1.0 INTRODUCTION

1.1 BACKGROUND

The San Diego County Regional Airport Authority (Authority) was established by the California Legislature as a local regional government entity with authority to operate the San Diego International Airport (SAN), a role previously the responsibility of the San Diego Unified Port District (Port of San Diego). Among various other duties, the San Diego County Regional Airport Authority Act (Assembly Bill 93, 2001) provided language in the Public Utilities Code that granted the Authority the responsibility for developing and managing all aspects of the airport facilities that it operates. Relevant sections of the Public Utilities Code were amended by the Legislature in 2002 (Senate Bill 1896) to establish the date on which responsibility for airport management would be transferred from the Port of San Diego to the Authority, to ensure that trusteeship of the lands underlying the airport were retained by the Port of San Diego, and to modify the responsibilities of the Authority. The amendments required the Port of San Diego to execute a 66-year lease with the Authority that transferred title and ownership of all real property interests and improvements, including above and below ground utilities, to the Authority. The legislative amendments also made the Authority responsible for all applications to other governmental agencies and for all approvals, permits, authorizations, or agreements of any kind affecting or relating to the property governed by the lease. As such, the Authority is responsible for managing storm water at the airport and for complying with laws, regulations, and permits related to storm water management activities.

This introductory section outlines the purpose of this document, provides an overview of the Authority and the Authority's obligations to manage storm water runoff at the airport, and presents the environmental setting of the airport.

On January 1, 2003, the Authority became the owner and operator of SAN and was required to obtain coverage under the applicable sections of the National Pollutant Discharge Elimination System (NPDES) permit program of the Clean Water Act and to prepare any associated documentation that was required.

The Port of San Diego was first required to manage storm water runoff at SAN by NPDES Permit No. CAS0108758, which established storm water management requirements through the California Regional Water Quality Control Board, San Diego Region (RWQCB) Order No. 90-42 for the municipal separate storm sewer system (MS4) owned and operated by the County of San Diego, the incorporated cities within San Diego County, and the Port of San Diego. NPDES Permit No. CAS0108758 was first renewed in 2001 by RWQCB Order No. 2001-01. With the creation of the Authority and the transfer of SAN operations to the Authority in January of 2003, the RWQCB determined that the Authority itself was now subject to NPDES Permit No. CAS0108758. As such, the RWQCB amended Order No. 2001-01 and required the Authority to implement the storm water management activities required by the permit and to prepare and submit the appropriate documentation. In August of 2003, the Authority submitted the SAN Storm Water Management Plan (SWMP) as documentation of permit compliance. NPDES Permit No. CAS0108758 was renewed again by RWQCB Order No. R9-2007-0001 in 2007, which specifically named the Authority as a Permittee. The municipal NPDES permit was most recently reissued in 2013 by RWQCB Order No. R9-2013-0001 (NPDES Permit No. CAS0109266), as amended by RWQCB Order No. R9-2015-0001 and R9-2015-0100. The Authority is again named as a Permittee. This document is presented to fulfill the Jurisdictional Runoff Management Plan (JRMP) requirements of this permit.

Since 1992, operations at SAN have also been subject to NPDES Permit No. CAS000001, a state-wide General Permit to Discharge Storm Water Associated with Industrial Activity, established by California State Water Resources Control Board (SWRCB), Water Quality Order No. 91-13-DWQ. Certain activities are defined as "industrial activities' subject to NPDES Permit No. CAS000001, and those defined activities include, among others, aircraft maintenance, cleaning, and deicing operations. Thus, certain activities at SAN require coverage under the permit. The permit requires a Permittee to develop a Storm Water Pollution

Prevention Plan (SWPPP) for the facility that identifies and evaluates sources of pollutants arising from industrial activities and that identifies and describes the best management practices (BMPs) implemented to reduce or prevent the discharge of those pollutants. At that time, the Port of San Diego filed a Notice of Intent (NOI) to comply with NPDES Permit No. CAS000001 (see Appendix A). NPDES Permit No. CAS000001 was subsequently renewed in 1997 by SWRCB Order No. 97-03-DWQ. In September of 2002, with the transfer of SAN from the Port of San Diego to the Authority scheduled for January 1, 2003, the Port of San Diego filed a Notice of Termination from permit compliance for SAN and listed the Authority as the new facility operator (Appendix A). In March of 2003, the Authority filed a NOI to comply with SWRCB Order No. 97-03-DWQ (Appendix A), and in August of 2003 prepared the SAN SWMP to comply with the permit. CAS000001 was most recently renewed in 2014 by SWRCB Order No. 2014-0057-DWQ, which became effective on July 1, 2015. This document is presented to fulfill the SWPPP requirements of this permit.

Presently, as the owner and operator of SAN, the Authority is subject to the requirements of the following two NPDES storm water permits:

- RWQCB Order No. R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-0100, NPDES No. CAS0109266, *NPDES and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds Within the San Diego Region* (Municipal Permit), and
- SWRCB Water Quality Order No. 2014-0057-DWQ, as amended in 2015 and 2018, NPDES General Permit No. CAS000001, *General Permit for Storm Water Discharges Associated with Industrial Activities* (Industrial Permit).

In regard to Industrial Permit compliance, the primary Standard Industrial Classification (SIC) code for the site is 4581 Airports, Flying Fields, and Airport Terminal Services, and the Waste Discharge Identification (WDID) number for SAN under the Industrial Permit is 937I018035.

1.2 PURPOSE AND OBJECTIVES

As the owner and operator of the MS4 or storm drain system, the Authority is subject to the Municipal Permit and as the operator of SAN, the Authority is also subject to the Industrial Permit.

Required documents of the Municipal Permit are as follows:

- JRMP:
  - A collection of all jurisdictional runoff management operations and activities developed and implemented by the Authority;
  - A comprehensive program to reduce and eliminate pollutants entering and discharging from its storm drains;
  - Required BMPs to eliminate storm water pollution from activities and areas within its jurisdiction, including municipal, industrial, commercial, construction and new development/redevelopment areas and activities; and
  - Public participation and public education programs directed at storm water pollution prevention.
- Water Quality Improvement Plan (WQIP):
  - To target resources to address highest and focused priority water quality issues and not "all pollutants, all of the time" (https://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/wqip.html);

- Developed through collaborative efforts by the Authority with other agencies listed under the Municipal Permit (Copermittees) within the San Diego Bay watershed management area (WMA), which includes Pueblo San Diego, Sweetwater, and Otay, to identify and describe:
  - Highest and focused priority pollutants or water quality conditions and their sources;
  - Goals and strategies to address those pollutants or conditions;
  - Time schedules associated with achieving goals and implementing strategies; and
  - Monitoring and assessment to evaluate progress and adapt program.

The Industrial Permit requires the following document:

- SWPPP: identifies and evaluates sources of pollutants from industrial activities at SAN and identifies, describes, and implements BMPs to reduce or prevent the discharge of those pollutants.

Because the requirements of the Municipal Permit and the Industrial Permit overlap so extensively, the Authority has chosen to address the documentation requirements of the two permits with a single, comprehensive document, namely this SWMP. As an informational document providing a written description of the overall runoff management program conducted by the Authority, the SWMP addresses the Municipal Permit requirements for a JRMP. The SWMP also complies with the Industrial Permit requirements for a SWPPP, since it also describes potential pollutant sources at SAN and the BMPs implemented to address them.

This document has been prepared to update the June 2015 version of the SWMP in accordance with NPDES Permit No. CAS0109266 (Municipal Permit) as renewed in June 2013 by RWQCB Order No. R9-2013-0001 and amended by Order Nos. R9-2015-0001 and R9-2015-0100, and NPDES Permit No. CAS000001 as renewed in April 2014 by SWRCB Order No. 2014-0057-DWQ, which was effective from July 1, 2015, and amended in 2015 and 2018. The SWMP incorporates storm water management approaches that have been developed as guidance by the Municipal Permit Copermittees, the United States Environmental Protection Agency (USEPA), the California Stormwater Quality Association (CASQA), and others. In addition, this SWMP incorporates the output from several elements of a special project conducted by the Authority in 2005 and 2006 entitled the Storm Drainage System BMP Program, enhanced and updated by strategies and BMPs outlined in the WQIP.

Several completed and ongoing environmental programs at SAN have informed this document, including a hydrology assessment; a hydraulic analysis and tidal surge study; a biannual Site Audit; a chemical emergency response evaluation; a Catastrophic Fuel Release Evaluation; the development of a new Storm Water Sampling Plan for SAN; and a BMP Recommendations Report. Many of the documents produced from these elements of the program are mentioned, discussed, or incorporated into this SWMP, as well as other subsequent documents. Finally, the SAN SWMP seeks to present information in a manner that is intended to facilitate understanding by Authority staff and SAN tenants.

This update to the SWMP meets the requirements of Provision E of the renewed Municipal Permit. The SWMP is intended to reduce the discharge of pollutants from the Authority's MS4 to the maximum extent practicable (MEP) and to prevent urban runoff discharges from the MS4 from causing or contributing to a violation of water quality standards. This update to the SWMP also meets the requirements of the Industrial Permit, including the requirement to implement BMPs that control potential pollutant discharges using best available technology economically achievable (BAT) for toxic and non-conventional pollutants and using best conventional pollutant control technology (BCT) for conventional pollutants.

SWMP ORGANIZATION

The content and organization of the SWMP is based, in large part, on a standardized format developed and agreed upon by the Municipal Permit Copermittees ("Standardized Format for Jurisdictional Urban Runoff Management Plan" (Standard Format), as submitted to the RWQCB on July 24, 2007) to address Sections D, G, H, I.1 and 5, and J.1a of the 2007 Municipal Permit. This standardized format has been modified to include elements of the renewed Municipal Permit; therefore, there are some differences between the original Standard Format and the layout of this document. The content and organization of the SWMP is briefly summarized below.

There are aspects of the SWMP that likely vary significantly from the JRMPs prepared by other Copermittees. These variations are due in part to the unique aspects of the Authority's governance, as well as the airport's unique geographic setting. Although these factors will be discussed elsewhere in the SWMP, where applicable, the Authority is unique in comparison to most of the other Copermittees in that (1) the Authority controls all land uses through property leases or use agreements; (2) there are no residential uses within the Authority's jurisdictional area; (3) there are no hillsides within the Authority's jurisdictional area; and (4) the SWMP incorporates SWPPP requirements of the Industrial Permit. The SWMP includes the following elements:

- **Executive Summary** – a clear and concise description of the purpose and major elements of the SWMP.
- **Signed Certified Statement** – a signed statement addressing the certification requirements of both the Industrial Permit and Municipal Permit.
- **Introduction** – an outline of the purpose of the document, an overview of the Authority and the Authority's obligations to manage storm water runoff at SAN, and a presentation of the environmental setting of SAN.
- **Administrative and Legal Procedures** – an identification of all departments and staff that conduct urban runoff management activities. This section also identifies and describes all relevant legal authorities.
- **Non-Storm Water Discharges (NSWDs)/Illicit Discharge Detection and Elimination (IDDE)** – an identification of all potential NSWDs, and the BMPs in place to control or eliminate those discharges (as required by Section E.2 of the Municipal Permit and Sections III and IV of the Industrial Permit). Also, a description of mechanisms for reporting illicit discharges, spill prevention and response measures, and inspection and enforcement activities (as required by Section E.2 of the Municipal Permit and Sections X and XI of the Industrial Permit).
- **Development and Planning Component** – a description of the Authority's development and environmental review processes and the incorporation of storm water management elements into those processes (as required by Section E.3 of the Municipal Permit).
- **Construction Component** – a description of the approval processes, methods of generating an inventory and the prioritization of construction activities, the BMPs required to address construction activities, and construction activity inspection and enforcement (as required by Section E.4 of the Municipal Permit).
- **Municipal and Commercial Components** – a description of methods of generating an inventory and prioritization of municipal and commercial activities and areas, characterization of potential pollutant sources from these activities and areas, the BMPs required to address municipal and commercial activities, and inspection and enforcement (as required by Section E.5 of the Municipal Permit).

- **Industrial Component** – a description of methods of generating an inventory and prioritization of industrial activities and areas, characterization of potential pollutant sources from these activities and areas, the BMPs required to address industrial activities, and inspection and enforcement (as required by E.5 of the Municipal Permit). This section also presents the bulk of documentation required by Section X of the Industrial Permit regarding the development and implementation of a SWPPP.
- **Residential Component** – a brief explanation of the non-existent residential land uses or activity areas within the Authority's jurisdiction and the absence of storm water management program elements relative to the Residential Component (Section E.5) of the Municipal Permit.
- **Education and Public Participation Component** – a description of the program elements designed to address both the training requirements of the Industrial Permit and the education requirements of the Municipal Permit (Section E.7). The section discusses education for Authority staff, as well as tenants and the public. Also, a description of the mechanisms in place to enable the public to participate in the implementation of the Authority's SWMP.
- **Fiscal Analysis Component** – a description of the methods to secure funds for storm water programs, program expenditures and budgets, and the strategy for developing standardized fiscal analysis and annual reporting.
- **Effectiveness Assessment** – a discussion of the strategy to assess the effectiveness of the Authority's SWMP through water quality assessments, various levels of program assessment, WQIP assessments, and program review and modification.
- **Reporting** – a description of the reporting requirements under the renewed Municipal Permit and Industrial Permit.
- **Modifications to the SWMP** – an outline of the modifications made since the March 2008 version of the SWMP to meet the requirements of the renewed Municipal Permit and Industrial Permit.
- **Conclusions and Recommendations** – a discussion of any key conclusions or recommendations derived as a result of updating the SWMP in response to the renewed Municipal Permit and Industrial Permit.

1.3 ENVIRONMENTAL SETTING

SAN is located in San Diego County (see Figures 1 and 2) just north of downtown San Diego. SAN covers approximately 661 acres and operates as a domestic and international commercial airport. Airport operations at SAN currently include two main airline terminals, a fixed-base operations (FBO) facility, one main runway area, taxiways, and ancillary support facilities (including an aircraft fuel storage facility, a remote fueling facility, air cargo facilities, ground support facilities and operations areas), a wash-rack, overnight airplane parking areas, and the Airport Rescue and Fire Fighting Facility (ARFF). Figure 3 shows the layout of SAN, including boundaries, major structures, surrounding areas, direction of storm water flow, and surface waters.

SAN is located within the Pueblo San Diego hydrologic unit (908.00) of the RWQCB San Diego Basin Plan (1994). More specifically, SAN is located in the San Diego Mesa hydrologic area (908.20), Lindbergh hydrologic subarea (HSA 908.21). The climate of the area is typical of the southern California coastal region. The adjacent Pacific Ocean has a moderating effect on temperatures. The average temperature is 71 degrees Fahrenheit (°F) with temperature extremes ranging from 40°F in the winter months to 80°F in the summer months. Although the amount of rainfall varies from year to year, the San Diego coastal area has an average annual rainfall of about 11 inches, with the greatest rainfall occurring during the winter months. The rainy season in San Diego is considered to be October through May. Precipitation is sparse during the summer months. Occasionally, strong dry and northeasterly Santa Ana winds descend the mountain slopes to the east producing wind speeds in excess of 50 miles per hour over localized sections of the San Diego Basin, usually below canyons. The highest winds at SAN are in association with the winter and spring storms that invade southern California from the Pacific Ocean. During the summer months, low clouds,

known as the "marine layer," are common in the late night and early morning hours due to the proximity to the Pacific Ocean.

Approximately 85 to 90 percent of the SAN property is covered by impervious surfaces consisting mainly of buildings and paved areas. The soils underlying SAN are generally undifferentiated bay deposits and hydraulic fill material originating from San Diego Bay. The soil is described as undetermined in the Soil Hydrologic Groups map in the San Diego County Hydrology Manual. The elevation of SAN ranges from approximately 10 to 25 feet above mean sea level.

Storm water from SAN drains to San Diego Bay, portions of which are currently on the Clean Water Act Section 303(d) list of impaired water bodies (303[d] listed) for impacts due to polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), chlordane, lindane, indicator bacteria, and metals, as well as benthic community effects and sediment toxicity. The 2010 303(d) list includes copper as a pollutant impacting water quality in the marinas along Harbor Island and PCBs as a pollutant impacting water quality throughout the San Diego Bay. Runoff from SAN commingles with runoff from other sources and discharges into the waters along Harbor Island. There are four Toxic Hot Spots in San Diego Bay, one of which (namely, the Downtown Anchorage, near the foot of Grape Street) is located near outfalls associated with runoff commingled from SAN and other sources. In 2014, this area was the subject of Investigative Order R9-2014-0007, issued by the RWQCB. The SWRCB has designated San Diego Bay in its entirety as having Rare, Threatened, or Endangered Species (RARE) beneficial use in the San Diego Basin Plan (1994). Both the Sweetwater Marsh National Wildlife Refuge and the South Bay Unit of the San Diego National Wildlife Refuge are considered Areas of Special Biological Significance (ASBS), but neither is within close proximity to SAN.

1.4 OVERVIEW OF SITE DRAINAGE AND THE MS4

The majority of surface water runoff from SAN is conveyed via sheet flow into gutters and storm drain inlets. The storm water conveyance system consists of 15 outfall basins. Each basin is composed of sub-basins that route flow to different sections of the infrastructure. The total system consists of approximately 192,000 linear feet of pipe and approximately 550 inlets discharging through 15 outfalls. Storm drainpipe sizes vary in diameter, according to their location in the storm drain system, from 4 to 84 inches in diameter. Storm water runoff flows from SAN through the storm water conveyance system and discharges through Outfalls 01 through 11 into San Diego Bay to the south of SAN, and Outfalls 12 through 15 into the Navy Boat Channel portion of San Diego Bay to the west. Flow in the majority of the storm drain system is intermittent and dependent on the amount of rainfall and subsequent runoff. Those portions of the MS4 that are closest to San Diego Bay receive seawater infiltration during high tides.

The Authority has completed several improvements to address environmental sustainability, storm water quality, and water conservation. The Centralized Receiving and Distribution Center (CRDC), completed in 2012, helps reduce traffic on the surrounding roadways by centralizing all truck deliveries of food, beverage, retail, and other goods. The Green Build, completed in August 2013, was the largest project in the history of SAN, expanding Terminal 2 with 10 new gates and adding a dual-level roadway for arrivals and departures. This project earned the Authority a Leadership in Energy and Environmental Design (LEED) Platinum certification, making SAN home to the first LEED Platinum certified commercial terminal in the world. The Fixed-Base Operator Complex project, completed in August 2014, constructed a bigger, more environmentally friendly FBO facility and also achieved LEED Platinum certification. The new developments also include many low-impact development (LID) BMPs, as detailed in the drainage basin descriptions.

More recently, the Authority has developed the new Facilities Management Department (FMD) building, operational since June 2020; the Airport Fueling Operations (AFO) area, operational since 2021; the new cargo facility, completed and occupied by June 2021; and the new West Refueler Facility (WRF) and West Waste Facility, both operational since 2022.

Below is a detailed description of each drainage basin located on the SAN property:

DRAINAGE BASIN 1

Drainage Basin 1 is located at the easternmost end of the Airport and is partially bisected by Drainage Basin 3. In the past, Drainage Basin 1 was occupied by the FBO facility serving general aviation aircraft (as opposed to regularly scheduled commercial passenger airlines). Following the Northside Improvements renovating and moving the FBO, this drainage basin now encompasses just a portion of the FBO public parking lot, a portion of the eastern blast fence area, and the vehicle service road (VSR). Storm water runoff from adjacent properties east of SAN flows in a westerly direction into Drainage Basin 1.

DRAINAGE BASIN 2

Drainage Basin 2 was removed from the SWMP maps. Following SAN drainage investigations and map updates, it was determined that Drainage Basin 2 was integrated with Drainage Basin 1, because the flows at the far east end of the runway (which contains a storm drain inlet and part of the VSR that circles the perimeter of the airfield) were draining to the same outfall in Drainage Basin 1. Drainage Basin 2 previously included a lavatory waste disposal facility connected to the sanitary sewer, but this facility has been moved to Drainage Basin 8.

DRAINAGE BASIN 3

Drainage Basin 3 includes a portion of the Rental Car Center (RCC) and the airside portion of the FBO. The RCC spans two drainage basins--approximately one-third of the parking garage structure is in Drainage Basin 3, with the remaining two-thirds in Drainage Basin 5. RCC bus parking and the taxi hold lot were relocated from Drainage Basin 4 to Drainage Basin 3 on the northside because of construction. The RCC provides passenger automotive transportation to airport customers at one location; it includes a parking garage that can house up to 5,000 vehicles, a customer service area, and a vehicle service station (quick turnaround [QTA] area). Only light maintenance is performed at the QTA area and activities include vehicle washing and fueling, oil changes, and tire rotations. Fuel, oil, and car wash solution are stored onsite for vehicle maintenance. The RCC was classified as having no potential pollutant sources because the industrial activities onsite are performed under the protected cover of the parking garage structure and pose no threat of exposure to storm water. As a result, the RCC initially obtained a No Exposure Certification (NEC) and had their own identification (ID) number. Amendment No. 1 incorporated the RCC under the Authority's WDID number and permit coverage. No sampling occurs in the RCC operating area because of its previously held NEC. The RCC's NEC ID number was 9 37NEC002567, though this number has since been nullified because the RCC is now under the Authority's WDID number. To obtain an NEC from the SWRCB, an industrial site must be able to claim no exposure for 11 categories: residuals from machinery, materials/products from past activity, material/product loading/unloading, open/deteriorated/leaking containers, waste material, residuals from ventilation, residuals from spills/leaks, material handling equipment, outdoor storage, private roads/railways, and processed wastewater.

The FBO includes two office buildings, five hangars used for a passenger area, a cafe, storage for small corporate jets and private aircraft, and an area for aircraft maintenance; following a review of the North Side Utilities (NSU) force main, it was determined that the public-facing sides of these buildings are in Drainage Basin 12. Aircraft lavatories are serviced by Signature, and the lavatory waste is disposed of at the triturator. It also encompasses parts of the runway, taxiway, California Least Tern (*Sterna antillarum browni)* nesting areas, and part of the airfield perimeter VSR. Small aircraft are sometimes parked along the VSR just south of the FBO. The area also includes aircraft parking and loading/unloading areas, aircraft refueling truck parking, and a vehicle and equipment maintenance shop with a hazardous waste accumulation area.

South of the new FMD Building is an Airport Authority equipment and materials storage area, referred to as the "boneyard," which provides storage for various parts and equipment. RCC bus parking and the taxi hold lot were relocated from Drainage Basin 4 to Drainage Basin 3 on the northside because of construction.

DRAINAGE BASIN 4

Drainage Basin 4 is a small area in the southeast portion of SAN encompassing parts of the south taxiway areas and VSR. The drainage basin also includes the nesting area for an endangered species of seabird, the California Least Tern (*Sterna antillarum browni)*, and a taxi vehicle parking area containing multiple proprietary drain inlet filter BMPs. The VSR is part of airport property and connects the north side facilities with the south side, and runs parallel to city streets. The wash rack and aircraft lavatory waste disposal area (triturator) that were located north of the compactors in Drainage Basin 8 have been moved to Drainage Basin 4. Drainage from both areas is directed to the sanitary sewer. Wastewater from aircraft cleaning and daily ramp scrubbing is disposed of in the triturator. Construction is underway for a new East Solid and Liquid Waste Facility, which will be located directly to the east of the new wash rack/triturator. The Transportation Network Companies (TNC) Lot is located south of the triturator, roughly split in half between Drainage Basins 4 and 5A.

DRAINAGE BASIN 5

A large portion of Drainage Basin 5 is used for vehicle parking and the RCC. It also encompasses the FMD campus, parts of the runway, taxiway, California Least Tern nesting areas, and portions of the VSR. Drainage Basin 5 contains most of the operational area for three cargo carriers: loading/unloading materials, container storage, some vehicle and equipment maintenance, and office space. The south edge of Drainage Basin 5 now extends to Harbor Drive and contains parking areas (with various newly installed BMPs, such as proprietary drain inlet filter BMPs), and the runway generator area where two 500-gallon diesel aboveground storage tanks (ASTs), a couple of small buildings, and an Authority materials storage area are located. Storm water runoff from adjacent properties to the north of SAN flows in a southerly direction into Drainage Basin 5.

The FMD Building and parking lot located south of Admiral Boland Way drain to a stormwater capture and reuse system. This development includes an underground concrete structure (cistern) composed of a 160-foot-diameter (retaining 8,655 cubic feet [ft^3] of runoff) and existing bioswales that were selected to meet pollutant control requirements. This northside cistern was installed to capture storm water runoff from the FMD Building and parking lot, and potential offsite storm drain facilities. At full capacity, it is designed to capture runoff from 77.8 acres. Currently, it captures runoff from a maximum of 15.65 acres from the newly constructed FMD Building and parking lot until additional storm water diversions to the cistern are installed. The northside cistern's captured storm water will be reused at the RCC car washing facilities. While the cistern connection to the RCC is being developed, the captured runoff in the northside cistern is temporarily pumped to nearby bioretention BMPs at the RCC for retention/infiltration. The cistern's overflow drains to Drainage Basin 5. Engineering as-builts are not yet available, but once they are completed, any changes to drainage basin delineations in the site maps will be updated in the maps.

DRAINAGE BASIN 5A

Roughly half of the TNC lot and the new Airline Support Building (ASB) or cargo facility, moved from Drainage Basin 7, is now located northeast of the intersection of North Harbor Drive and Liberator Way in Drainage Basin 5a. The facility includes an approximately 73,600-square-foot, two-story warehouse building approximately 30 feet high. It includes outdoor loading and unloading of cargo at the front-loading dock. On the back side of the ASB, a tenant provisioning truck loading area is used to supply trucks with food, drinks, and other equipment to take back to the terminals. There are multiple maintenance bays with roll-up garage doors where maintenance is conducted indoors. Materials stored outdoors include mail carts, loading racks and other loading accessories such as wood/metal pallets, forklifts and other ground support equipment/vehicles, vehicle parts, and hazardous waste accumulation in covered containers. Most of the hazardous materials are stored indoors within the maintenance/cargo bays; the rest are in a locked storage box directly east of the building. Storm water runoff is captured in and treated by underground infiltration basins on the front and back sides of the ASB. If the underground infiltration basins overflow, bypass is directed over a diversion weir and drains to Outfall 5a.

DRAINAGE BASIN 6

The northeast side of Drainage Basin 6 contains a portion of the operational area for two air cargo carriers; activities performed by the cargo carriers in this area include loading/unloading of cargo onto airplanes and container storage. Aircraft, vehicle, and equipment fueling, and maintenance are also conducted at this site. The Aircraft Fuel Storage Facility (FSF) is located on the northwest side of the drainage basin. There are five 1-million-gallon jet fuel ASTs within secondary containment located at the FSF. This facility is equipped with a 12,000-gallon oil-water separator (OWS) plus an 8,000-gallon holding tank to treat fuel spills. There are also jet fuel, diesel, and gasoline loading and unloading areas with spill containment, an equipment pad with spill containment, gasoline and diesel underground storage tanks (USTs), and a foam equipment building with a 1,500-gallon AST containing a 3 percent aqueous foam concentrate. Drainage Basin 6 formerly included the airport Remote Fueling Facility (RFF), used to dispense fuel from the FSF to mobile aircraft refueling tanker trucks, but that facility has been removed because of the Terminal 1 construction. To replace it, the WRF in Drainage Basin 15 was built in September 2022 and is described in the Drainage Basin 15 section. The new facility will provide backup and supplemental aircraft fueling capability to support the proposed hydrant system.

Just east of the FSF is the new 7,050-square-foot, one-story AFO Building where indoor maintenance of Menzies (the SAN fuel distributor) fuel trucks is conducted. The AFO includes a parking lot, a truck movement area, and two fuel truck parking areas that are bermed and sloped toward inlets installed with 100 percent trash capture filters. A modified storm drain manhole just southwest of the AFO houses a hydrocarbon flow filter (HFF) oil stop valve manifold system to prevent any unintentional discharges of oil from the fuel parking areas into the storm drain system. Menzies relocated to this new facility in June 2021.

The “90-Day Facility” was put into service in 2016 and is the designated storage area for both solid waste and hazardous waste accumulation before waste is properly disposed. The 90-Day Facility is located between the Air Traffic Control Tower (ATCT) and Centralized Receiving and Distribution Center (CRDC). The 90-Day Facility is fully enclosed so that the materials inside do not pose an environmental threat.

The CRDC, located west of the ATCT, serves as a central delivery location for food, beverage, retail, and other goods. This facility was constructed with several proprietary trench drain filter and grate inlet skimmer BMPs.

The ARFF station is south of the FSF. The ARFF station participates in firefighting vehicle and equipment testing at least once per year on a large concrete pad called the north ramp area, just east of the ARFF facility. The north ramp area drains through two OWSs.

Also located in Drainage Basin 6 are portions of the runway, taxiways, and the VSR. Solid waste from runway rubber removal is disposed of in the dewatering bin just east of the ATCT. Solid waste generated by ramp sweeping has been dumped at the lined lowboy immediately southwest of the ATCT. However, the lowboy is being phased out in favor of the dewatering bins near the ATCT. Wastewater generated by ramp sweeping is disposed of at the wash rack. A contractor is responsible for disposal of waste and wastewater generated in both the lowboy and the dewatering bin.

On the south side of the Drainage Basin 6, the former Commuter Terminal now serves as the Authority’s Administration Building and no longer has flights arriving or departing. The former ramp area was used occasionally for aircraft maintenance, equipment storage, and cargo-related operations; this area is now fully under construction for the new Terminal 1 development. The parking lots were constructed with several treatment control and LID BMPs, including hydrodynamic separators, permeable asphalt strips, and a high-rate media filter.

DRAINAGE BASIN 7

Drainage Basin 7 is currently undergoing construction for the Terminal 1 expansion project. The south side cargo facility, valet lot, Commuter Terminal short-term parking lot and access road, and Menzies building were demolished in 2021. Menzies relocated to the new AFO in Drainage Basin 6 in June 2021. In addition, the ground support equipment (GSE) maintenance, storage, and cargo area moved to the new ASB cargo facility located in Drainage Basin 5a in July 2021.

DRAINAGE BASIN 8

The east portion of Drainage Basin 8 contains two trash compactors, two recycling compactors, one compost compactor, a metal roll-off, and a wood roll-off with a berm along the back sides of the compactors. The wash rack was moved from Drainage Basin 8 to Drainage Basin 4 because of construction. This area is used by the Authority, the airlines, and other tenants to dispose of trash, recyclables, and compost. Drainage in the bermed area is discharged to the sanitary sewer. The FMD constructed a new sanitary sewer inlet at the bermed area in fall 2018, removed some sections of the old berm, and extended the berm to prevent any illicit discharges (from power washing at the trash compactor/recycling compactor bermed area) to reach a storm drain. Washing is performed by Republic. All wash water is discharged into the sanitary sewer. FlagShip maintains the trash compactor area and washes trash and recycling tippers/bins. Wastewater from FlagShip power washing the sidewalks is disposed of in the dewatering bin at this compactor area.

West of the trash compactor area are the Terminal 1 gate and ramp areas and building. Fueling, maintenance, deicing, lavatory servicing, washing, and loading/unloading of passenger aircraft occur at the main terminal ramp. Approximately 350,000 gallons of jet fuel are brought to the Terminals 1 and 2 ramp areas daily by the mobile refueling tankers and loaded by positive lock hose into the aircraft. A 250-gallon diesel AST is located on the roof of the terminal building. Aircraft maintenance equipment, vehicles, deicing fluids, hazardous waste accumulation areas, trash dumpsters, parts, and flammable materials storage lockers containing mainly oils and lubricants are stored under overhangs and around jet ways and gates in this area. One 3,000-gallon grease receptacle, plus several grease traps and smaller grease containers, is located next to the Terminal building to trap and/or collect grease from the airport restaurants. The receptacles and traps are linked to the sanitary sewer and are serviced regularly. The wastewater and grease from cleaning of the units are transported offsite for processing and disposal in the sanitary sewer or at a landfill.

Drainage Basin 8 also encompasses parts of the runway, taxiway, and VSR, and includes a generator and 425-gallon gasoline AST north of the VSR on the northside of the runway and southwest of the ARFF facility. This drainage basin is currently under construction to build the proposed new Terminal 1 building and the Terminal 1 parking plaza.

DRAINAGE BASINS 9, 10, 11, AND 14

Runoff from the Terminal 2 access roads, as well as most of the terminal building, is captured in four drainage basins: 9, 10, 11, and 14, spanning from the east to the west, where the new dual-level roadway for arrivals and departures has been constructed as part of the Green Build. Drainage Basin 9 also partially includes the central heating, ventilation, and air conditioning (HVAC) building, power plant building, and materials and waste storage areas. Drainage Basins 9, 10, and 11 include the Terminal 2 Parking Plaza that was completed in May 2018. Drainage Basins 9, 10, 11, and 14 were revised in January 2022 after a review of the as-builts for the Terminal 2 Parking Plaza. The small parking lot east of the parking plaza drains to Drainage Basin 11, and the parking area west of the Terminal 2 Parking Plaza drains to Drainage Basin 9. Storm water BMPs were installed in the original Terminal 2 East and West parking lots as part of the Green Build, including an acre of pervious pavers and bioswales, and three high-rate media filters that were retained when the Terminal 2 Parking Plaza was redeveloped on the Terminal 2 East parking lot. The Terminal 2 Parking Plaza contains a 7.6-acre capture and reuse facility, known as the Storm Water Reuse Treatment System (SWRTS), that captures 100 percent of the storm water drainage on the third floor of the Terminal 2 Parking Plaza from an 85^{th}-percentile of the 2-year storm event and routes it to the central HVAC building and power plant building. In the event of overflow, bypass is directed over a diversion weir and

drains within Drainage Basin 10. The system also includes one OWS to serve as a precautionary capture method for leaks and spills prior to runoff entering the capture and reuse facility.

In 2022, the TNC Lot and Cell Phone Lot were moved from Drainage Basin 6 to Drainage Basin 14 because of the ongoing construction associated with the Terminal 1 expansion. The office buildings for Airport Design and Construction (ADC) in Drainage Basin 14 were relocated to an off-airport parcel by Liberator Way and North Harbor Drive. Construction of the new Airport administrative building in Drainage Basin 14, directly north of the Cell Phone Lot, started in 2022; completion is slated for fall 2023.

DRAINAGE BASIN 12

The Terminal 2 East gate and ramp areas and part of the terminal building are located in Drainage Basin 12 and their activities and storage are very similar to those in the Terminal 1 gate and ramp areas in Drainage Basin 8 (described above). The Terminal 2 area has one 6,000-gallon grease receptacle and one 5,000-gallon grease receptacle, plus several grease traps. The OWS previously located northwest of Gate 41 is no longer in service. Trash dumpsters are placed at Terminal 2 West and in between Terminal 2 West and East. Four emergency generators are located near the terminal areas, with a substation and 500-gallon diesel AST at the west end of the runway. Two 240-gallon diesel ASTs are also located near Terminal 2.

Drainage Basin 12 was revised in 2023 following a review of the as-builts for the NSU force main and the SAN Park 2, which is the main employee parking lot. The NSU force main is a storm drain that runs from Admiral Boland Way to outfall 12, going underneath Drainage Basin 6 and running parallel to the north VSR. The employee lot has a detention basin for capturing stormwater; the overflow pipe leads into the NSU force main, along with stormwater from Admiral Boland Way and the landside portion of the FBO. As a result, Drainage Basin 12 is broken up to include the employee lot, the majority of Admiral Boland Way, and the northern sides of the FBO buildings along with the Terminal 2 East gate and ramp areas. New LID BMPs were installed at the FBO as part of the Northside Improvements Project, including eight sections of permeable pavement with infiltration trenches, five bioswales, and one Contech Stormfilter. More information about the FBO is described above in Drainage Basin 3.

DRAINAGE BASIN 13

Drainage Basin 13 is a small area in the far northwest section of SAN that covers the west end of the taxiway and portion of the VSR. SAN's Engineered Material Arresting System, designed to prevent aircraft overruns, is also in Drainage Basin 13. Storm water runoff from adjacent properties north of SAN flows in a southerly direction into Basin 13.

DRAINAGE BASIN 15

Drainage Basin 15 encompasses the Terminal 2 West gate and ramp areas and part of the terminal building and has activities that are very similar to those in Drainage Basin 12. Drainage Basin 15 has one 5,000-gallon grease receptacle and two 2,000 gallon grease receptacles, as well as several grease traps alongside the terminal. A 250-gallon diesel AST is alongside the terminal building, with an additional 1,000 gallons of diesel storage available within the generator. Drainage Basin 15 also includes aircraft overnight parking and GSE storage area. As part of the Green Build, a high-rate media filter and 1.75 acres of permeable artificial turf were added on the airfield at the far west end of Drainage Basin 15. Because of the removal of the RFF, the WRF was constructed at the west end of SAN, north of the remain-overnight (RON) areas. The WRF features a five-bay refueler loading rack, a spill containment pit, an OWS, and activated carbon filtration. The five concrete loading islands are each designed to capture fuel spills and storm water, and they all drain to the containment pit. Once visual observations of the water collected in the containment pit have been completed to ensure that no floatables or oily sheens are present, the water is manually pumped into the OWS/carbon filtration BMPs. The fuel reaches the WRF dispensers via an underground pipeline from the FSF. Directly south of the WRF is the new West Solid Waste Disposal Facility, a bermed area with dumpsters for municipal solid waste, recyclables, and food waste. This facility drains to an oil/water separator before discharging to the sanitary sewer.

OFF-AIRPORT LEASED PARCELS

As of January 2022, the Authority has temporarily leased eight off-airport parcels from the Port of San Diego in coordinated efforts to shift operations and facilities for the Terminal 1 expansion project. Three of the parcels are located by Pacific Highway, and five are located on Liberator Way or on Harbor Island Drive.

Liberator Way Parcels:

The Authority has leased three parcels, one leased from the Port of San Diego, and two subleased from Port of San Diego tenants Avis and Hertz, respectively. The triangular parcel leased from the Port of San Diego contains the Authority's ADC department trailers and the trailers for the Terminal 1 Expansion Joint Venture Team, also known as the Arrive Team, which consists of Turner, FlatIron, and Gensler contractors. The two parcels to the west are combined as the Arrive and ADC employee parking. The triangular parcel drains to Convair Lagoon, and the two other parcels drain to outfalls at the East Basin.

Harbor Island Parcels:

The Authority leased from the Port of San Diego the "elbow" lot on Harbor Island Drive. In the west half of the lot, ABM, a parking management company, operated in the area until December 2021. Since then, it has been serving as a construction employee parking lot for the Arrive Team contractors. The "elbow" lot drains north and toward the east to an outfall at the East Basin. The east half of the lot is currently operated by Ace Parking and used as an overflow valet lot. The overflow valet parking lot drains south to an outfall at the North San Diego Bay.

The parcel north of the "elbow" lot is leased from the Port and is subleased to their tenant, Avis. Avis primarily uses the lot for storage of vehicle overflow from their primary operations located by Liberator Way. The Avis lot drains toward the east, into the East Basin, connecting with Outfall 7.

Pacific Highway Parcels:

The Port of San Diego is subleasing from the Authority a parcel on Pacific Highway and Sassafras Street as their Port of San Diego employee parking lot. The parcel on Pacific Highway and Palm Street and an adjacent lot to the north on California Street and West Laurel Street are leased by the Authority from the Port of San Diego to be used as a consolidated Airport Bus Shuttle Operations Center. Currently, there are no operations at these two parcels. Both lots drain toward the west and onto Pacific Highway via scuppers, and then drain into curb inlets that ultimately drain to Outfall 1.