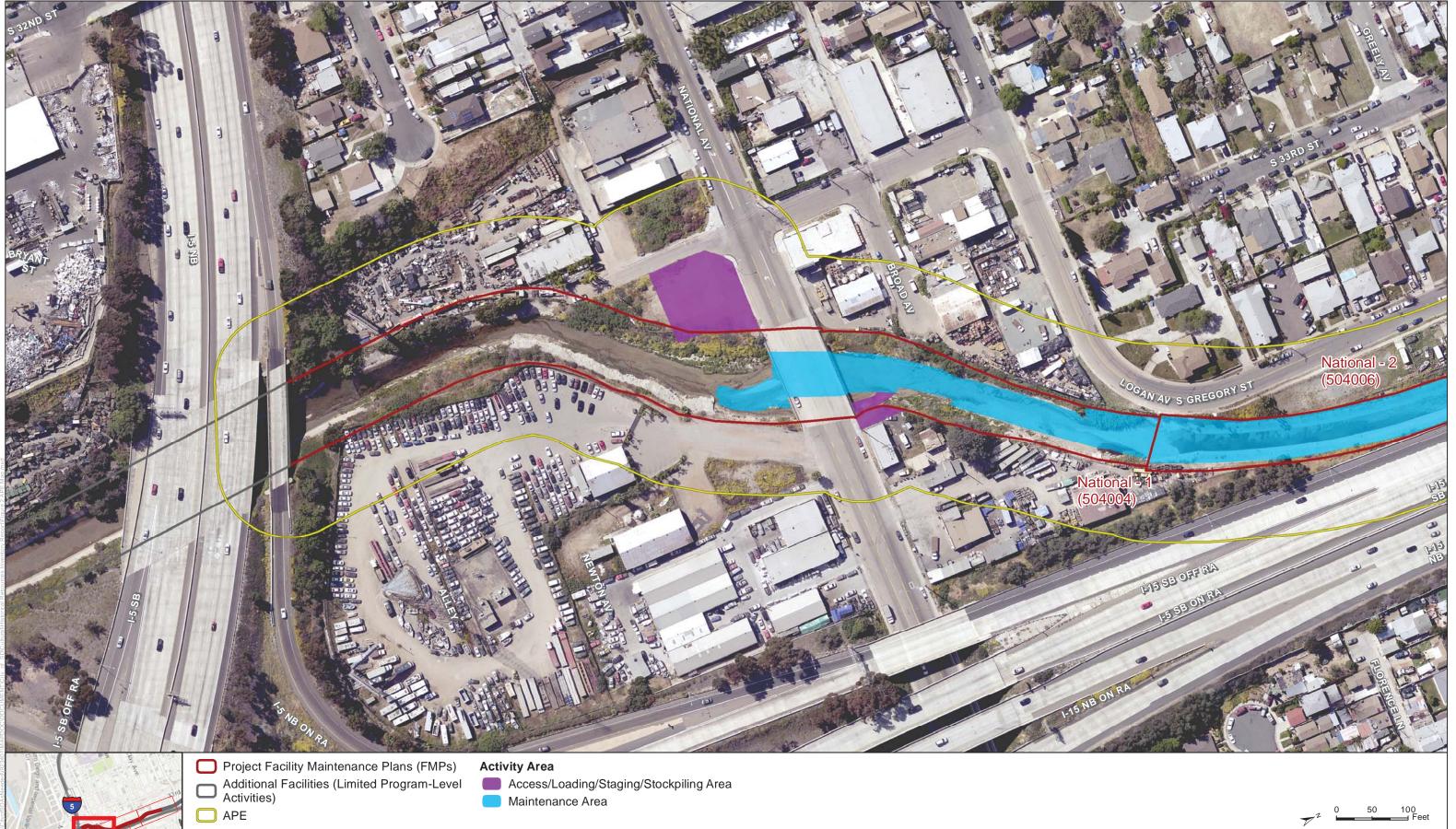
Pueblo San Diego Watershed

San Diego Bay - 28th St

Figure 2-26 - APE Map

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SOURCE: SANDAG, 2014

Municipal Waterways Maintenance Plan

Historical Resources Inventory Report

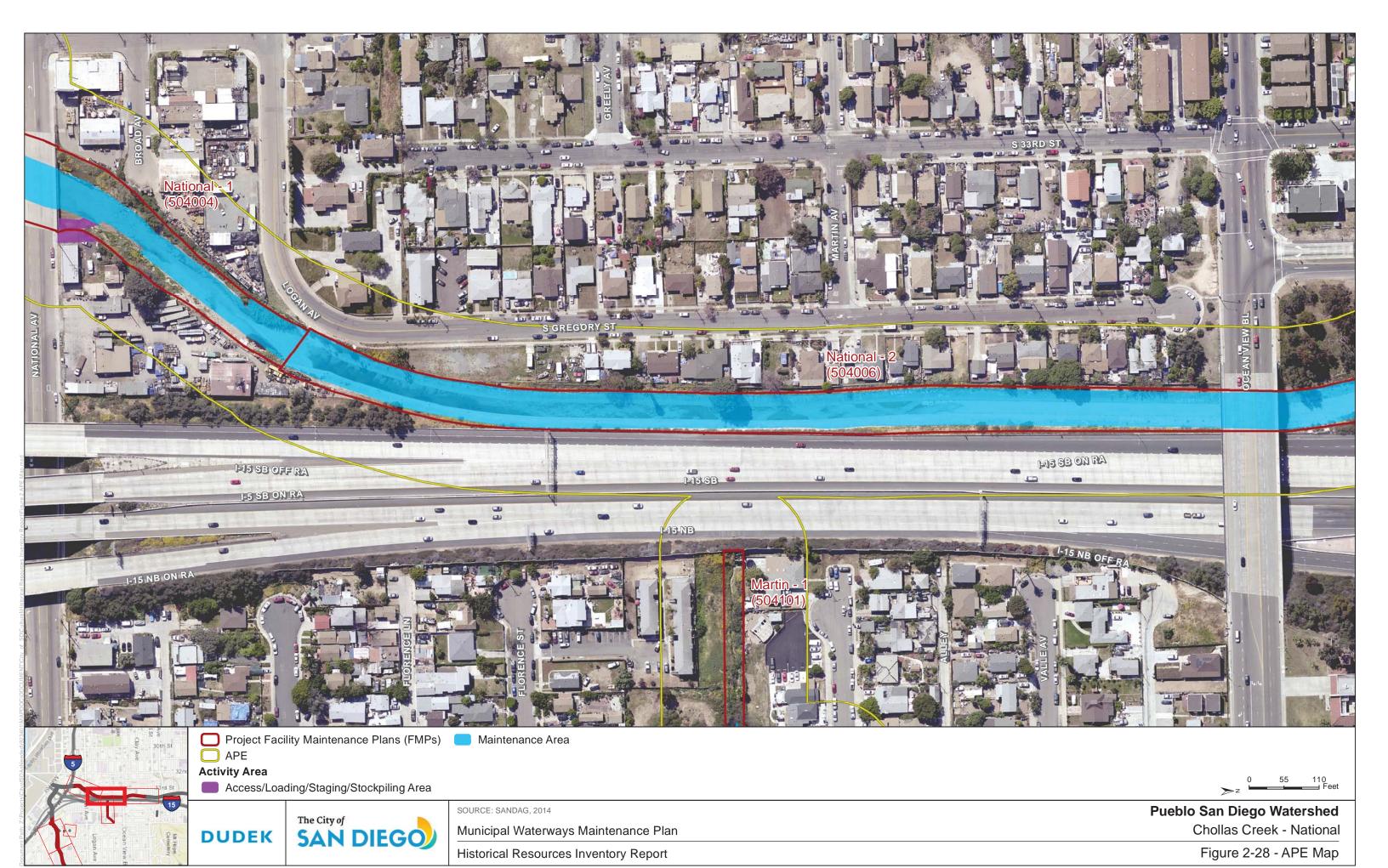
Pueblo San Diego Watershed

Chollas Creek - National

Figure 2-27 - APE Map

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SOURCE: SANDAG, 2014

Pueblo San Diego Watershed

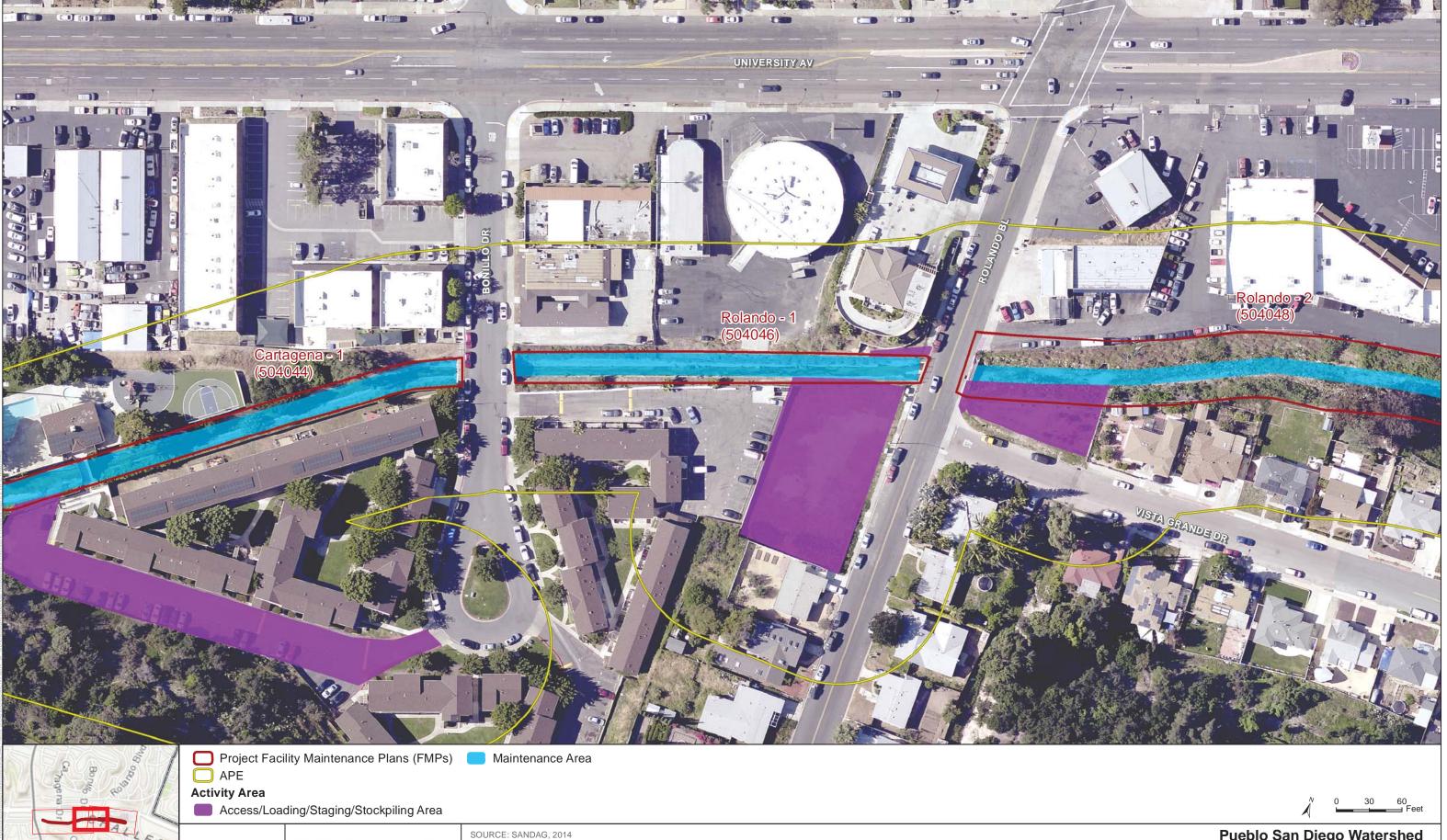
Municipal Waterways Maintenance Plan

Historical Resources Inventory Report

Chollas Creek - Rolando Figure 2-30 - APE Map

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Municipal Waterways Maintenance Plan

Historical Resources Inventory Report

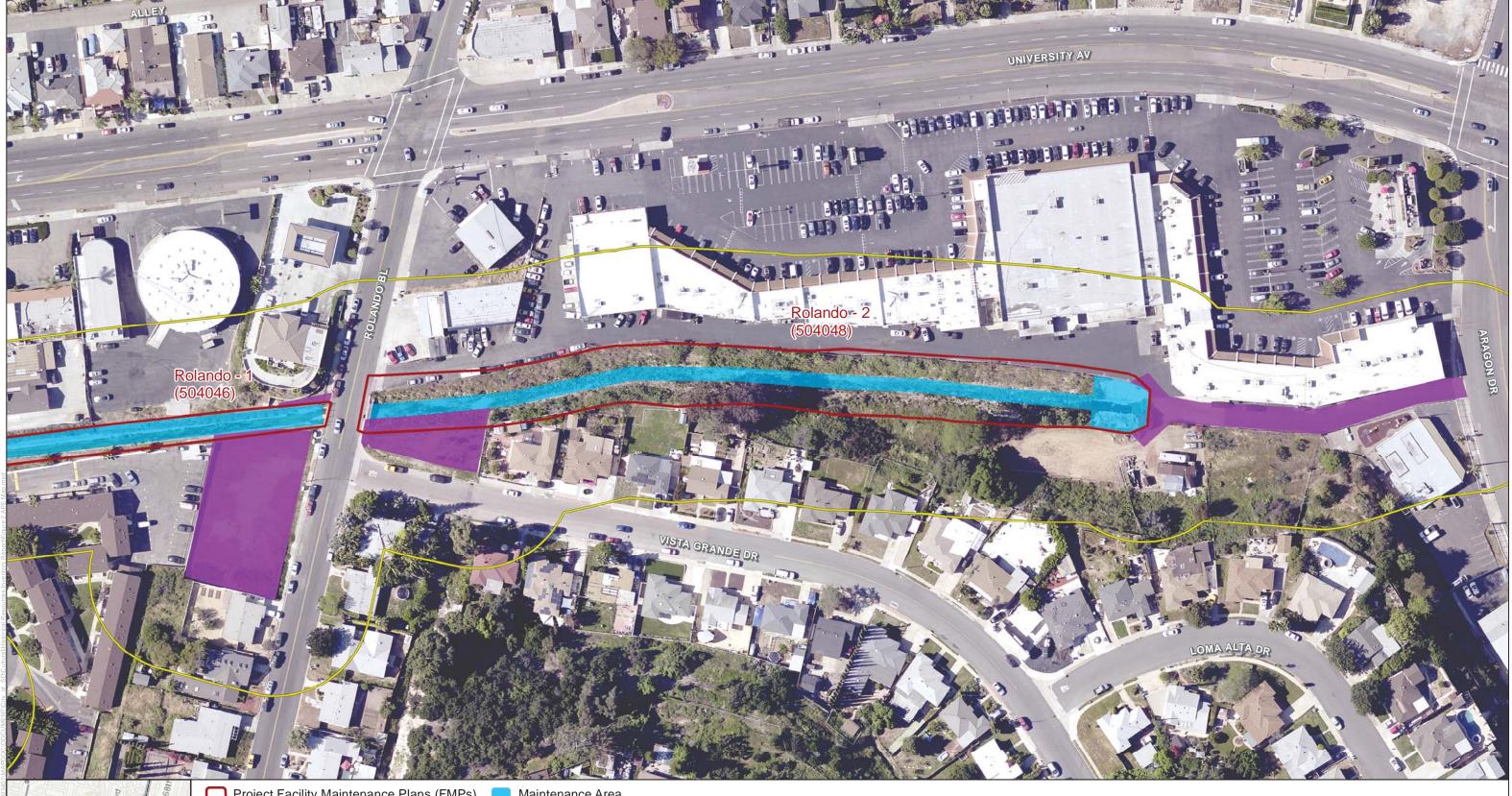
Pueblo San Diego Watershed

Chollas Creek - Rolando

Figure 2-31 - APE Map

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Project Facility Maintenance Plans (FMPs) Maintenance Area

APE

Activity Area

Access/Loading/Staging/Stockpiling Area



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SOURCE: SANDAG, 2014

Pueblo San Diego Watershed Municipal Waterways Maintenance Plan

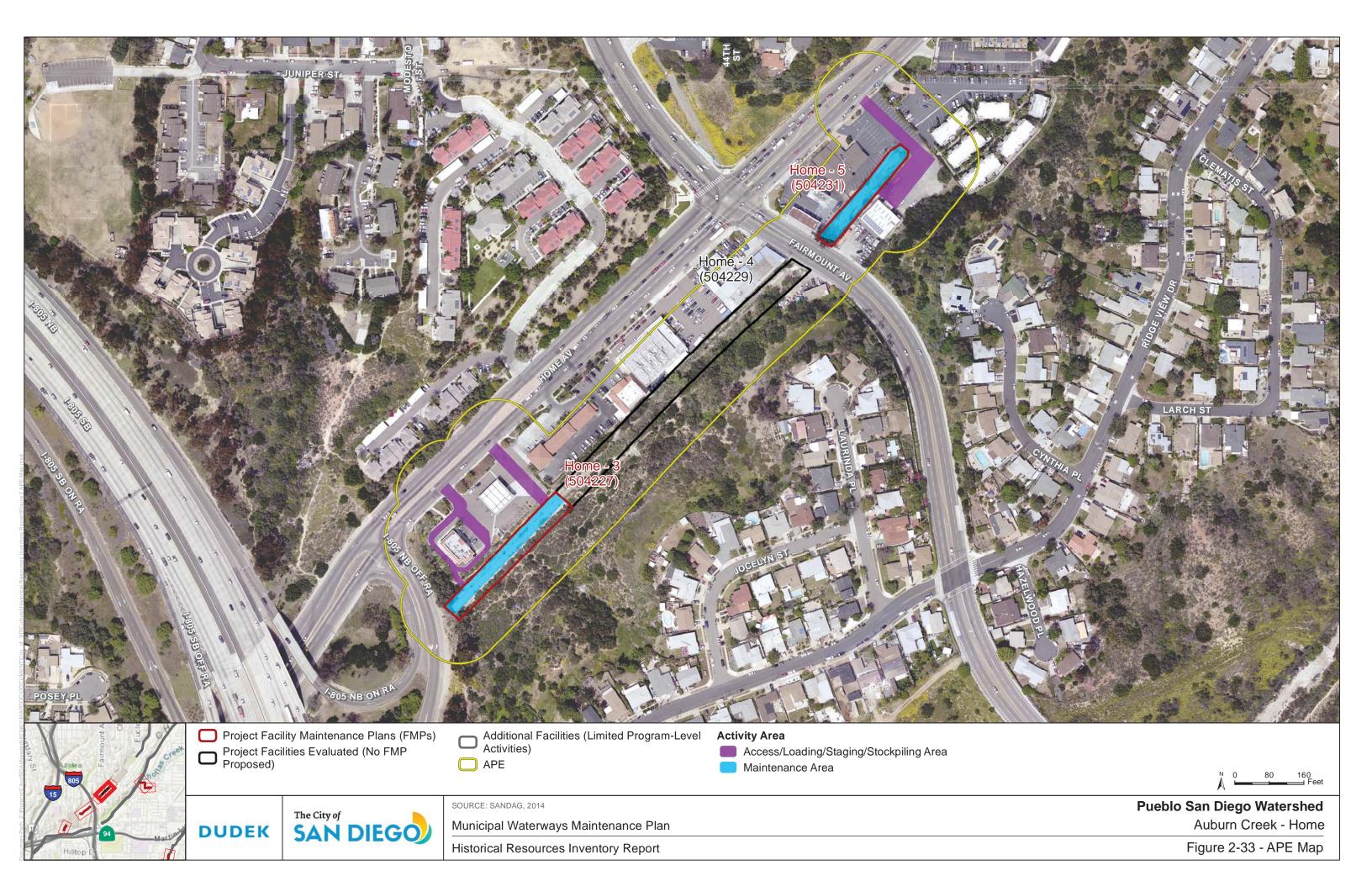
Historical Resources Inventory Report

Chollas Creek - Rolando

Figure 2-32 - APE Map

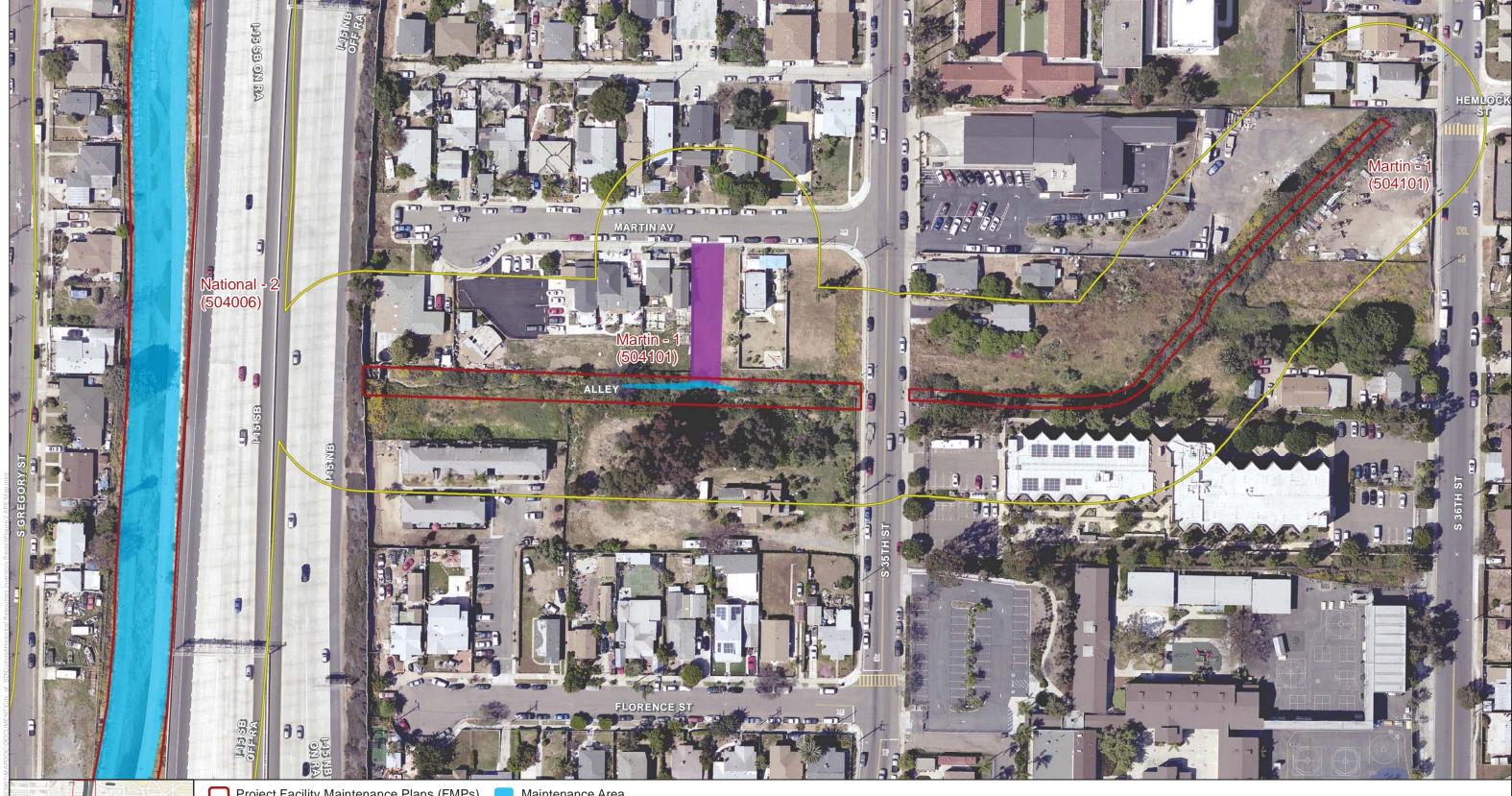
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Project Facility Maintenance Plans (FMPs) Maintenance Area

APE

Activity Area

Access/Loading/Staging/Stockpiling Area



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SOURCE: SANDAG, 2014

Municipal Waterways Maintenance Plan

Historical Resources Inventory Report

Pueblo San Diego Watershed

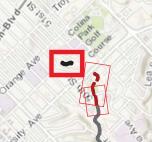
Chollas Creek - Martin

Figure 2-34 - APE Map

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APE



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SOURCE: SANDAG, 2014

Pueblo San Diego Watershed

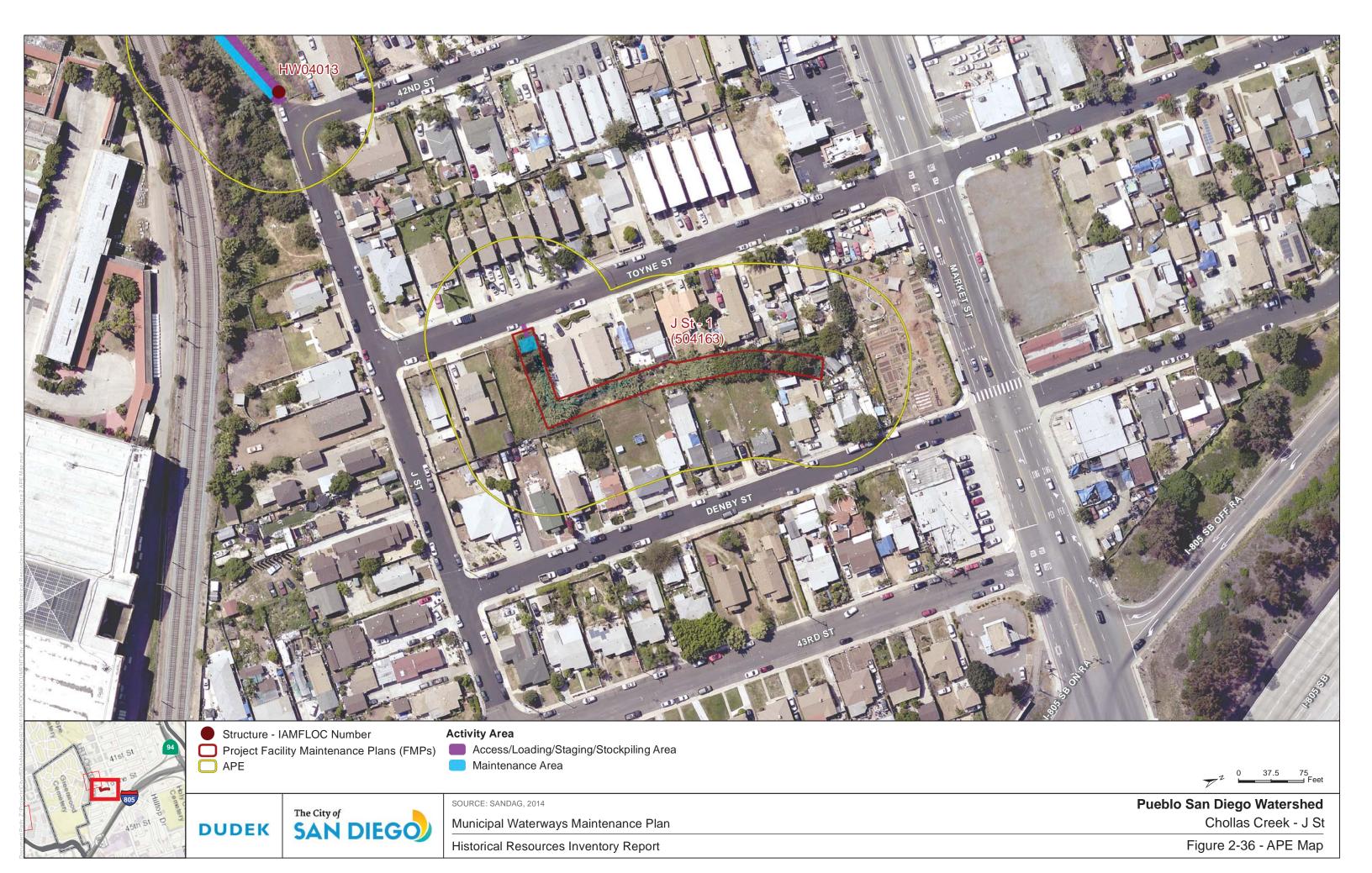
Auburn Creek - Oakcrest

Historical Resources Inventory Report

Municipal Waterways Maintenance Plan

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Pueblo San Diego Watershed

Auburn Creek - Home

Figure 2-37 - APE Map

Historical Resources Inventory Report

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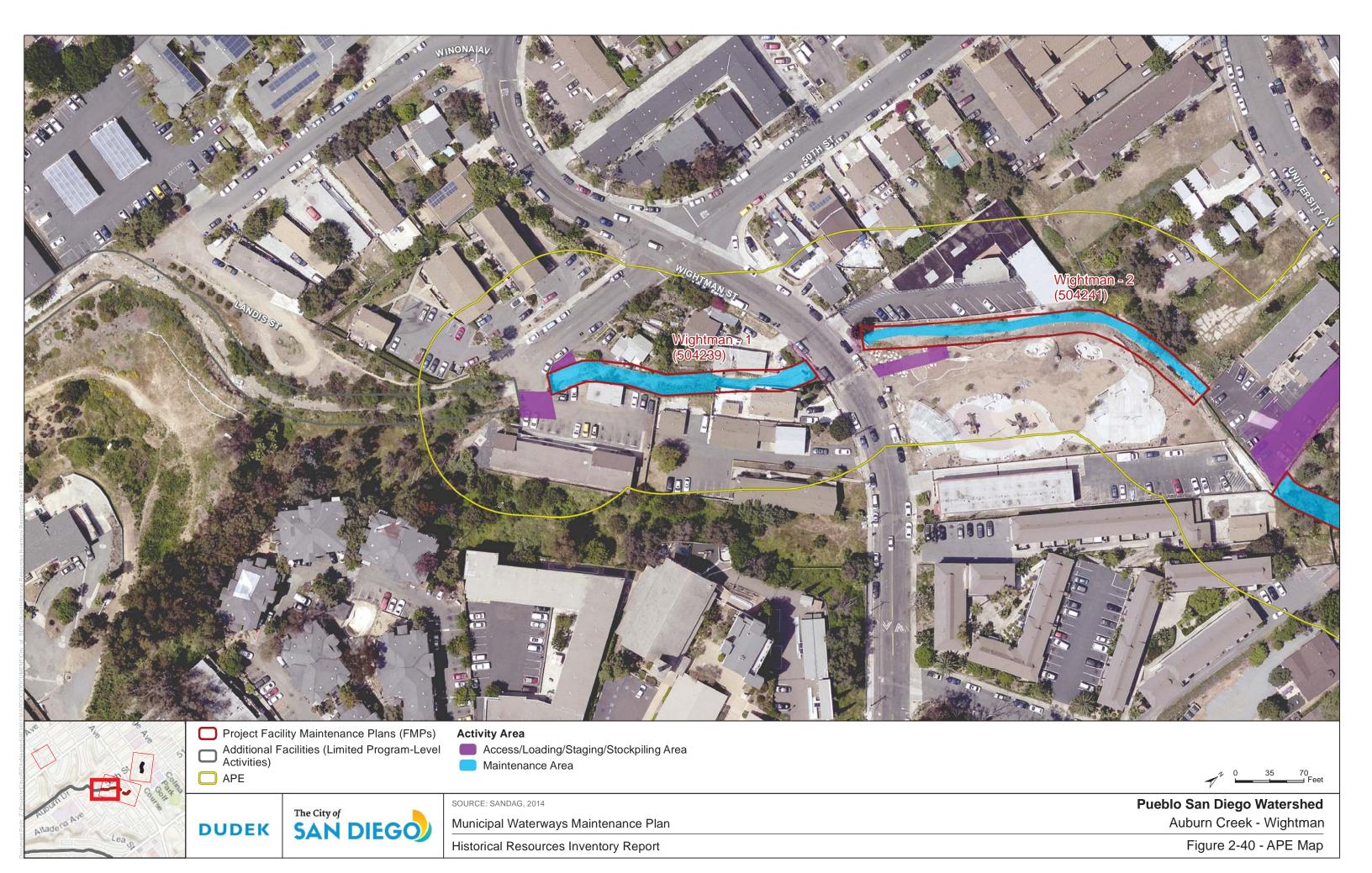
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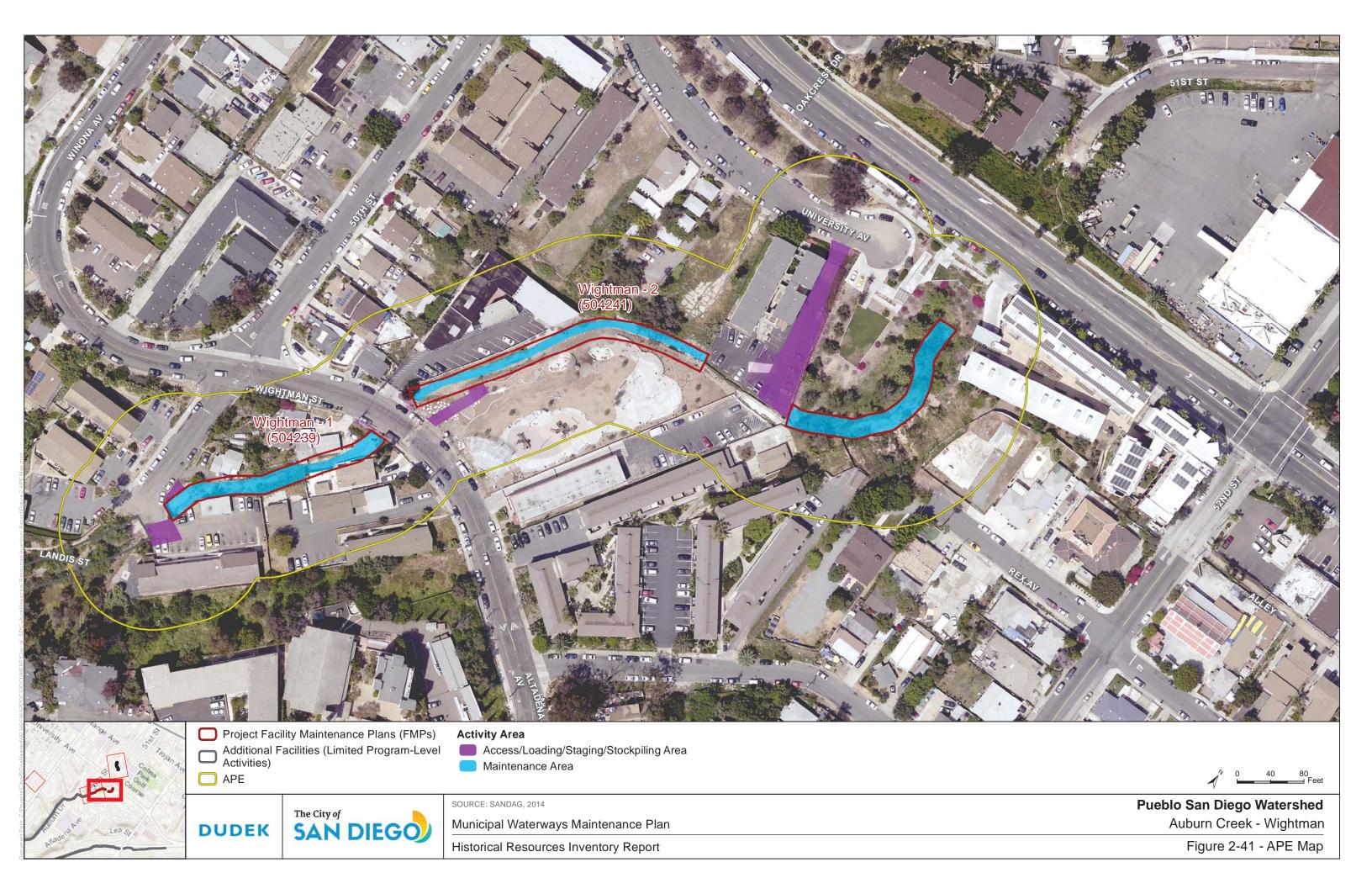
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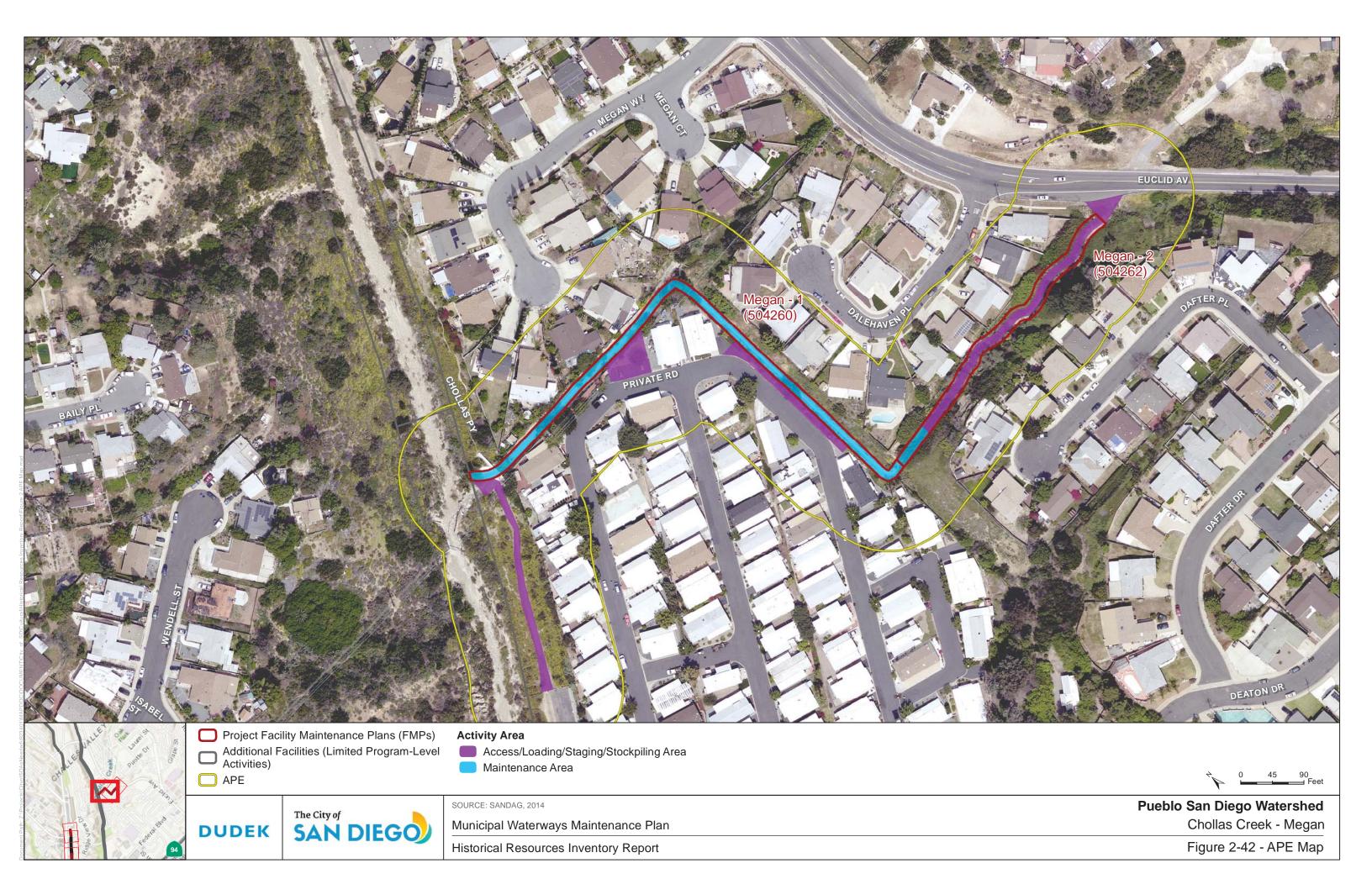
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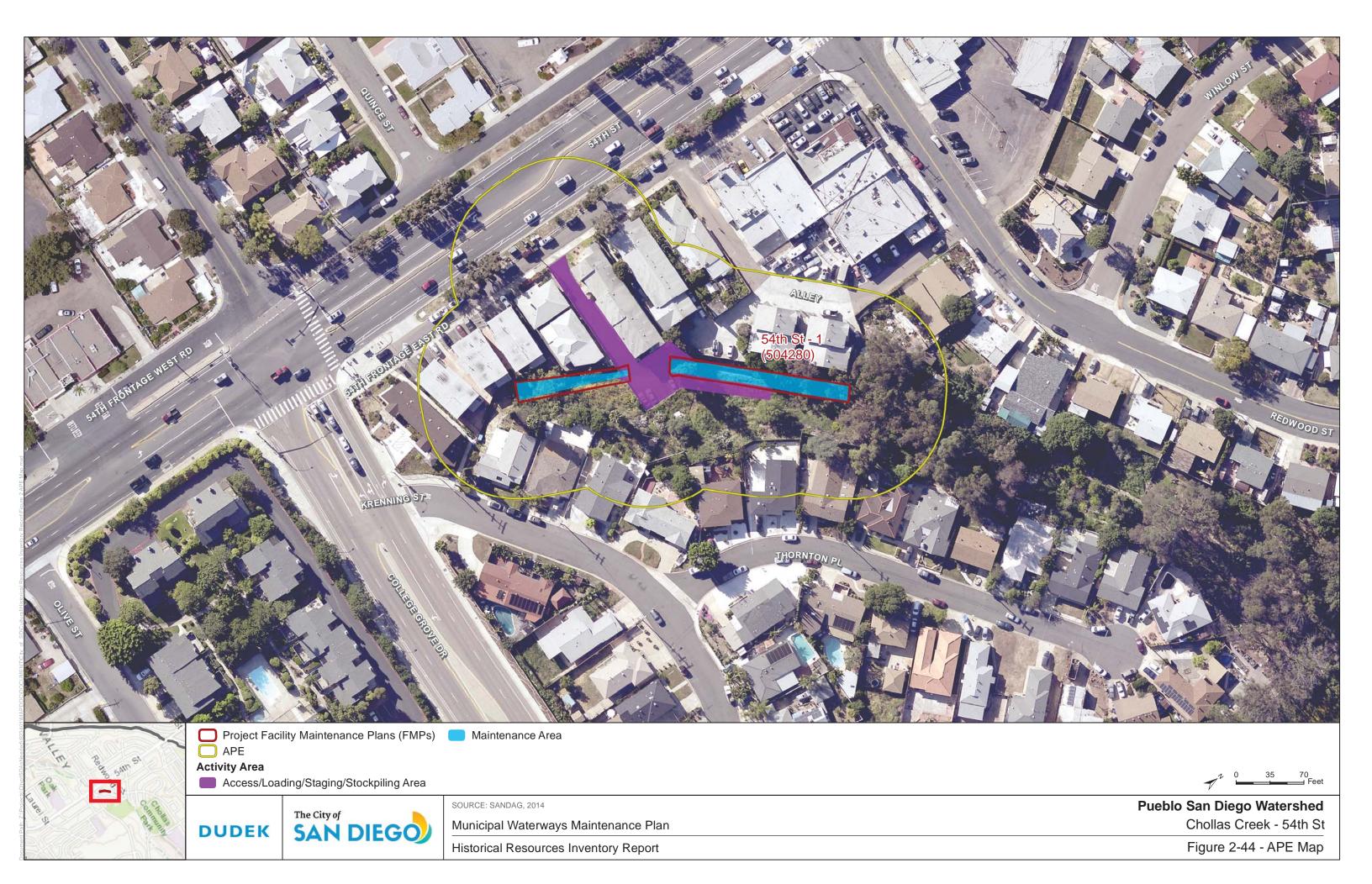
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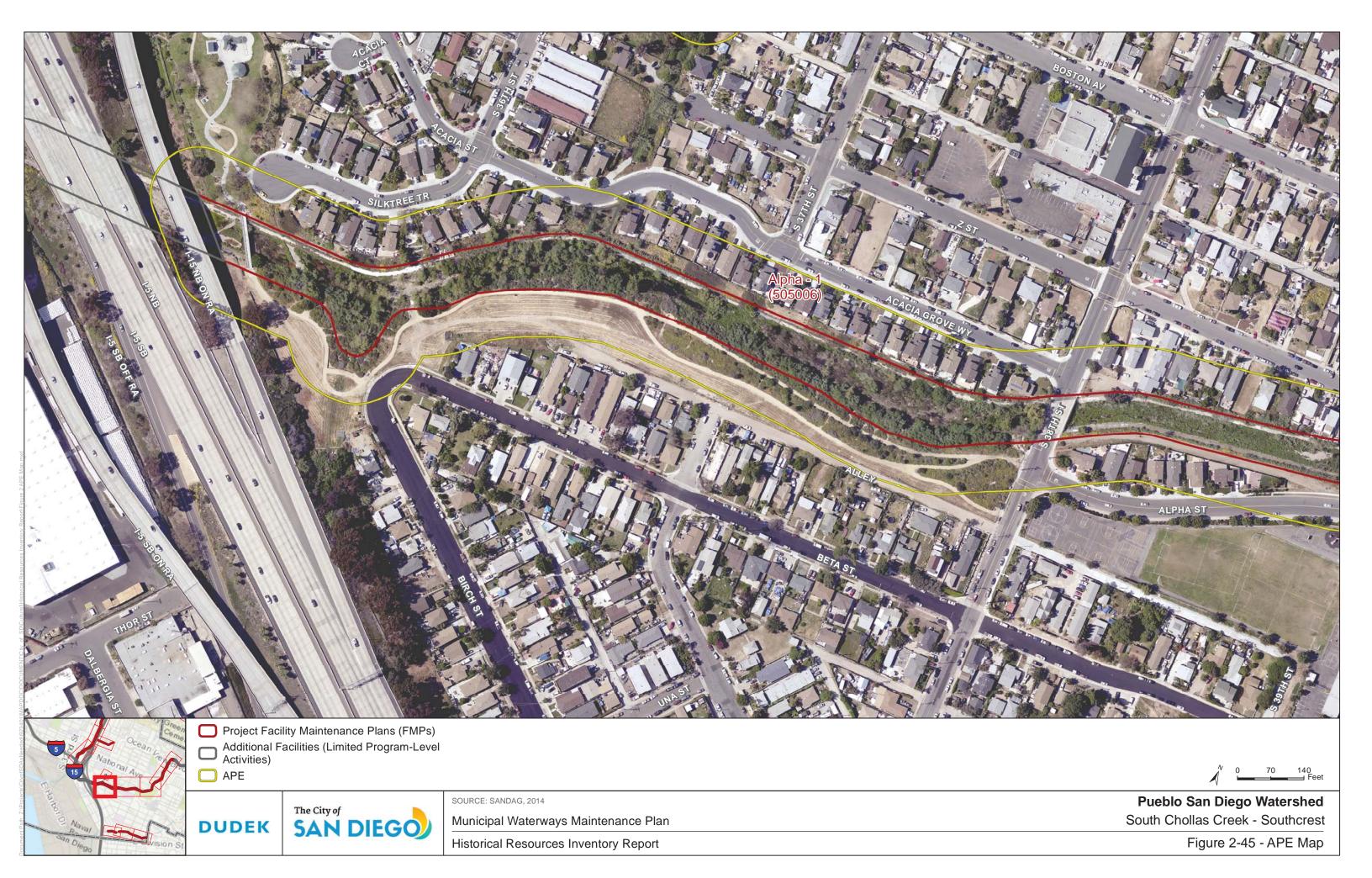
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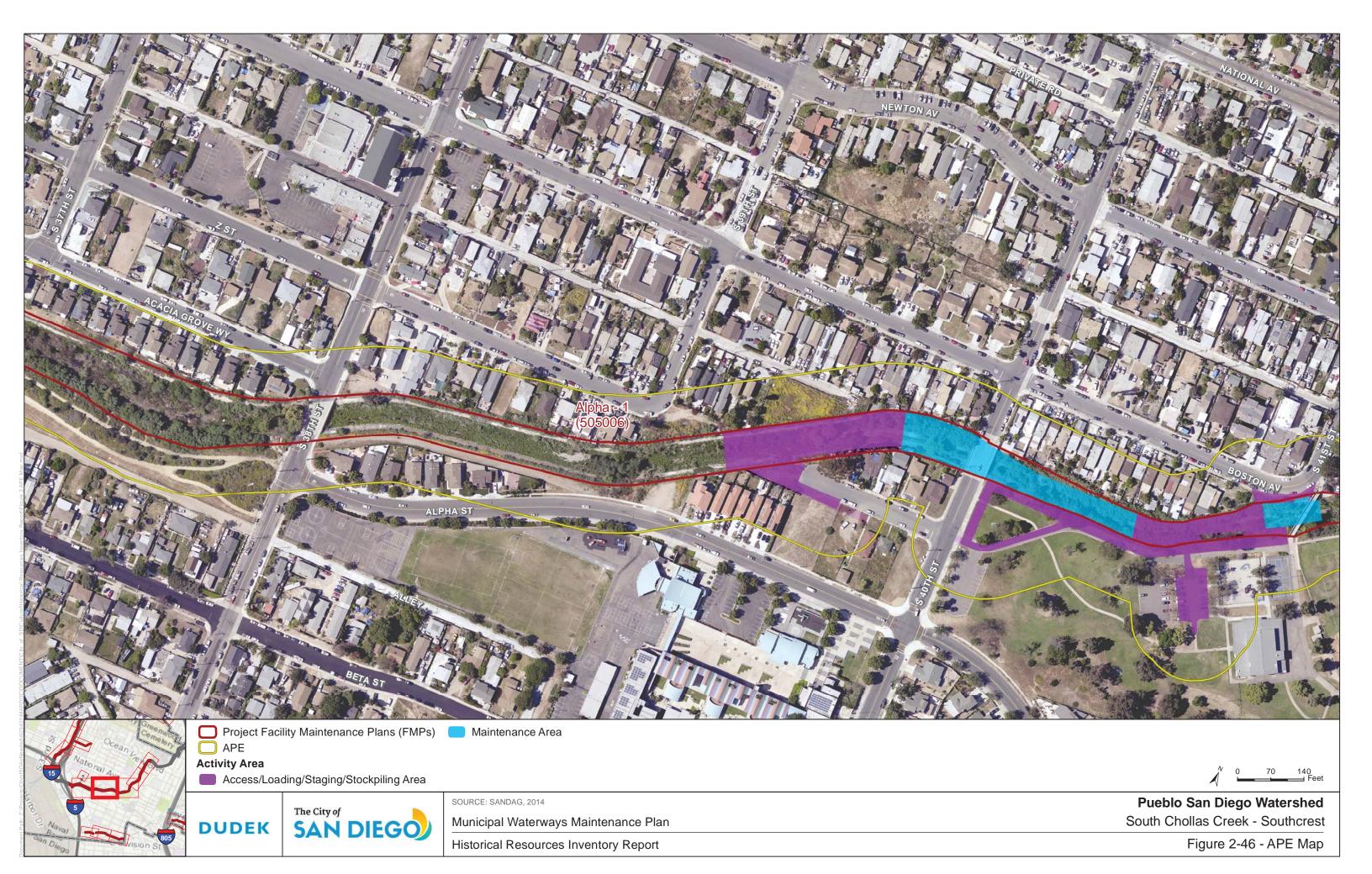
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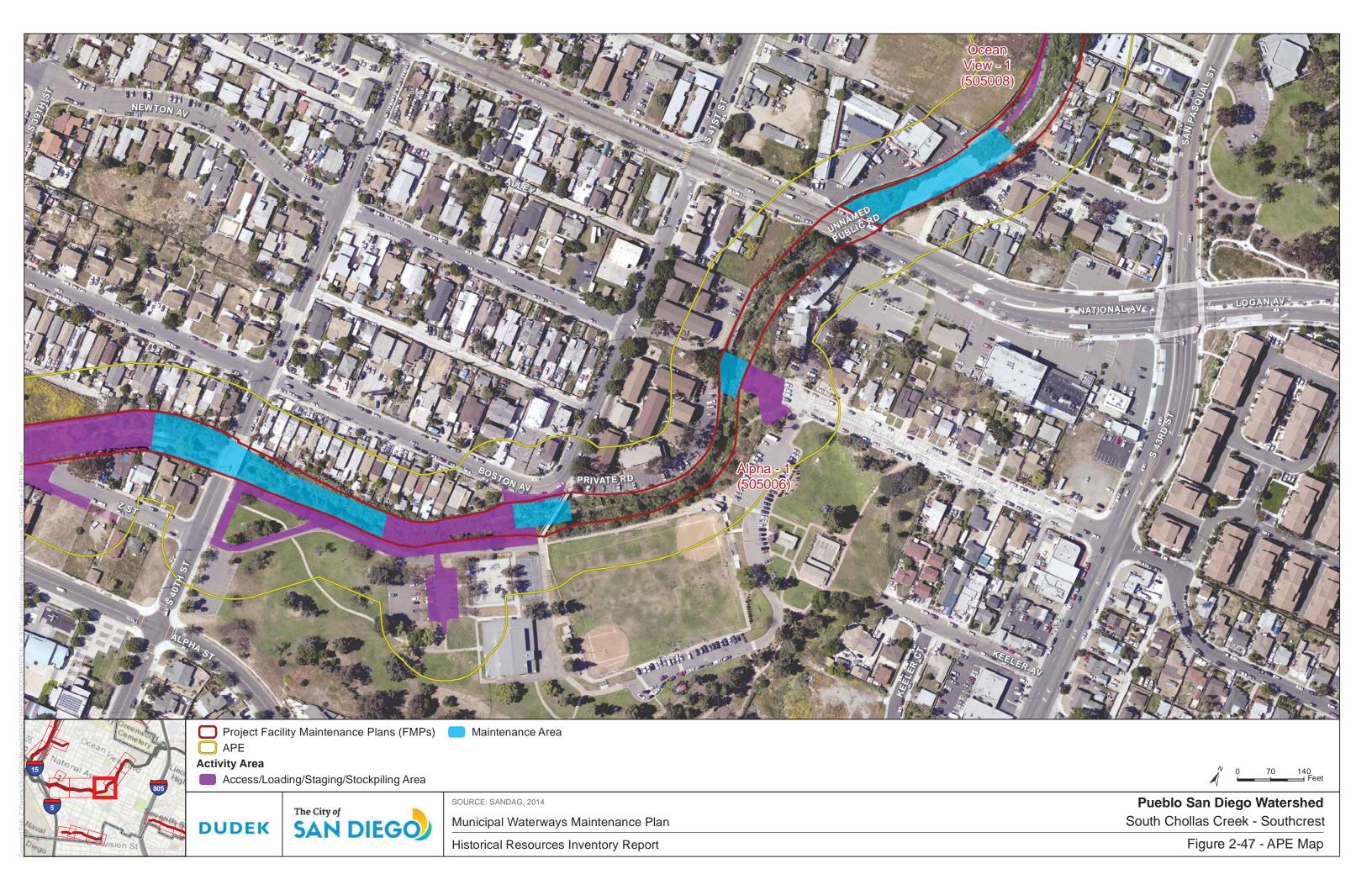
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SOURCE: SANDAG, 2014

Municipal Waterways Maintenance Plan

Historical Resources Inventory Report

Pueblo San Diego Watershed

South Chollas Creek Encanto Branch - Imperial

Figure 2-49 - APE Map

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SOURCE: SANDAG, 2014

Municipal Waterways Maintenance Plan

Historical Resources Inventory Report

South Chollas Creek Encanto Branch - Jamacha

Figure 2-50 - APE Map

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The City of SAN DIEGO

Municipal Waterways Maintenance Plan

Historical Resources Inventory Report

South Chollas Creek Encanto Branch - Jamacha

Figure 2-51 - APE Map

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E 5th St

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SOURCE: SANDAG, 2014

Municipal Waterways Maintenance Plan

Historical Resources Inventory Report

Pueblo San Diego Watershed

Paleta Creek - Cottonwood

Figure 2-52 - APE Map

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Access/Loading/Staging/Stockpiling Area

SOURCE: SANDAG, 2014

Municipal Waterways Maintenance Plan

Historical Resources Inventory Report



Figure 2-53 - APE Map

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SOURCE: SANDAG, 2014

Municipal Waterways Maintenance Plan

Pueblo San Dieg

Municipal Waterways Maintenance Plan

Paleta Creek

Historical Resources Inventory Report

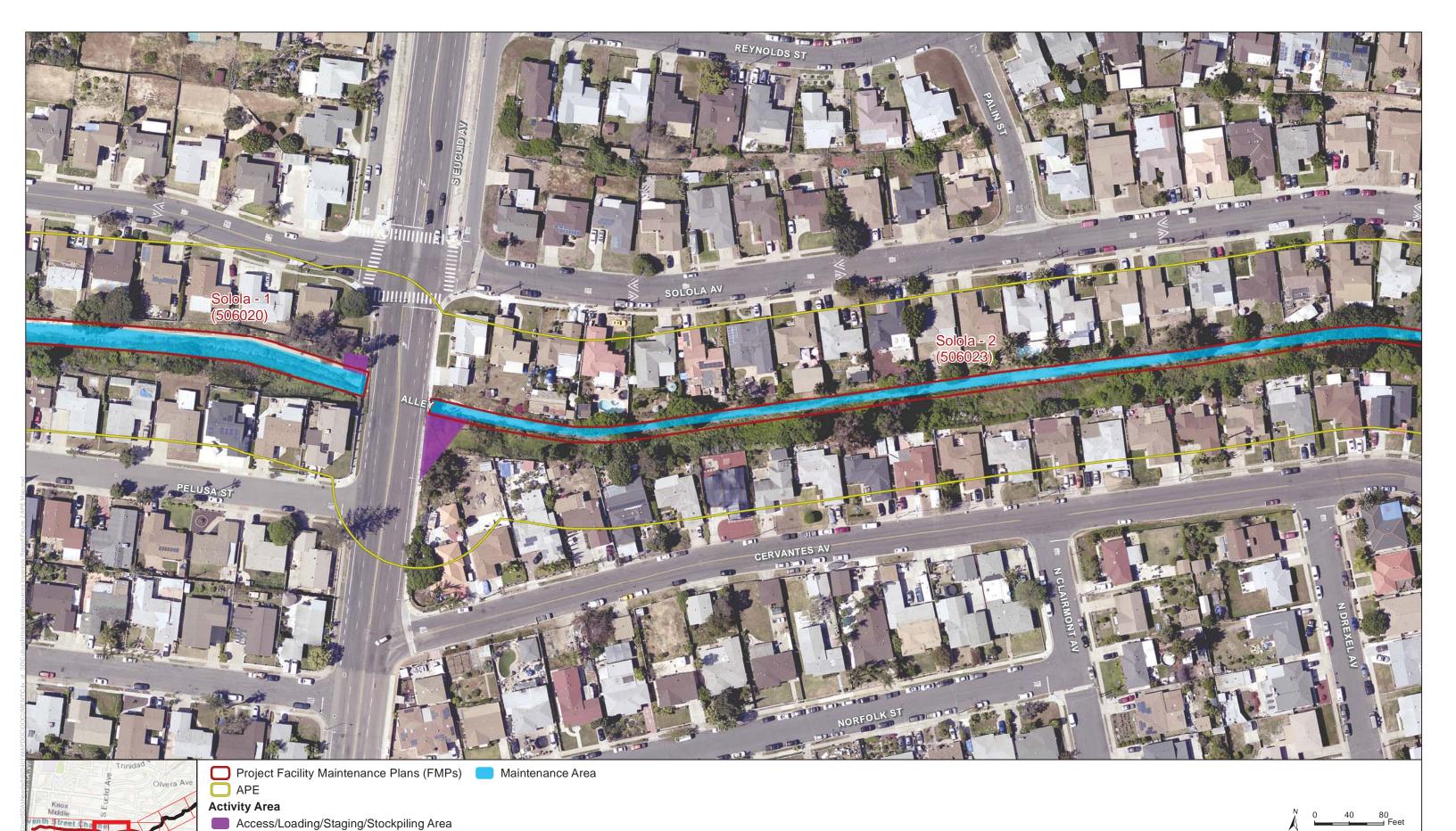
Pueblo San Diego Watershed
Paleta Creek - Cottonwood

Figure 2-54 - APE Map



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SOURCE: SANDAG, 2014

Pueblo San Diego Watershed
Paleta Creek - Solola

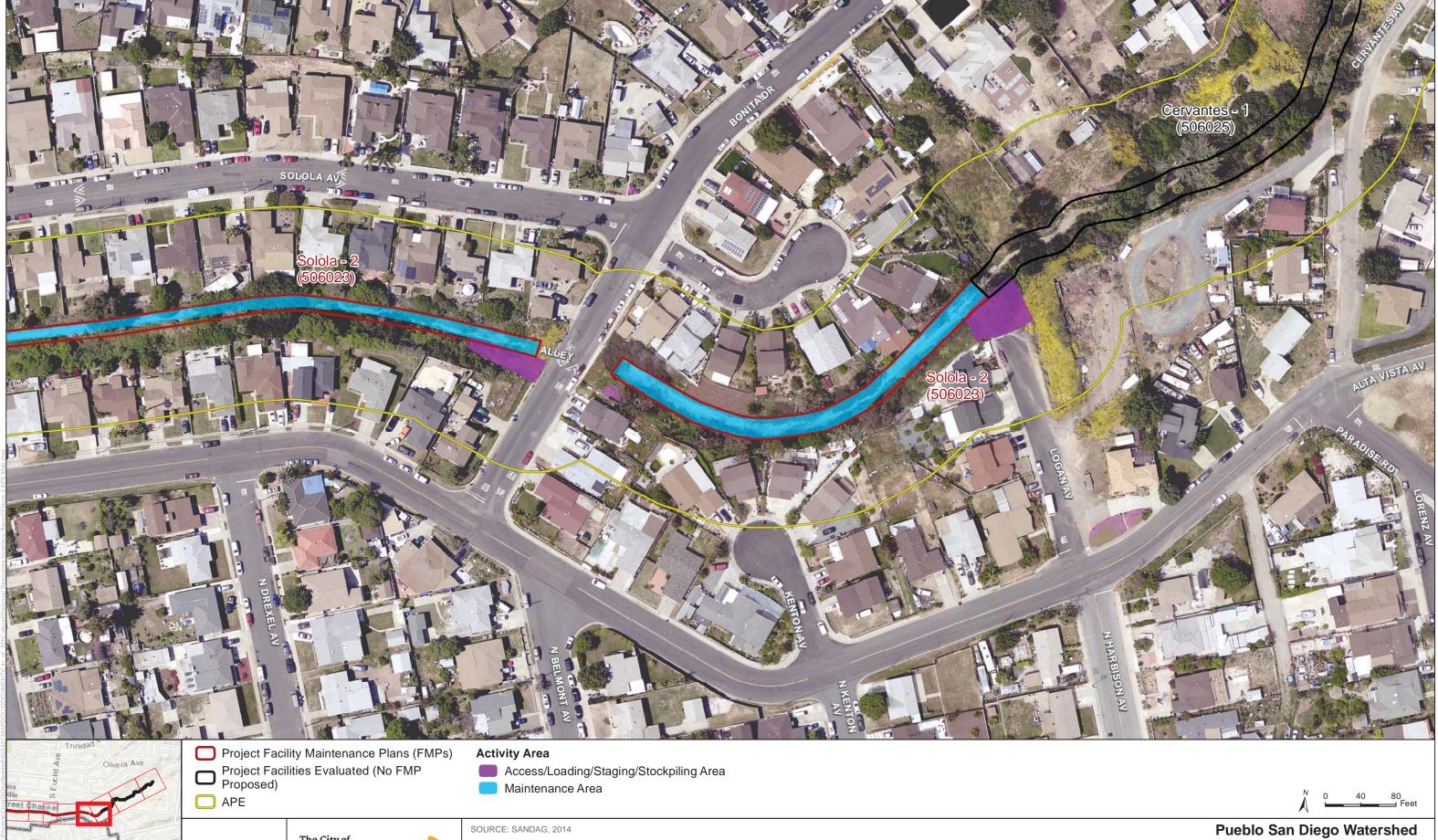
Municipal Waterways Maintenance Plan

Historical Resources Inventory Report

Figure 2-55 - APE Map

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Historical Resources Inventory Report

Paleta Creek - Solola Municipal Waterways Maintenance Plan

Figure 2-56 - APE Map

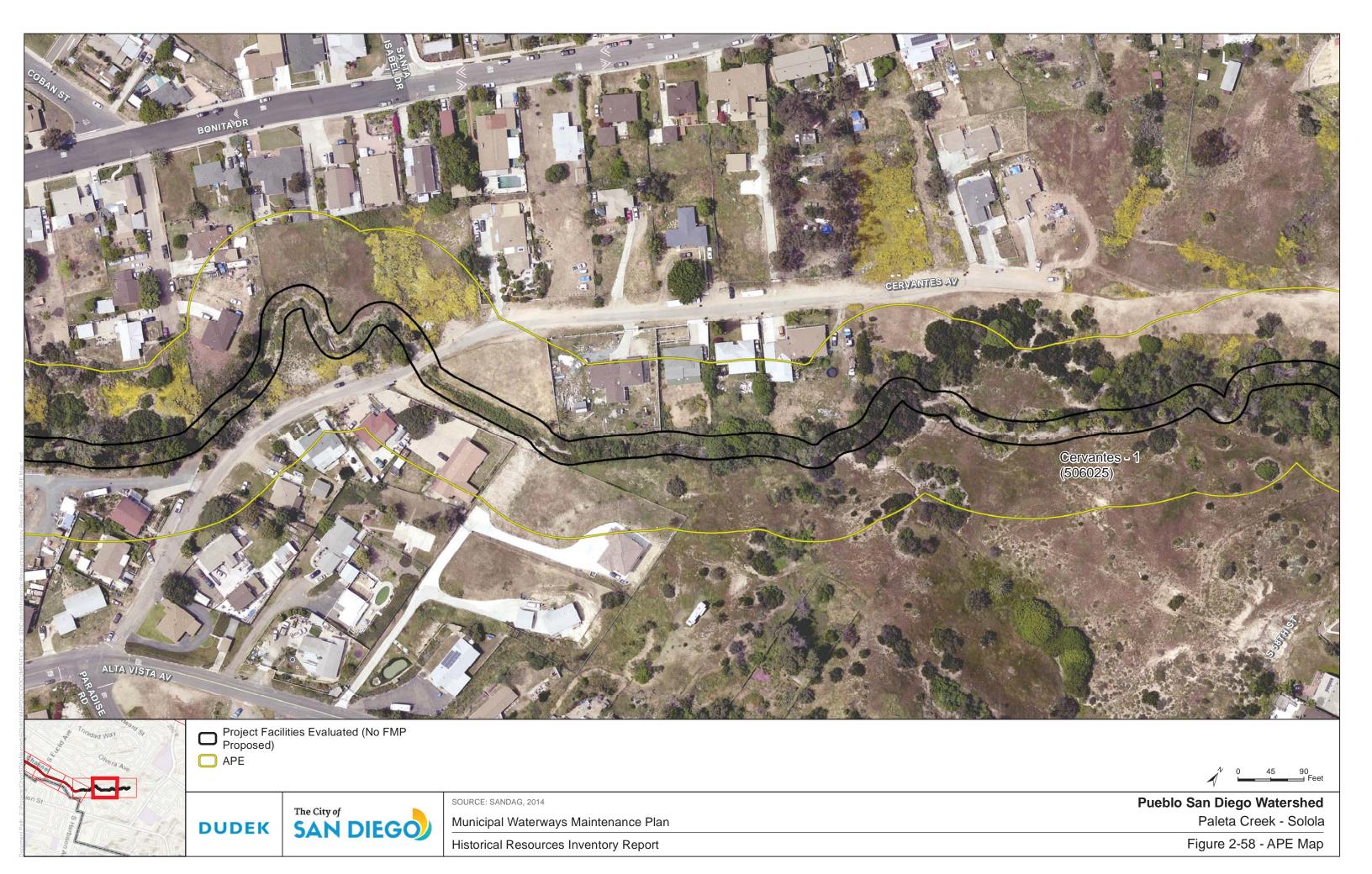
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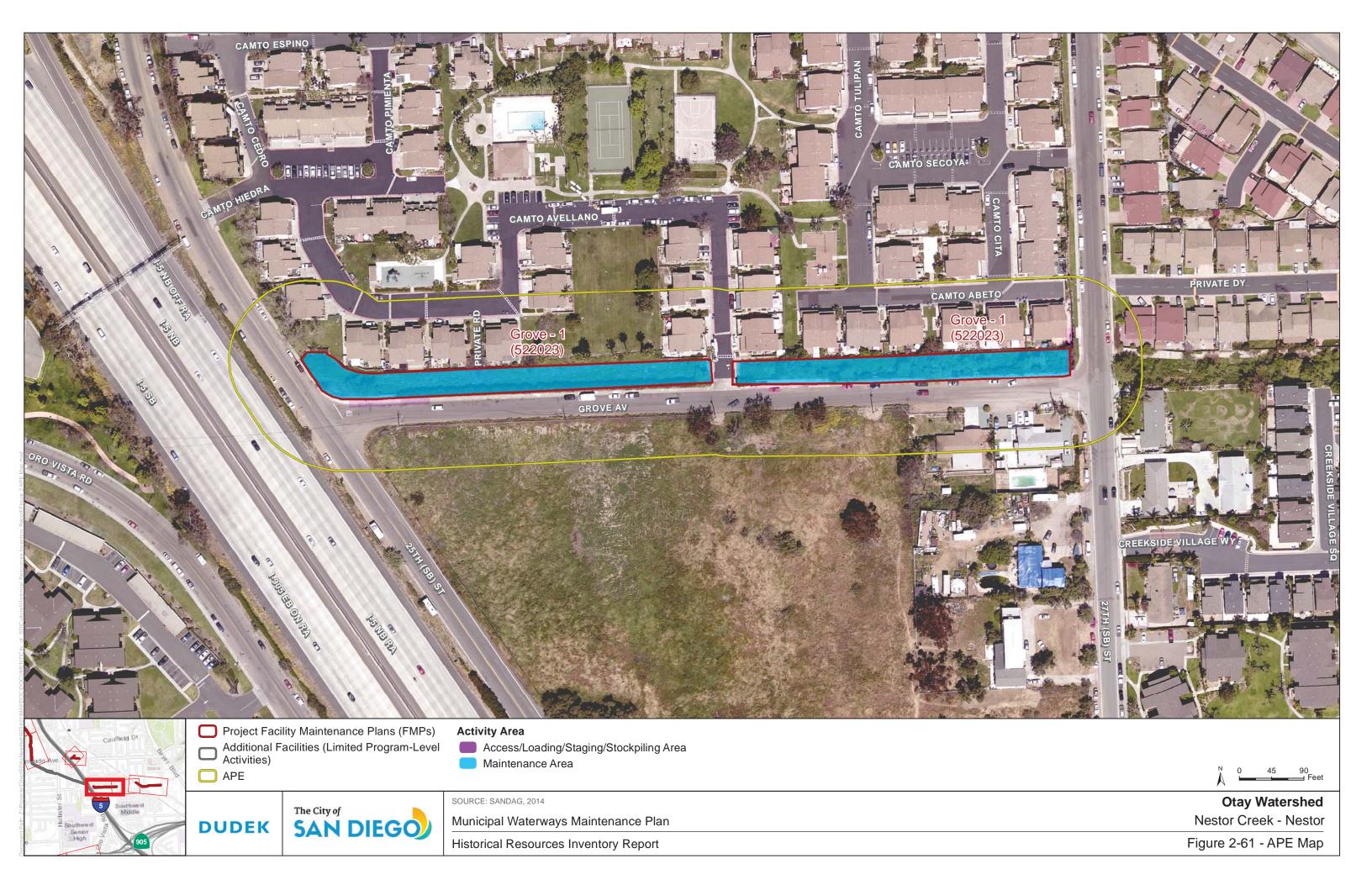
SOURCE: SANDAG, 2014

Municipal Waterways Maintenance Plan

Nestor Creek - Nestor Historical Resources Inventory Report Figure 2-60 - APE Map

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SOURCE: SANDAG, 2014

Municipal Waterways Maintenance Plan

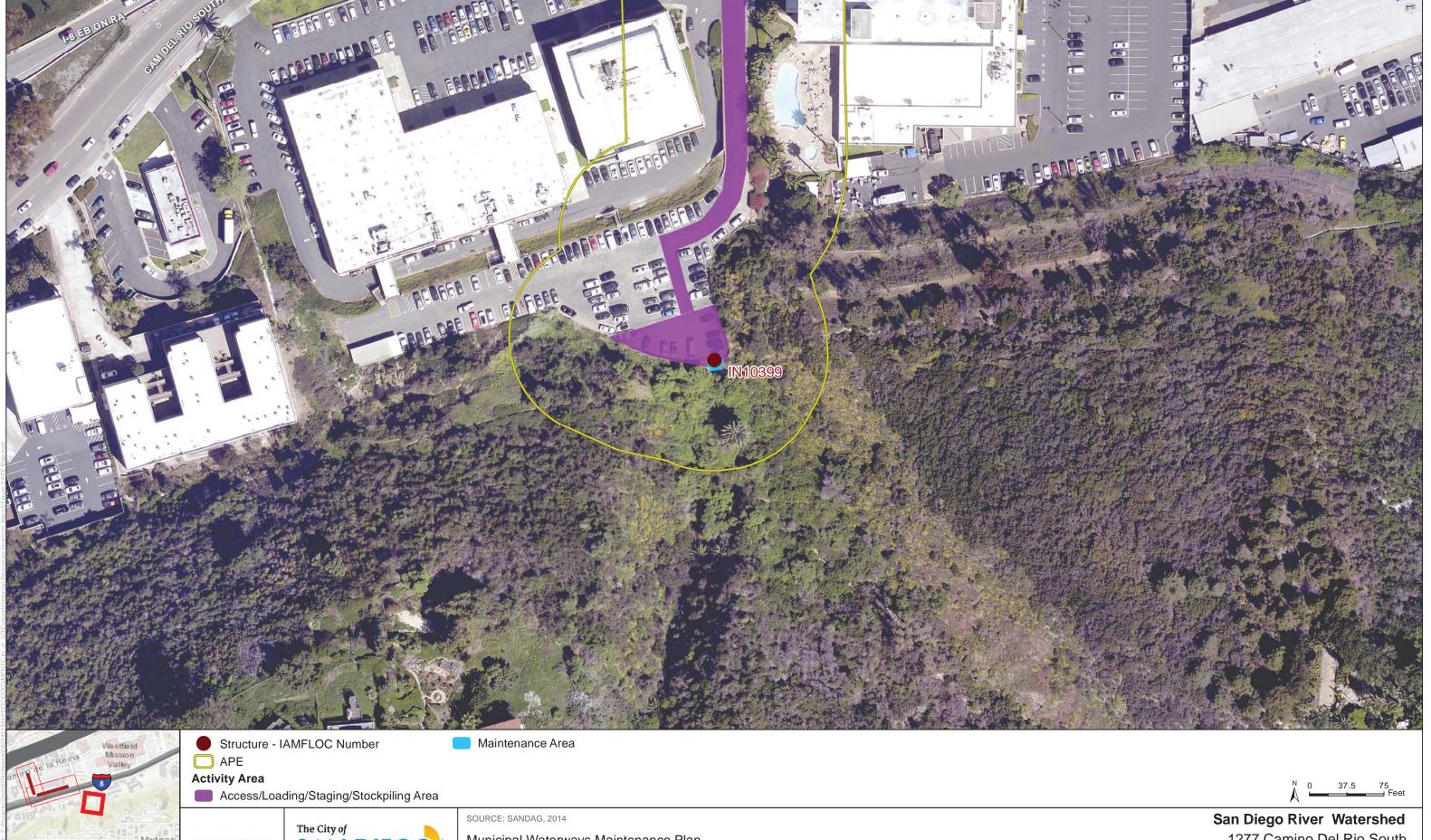
Historical Resources Inventory Report

Tijuana River WatershedTijuana River - Smythe

Figure 2-63 - APE Map

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Municipal Waterways Maintenance Plan

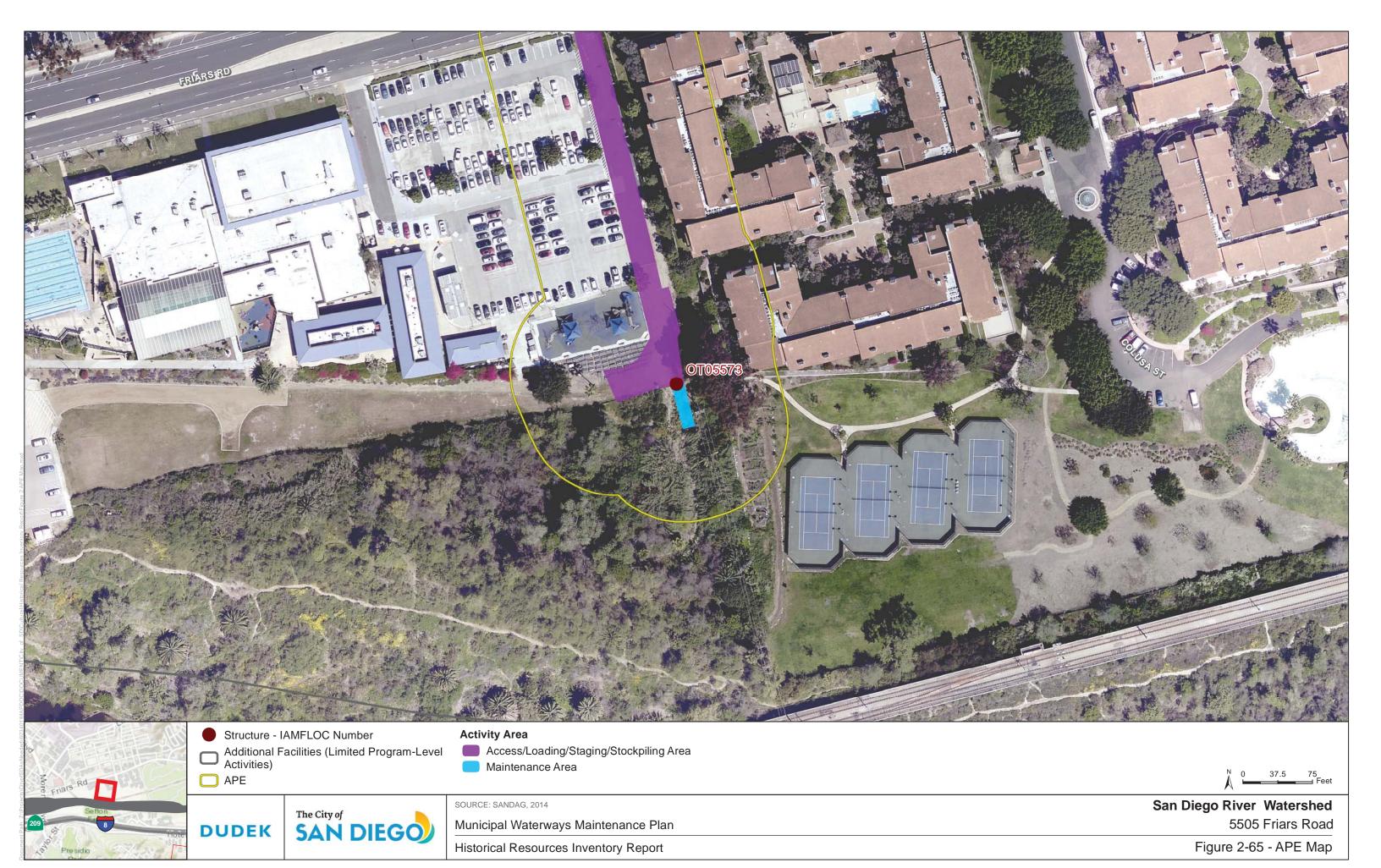
Historical Resources Inventory Report

1277 Camino Del Rio South

Figure 2-64 - APE Map

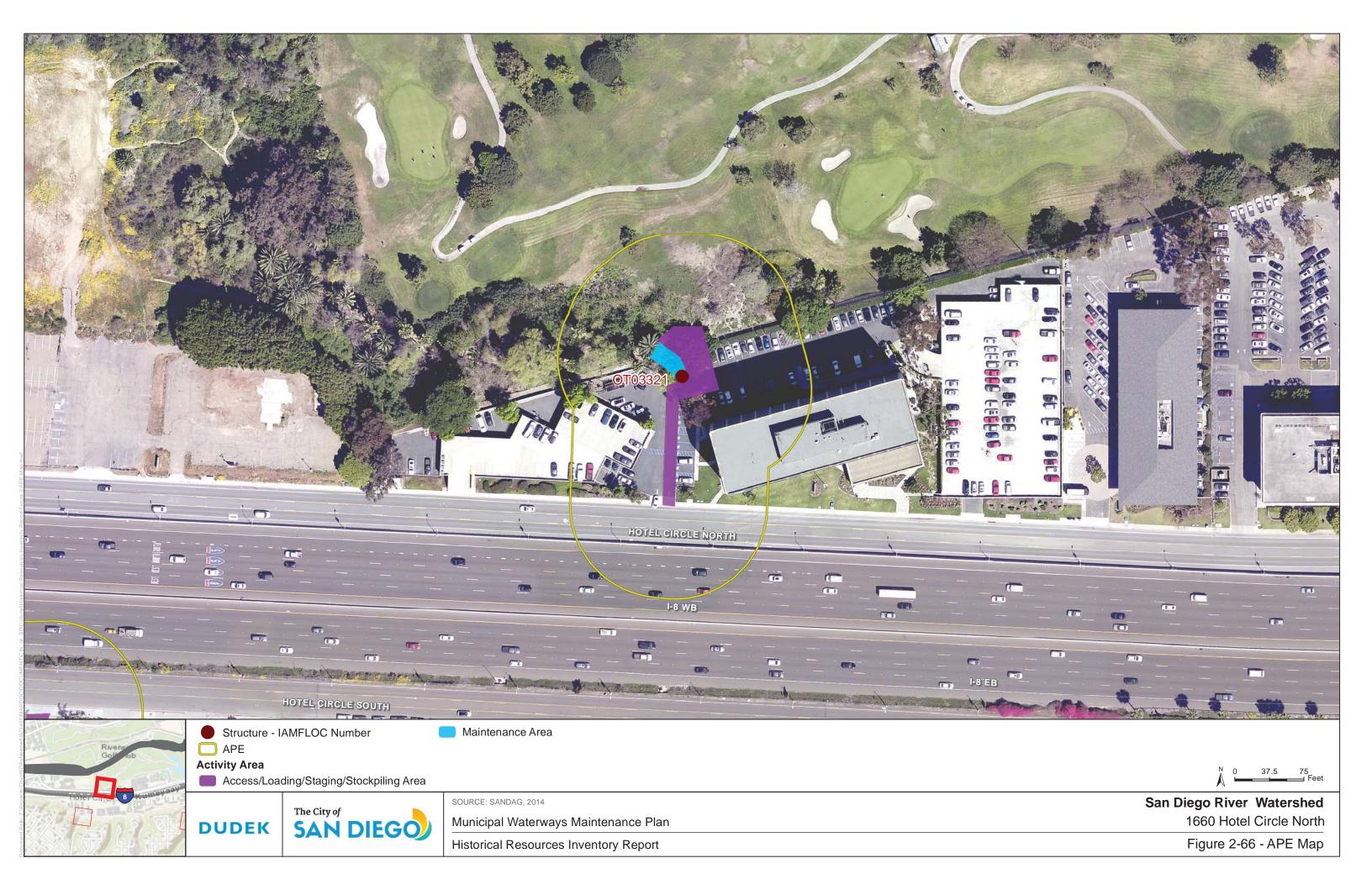
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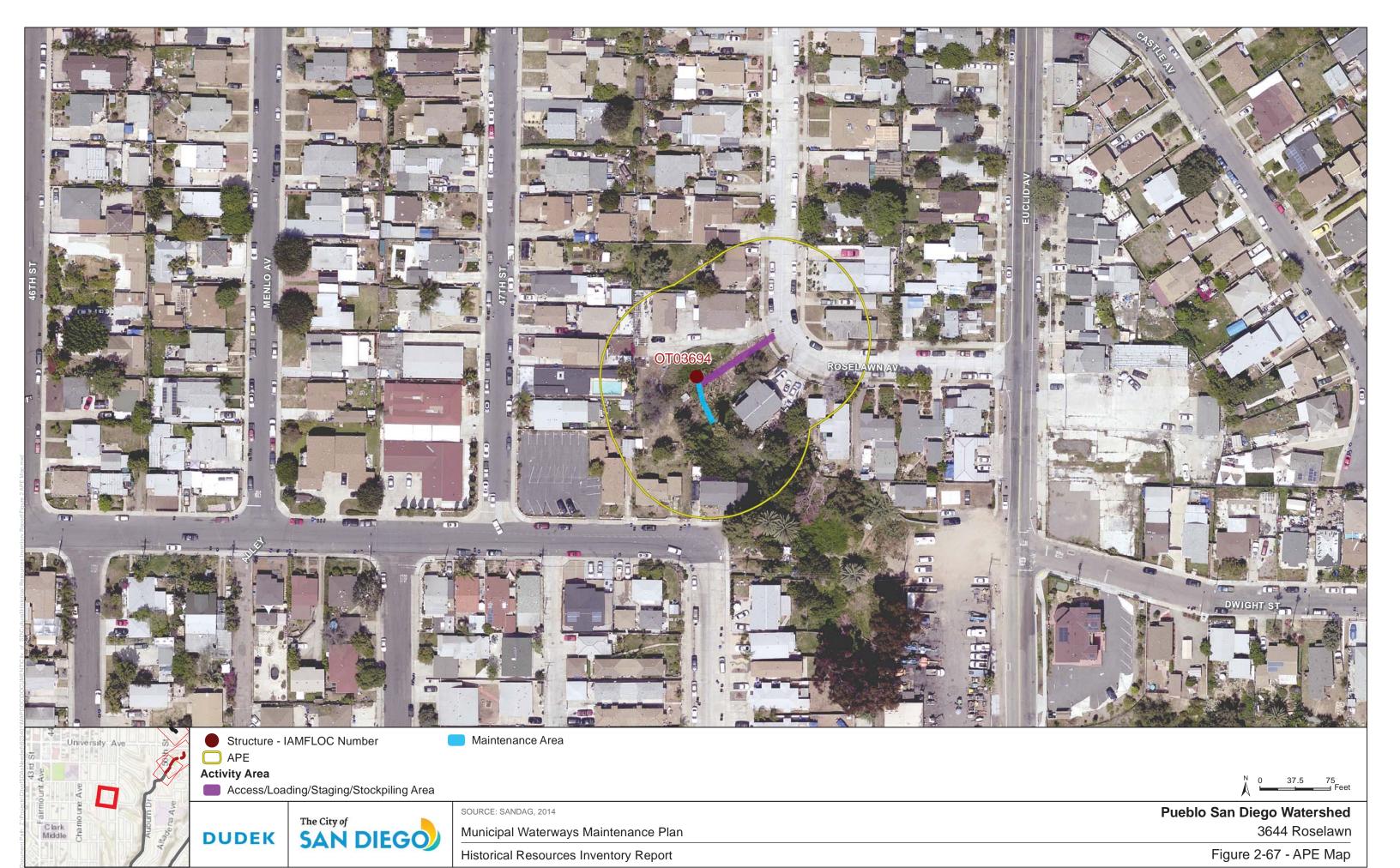
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