TECHNICAL MEMORANDUM

System-wide Evaluation to Identify Retrofit Opportunities

Prepared for:

San Bernardino County
Flood Control District

Prepared by:

RBF Consulting
14725 Alton Parkway
Irvine, California 92618

January 2011

TABLE OF CONTENTS

APPENDICES

FIGURES

TABLES

1 INTRODUCTION

1.1 Background

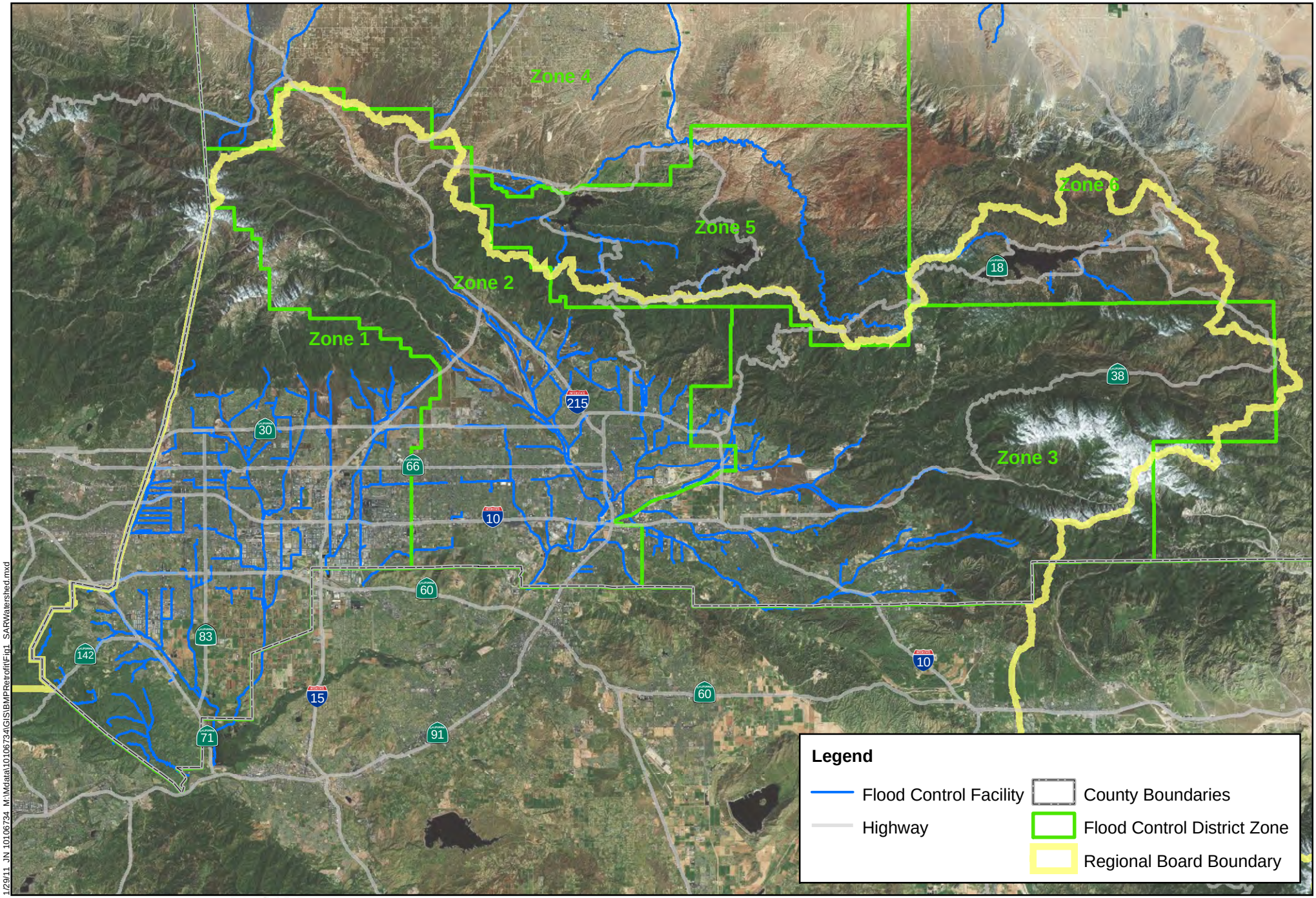
The Santa Ana River Watershed is located in Southern California, east of the City of Los Angeles, and includes a small portion of Los Angeles County, a significant portion of Orange County, the northwestern corner of Riverside County, and the southwestern portion of San Bernardino County. Water quality in the Santa Ana River Watershed is regulated by the Santa Ana Regional Water Quality Control Board, which issues National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permits for Orange County, Riverside County, and San Bernardino County and their associated municipalities, also known as Copermittees.

Within Section XI, New Development of the Area-wide Urban Stormwater Runoff Management Program San Bernardino County MS4 Permit (Order No. R8-2010-0036), the County and the Permittees are required to develop a Watershed Action Plan (WAP). The purpose of the WAP is to address water quality and hydromodification impacts and integrate water quality, stream protection, stormwater management and re-use strategies with land use planning policies, ordinances, and plans within each jurisdiction. This integration is also designed to address cumulative impacts of development on vulnerable streams and to the maximum extent practicable preserve or restore the structure and function of streams and protect surface and groundwater quality. The WAP, Section ix, specifies the development of a system-wide evaluation to identify opportunities to retrofit existing stormwater conveyance systems, parks, and other recreational areas with water quality protection measures and develop recommendations for specific retrofit studies that incorporates opportunities for addressing applicable TMDL implementation plans, hydromodification management, and/or LID implementation within the permitted area.
RBF Consulting performed this system-wide evaluation on behalf of the County of San Bernardino and Permittees, and this report describes the study that was performed to meet this permit requirement, including the technical approach, methodology, and the results of the study. Also provided are future steps and recommendations on specific future retrofit studies.

1.2 The Santa Ana River Watershed

The Santa Ana River (SAR) Watershed is located within portions of Los Angeles, Orange, Riverside and San Bernardino County and has an area of approximately 2,650 square miles. The headwaters of the Santa Ana River are in the San Bernardino Mountains with two of its principal tributaries Bear Creek and Mill Creek. Other tributaries include Lytle Creek originating in the San Gabriel Mountains and the San Jacinto River originating in the San Jacinto Mountains. The climate in the watershed is Mediterranean with hot, dry summers and cooler wet winters with a range of 12 inches of rainfall per year in the coastal plain, to 18 inches per year in the inland valleys, to 40 inches per year in the mountains. Due to the climate, there is little natural perennial surface water in the watershed. The upper part of the watershed in the mountains has the highest gradient and water quality is usually of high quality. Flows in the Upper Valley from the Seven Oaks Dam to the City of San Bernardino consist of storm flows and rising groundwater. From the City of San Bernardino to the City of Riverside, the Santa Ana River flow perennially and includes discharges from publicly owned treatment works (POTW). From the City of Riverside to northern part of Orange County, flow consists of POTW discharges, urban runoff, irrigation runoff water and surfacing groundwater. The SAR cuts

through the Santa Ana Mountains, flows on to the Orange coastal plain, and eventually discharges to the ocean in the City of Huntington Beach (SAWPA, 2009). The Santa Ana River Watershed is substantially urbanized with approximately 32% of the land being residential, commercial, or industrial. Agricultural land makes up approximately 10% of the watershed, and the watershed is home to approximately 5 million people. Figure 1 shows the boundaries of the SAR Watershed within San Bernardino County.



1/29/11 JN 10106734 M:\Mdata\10106734\GIS\BMPRetrofitFig1_SARWatershed.mxd

RBF CONSULTING GIS

0 5 10
Miles

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Figure 1: Santa Ana River Watershed - County of San Bernardino

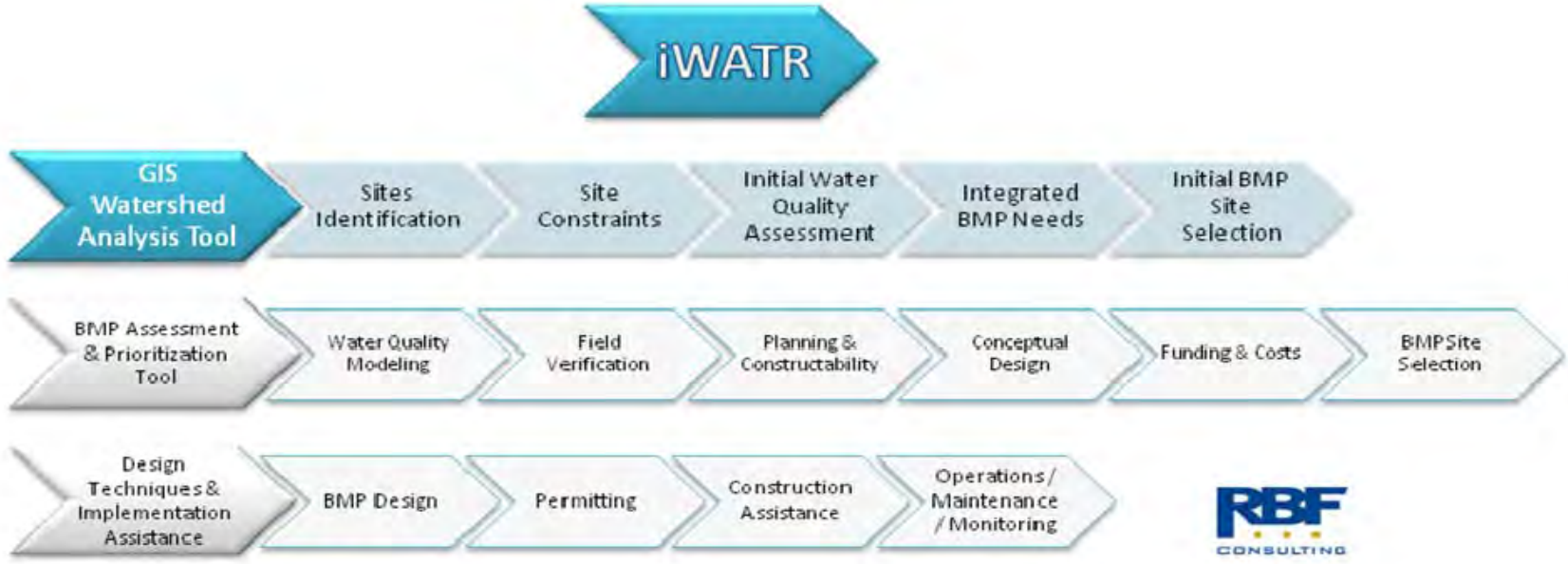
1 RETROFIT OPPORTUNITY IDENTIFICATION ANALYSIS

1.3 Summary of Technical Approach

Retrofit opportunities were identified using the Integrated Watershed Assessment Tool for Restoration or iWATR as shown in Figure 2 (RBF Consulting, 2010). Several factors were considered when identifying retrofit opportunity locations in the County of San Bernardino portion of the Santa Ana River Watershed. The Geographic Information Systems (GIS) Watershed Analysis Tool took into account characteristics of the watershed, including public land availability and ownership, aerial photography, topography, hydrology, existing stormwater infrastructure, and areas of anthropogenic sources of pollutants. The tool also evaluated the technical feasibility or site constraints, such as environmental issues, maintenance access, utility interference, and aesthetic considerations. For each retrofit opportunity identified, watershed characteristics and site constraints were considered to provide a preliminary recommendation on the most appropriate BMP types. Based on the extent of the tributary area served, both subregional and regional retrofit opportunities were identified. Subregional retrofit opportunities were preferred for local or neighborhood drainage areas and included BMPs such as bioretention areas, extended detention basins, wet basins/constructed wetlands, and media filters. Regional or watershed retrofit opportunities were selected for larger drainage areas and in locations where there was an opportunity to extract water from a water body or major storm drain, treat the water with a BMP and then discharge back into the water body or storm drain. The regional BMPs included infiltration basins, wet basins/constructed wetlands, subsurface wetlands, and extended detention basins.

This section outlines the technical approach that was used to identify the potential retrofit opportunities during the desktop survey of the upper part of the Santa Ana River Watershed.

Figure 2: Integrated Watershed Assessment Tool for Restoration



1.4 Differentiate Regional and Subregional Sites

Several characteristics of the upper part of the Santa Ana River Watershed, which is located in San Bernardino County, limit the number of retrofit opportunities that include extraction, treatment, and discharge of water from and into creeks or major channels. Major channels in the watershed drain large tributary areas, including significant portions of natural land as they are located downstream of alluvial fans. The amount of available space within Flood Control boundaries remains relatively limited for implementing large BMP sites. The alluvial fans are also associated with large transfers of sediment loads. Finally diverting flows from natural channels and creeks to a treatment site may have some affect on beneficial uses in the creeks but may have significant regulatory hurdles. For these reasons, the identification process focused principally on public parcels, which are in proximity to existing storm drains and infrastructures.

Diverting and treating runoff from municipal storm drains specifically targets runoff produced by urban or developed areas and their associated anthropogenic pollutants. Regional sites are located in proximity to major storm drains or downstream of large developed drainage areas. Subregional sites are identified at the local scale and are intended to treat runoff from neighborhood-size drainage areas.

1.5 Identification Criteria and Methodology

The iWATR GIS Watershed Analysis Tool helped identify retrofit opportunities in the watershed (RBF Consulting, 2010). The GIS tool was used in two steps, each one including a multitude of criteria. The two steps are defined, as follows:

1. The identification of public-owned parcels where structural BMPs could potentially be implemented

2. The assessment of retrofit characteristics and site constraints

1.5.1 Identification of Potential Retrofit Sites

The portion of the Santa Ana River Watershed, which is located in San Bernardino County, was surveyed using the iWATR GIS Watershed Analysis Tool. Several sources of information were integrated into the GIS tool to identify potential retrofit opportunities prior to the initial evaluation of these potential BMP sites. Pieces of information included:

1.1.1.1 Aerial Imagery Information

Several aerial photography datasets were accessible through Google Earth: 2009 County of San Bernardino Aerial Photography, 2009 USDA Farm Service Agency Aerial Photography, and 2010 Google Street View Imagery. The datasets were utilized to identify potential BMP locations, as they also provided an understanding of the local land uses, terrain, density of vegetation, physical obstructions, and utilities. The 2010 Google Street View Imagery dataset provided crucial information regarding the general topology of each potential retrofit opportunity site and helped evaluate the slopes for potential BMP placement.

1.1.1.2 Availability of Publicly Owned Land

The primary focus of the study was to identify opportunities to retrofit existing conveyance systems, parks, and other recreational areas with water quality protection measures. With this focus and the predominant classification of land in these areas being in the public domain, availability of public parcels were identified. Other concerns included that since the cost of acquiring privately owned land to implement a BMP retrofit project would likely make the project cost-prohibitive, only sites within public ROW or publicly owned land were considered during the identification process. Public parcels including county-owned parcels, municipal parks, and municipal golf courses were provided by the stakeholders in GIS format.

1.1.1.3 Tributary Area Served

As discussed previously, the study is focused on sub-regional and regional-level retrofits to take advantage of economies of scale during construction and operation. Public-owned parcels that are adjacent to channels draining for the most part natural tributary drainage area were considered unlikely retrofit opportunities.

1.1.1.4 Proximity to Existing Drainage Facilities

A feasibility criterion used in the identification of retrofit opportunities included the minimization of offsite infrastructure improvements, including diversion structures and piping. Thus, sites were limited to those adjacent or close to significant named streams and master planned drainage facilities. Potential sites not directly adjacent to receiving waters or drainage facilities were deemed "close" if there appeared to be sufficient existing public right-of-way to hydraulically connect the site to the nearby drainage facility or receiving water with a modest capital expense. Passive retrofit opportunities were favored in an effort to minimize high operation and maintenance costs associated with the implementation of lift stations.
The identification process considered all available storm drain information in GIS or CAD format, which was provided by the different municipalities and agencies in the watershed.

1.1.1.5 Topography

The general topography of the drainage area was assessed from the National Geographic Society 20-foot contours. The general topology of each potential retrofit opportunity was evaluated based on the best professional judgment of the actual imagery street view of the considered site, which was accessible from Google Earth. This methodology was considered as the most appropriate since there is a limited amount of large-scale topographic information available in the upper part of the Santa Ana River Watershed. Areas of steep topography could constrain grading and greatly increase the cost of any BMP implemented. Any areas of steep topography on each site were noted, reducing the potential to retain the site as a potential retrofit opportunity.

1.5.2 Retrofit Characteristics and Site Constraints

Upon identification of potential retrofit opportunities with the GIS Watershed Analysis Tool, the GIS tool was also used to determine whether a potential site should be classified as a retrofit opportunity. The GIS Watershed Analysis Tool analyzed several constraints to define an initial list of retrofit opportunities with major constrains eliminating a potential site as a retrofit opportunity. Selection criteria, which were integrated in the initial BMP site selection, include:

1.1.1.6 Hydraulic Head Constraints

The general topography of the drainage area was assessed from the National Geographic Society 20-foot contours. The general topology of each potential retrofit opportunity was evaluated based on the best professional judgment of the actual imagery street view of the considered site, which was accessible from Google Earth. This methodology was considered as the most appropriate, since there is a limited amount of large-scale topographic information available in the upper part of the Santa Ana watershed. This methodology was similarly applied to evaluate the available hydraulic head, and thus, the need for a pump station. The available hydraulic head is a critical parameter that determines the applicability of certain types of BMPs, particularly filtration systems.

1.1.1.7 Environmental Constraints

Environmental constraints for retrofit opportunities include issues related to endangered species, contaminated soils, sensitive biological areas, and protected habitats. The areas that are concerned by environmental constraints were identified using the corresponding GIS layers that were provided by the County of San Bernardino. The Endangered Species Act may not affect BMP selection as much as design and operation. BMPs, such as sand filters, infiltration basins, and wet ponds, adjacent to designated habitat may require design and operation modifications to prevent potential conflicts between the U.S. Fish and Wildlife Service and the project owner. Certain BMPs, such as wet basins and wetlands, may be very attractive to endangered species, so special care may be needed to discourage the presence of these species or maintenance necessary to proper functioning of the BMP may be prohibited. Each of the proposed sites must be evaluated to identify habitat for threatened and endangered species. If the potential for endangered species exists, the facility design and construction activities need to prevent or minimize impacts to these species or protected habitats.

1.1.1.8 Utility Interference

Location of utilities and easements may preclude the construction of a retrofit site even if the surface of the site appears undeveloped. During the desktop survey, a visual assessment of the presence of utilities was made based on the actual imagery street view of the considered site, which was accessible from Google Earth. This assessment relied on observations of the presence of power lines, pipeline markers, and other indications of the presence of buried utilities.

1.1.1.9 Dual-Use and Aesthetics

County and city parks play a significant social role in local communities by providing ecological features and entertainment or sport fields in urban environments. Dual-use practices allow the implementation of structural BMPs in such parks while preserving the primary recreational role of the sites. Dual-use practices for parks include, but are not limited to

(1) grassed extended detention basins providing that the actual field can be excavated or bermed in a cost-effective way while preserving the primary function of the field;

(2) bioretention areas for landscape purposes; and

(3) underground media filters.

All county and city parks were evaluated and dual-use retrofit opportunities were noted when available.

Several channels and storm drains in the upper part of the Santa Ana Watershed are located downstream of alluvial fans, hence several existing retarding basins are present in the watershed. Retrofitting some of these retarding basins for water quality is a cost-effective measure that serves both flood control and water quality purposes. Retrofitting retarding basins includes the implementation of a water quality riser and the transformation of the lower geomorphology of the basin for water quality (low-flow channel, multistage basins, and riparian vegetation if needed). All publicly owned retarding basins (except for those located downstream of alluvial fans) were analyzed for potential retrofit opportunities.

Aesthetics are an important criterion for differentiating the use of constructed wetlands and wet basins. Open water is generally considered much more attractive than the dense vegetative growth that occurs in constructed wetlands. Consequently, wet basins are preferred for potential BMP sites that are clearly visible from adjacent neighborhoods, parks, or other public places. Infiltration basins and extended detention basins appear essentially identical to the layman; therefore, aesthetics cannot be used as a selection factor between the two, although these would generally be less aesthetically appealing than wet basins or constructed wetlands.

1.1.1.10 Water Quality Considerations

The purpose for pursuing BMP retrofit opportunities is to address water quality issues that have been identified for a receiving water or watershed. At the identification level of the process, water quality considerations were based on the calculation of the water quality volume (WQV). The volume capacity of each potential retrofit opportunity was compared to the water quality volume as a measure to determine the capacity for the potential BMP site to capture and treat a large portion or the entirety of the tributary drainage area. The water quality volume was computed for each retrofit opportunity based on the Volume-Based BMP Design methodology as defined in Attachment D of the Water Quality Management Plan Template (SBC Stormwater Program, 2005). The water quality is a composite calculation:

$$WQV = \iiint \text{Runoff Coefficient} \circ \text{Drainage Area} \circ \text{Design Rain Event}$$

Composite runoff coefficients integrate the most recent land use layer (SBC, June 2010), as well as the conservative runoff coefficients as defined in the Hydrology Manual (SBC, 1986). For undeveloped areas, a composite runoff coefficient of 0.07 was considered to reflect the steepness of the mountainous undeveloped areas. Similarly, the volume capacity of each retrofit opportunity was computed based on the delineated BMP footprint and an assumed depth of 4 feet. Footprints were drawn based on the best professional judgment to reflect the shape of the recommended BMP. The shape of these footprints is shown in each individual retrofit opportunity exhibit, as listed in Appendix A.

Specific water quality considerations were accounted for when considering each type of treatment BMP. Constructed wetlands and wet basins operate on the same principles and differ primarily in the average depth of water and the amount of vegetation coverage. Water quality performance of the two systems would be expected to be equivalent.

Infiltration basins are clearly superior to extended detention basins for reducing potential impacts of urban runoff to surface waters. Since infiltration basins are "no discharge" systems

for all events up to the design storm, they eliminate all surface water impact. In addition, they help restore the predevelopment hydrology by greatly reducing the runoff volume and frequency of discharges. Infiltration basins, however, have generally limited siting opportunities.

Wet basins, constructed wetlands, and infiltration BMPs provide comparable treatment performance, and provide better treatment performance than extended (dry) detention. Extended detention basins however do provide the additional benefit of flow attenuation.

1.1.1.11 Potential BMPs

A list of potential BMPs for the sites was developed based on the drainage areas for subregional BMPs and regional/watershed BMPs. This list of BMPs is identified in
Table 2. For each potential BMP site, specific site information was identified and reviewed. This information encompassed geotechnical information, including hydrologic soil group and depth to groundwater, area available for the BMP footprint, existence of a perennial source of water, existence of woody or dense vegetation, available hydraulic head for certain BMP types, and maintenance access.
Table 2 also identifies the maintenance activities associated with each potential BMP, as well as each BMP's estimated pollutant removal benefit for several common stormwater pollutants: total suspended solids, metals, bacteria, nutrients, and trash.

1.1.1.12 Vector Concerns

The attitudes of local vector control agencies can affect the types of BMPs selected as well as certain design elements. The selection of BMPs that retain a pool of standing water beyond 72 hours in permanent pools or energy dissipation features may be impractical in areas with aggressive mosquito abatement policies. The abatement policies generally differ significantly between even adjacent jurisdictions. Awareness of the potential for mosquito breeding in stormwater control devices and systems currently is not widespread; however, this concern is expanding and needs to be included in the selection and design processes. The desktop survey considered any adjacent residential areas that might be impacted by increased mosquito breeding.

1.1.1.13 Soil Type

Soil type and depth to groundwater are the two primary constraints for siting of infiltration basins. Their use will be limited to those areas underlain by soils of hydrological groups A (sand, loamy sand, or sandy loam soils) and B(silt loam or loam soils), where the groundwater level is at least 10 feet below the proposed basin invert. These devices tend to perform better when there is sufficient dry time between events to allow the system to recover. Consequently, they are not preferred for sites with dry weather flow.

1.1.1.14 Cost

An important consideration in BMP selection is the total cost to construct, operate and maintain the facility (lifecycle cost). Table 1 provides a comparison of the relative costs of the BMP technologies applicable for potential retrofitting, based on a recently completed study by Caltrans to document construction and operation and maintenance costs for BMP sites in Los Angeles and San Diego Counties (Caltrans, 2004). Since the BMPs studied served tributary areas of different sizes, cost data from the study were normalized and adjusted for a drainage area more representative of those considered in this study. Thus, Table 1 provides the relative

construction and operation/maintenance costs (per unit water quality volume) for a hypothetical site of 100 acres with 40% impervious cover. The construction cost does not include land costs or costs associated with design and project administration, as these were not the focus of the Caltrans study. However, for smaller projects (less than $500,000 construction cost) design/permitting/administration costs are estimated to be about 70% of the project construction cost, and would be about 40% of the project construction cost for larger (greater than $500,000) projects.

Wet basins were observed to be the most costly facility, especially for maintenance. The much higher maintenance costs were associated with vegetation management to suppress mosquito breeding and that level of maintenance may not be required at every site. This would depend primarily on the visibility of the site from adjacent neighborhoods and the constraints imposed by the local vector control district. Constructed wetlands would be expected to have costs similar to that for the wet basin if land costs are not included, since their footprint would be about twice that required for a wet basin.

Infiltration basins tend to be slightly less expensive than extended detention basins, since, if constructed off-line they have no outlet structure.

Table 1: Relative BMP Construction and Operation Costs

BMP Type	Construction Cost/WQV ($/ft3) [a]	Present Value O&M Cost/WQV ($/ft^3)	Life-Cycle Cost/WQV ($/ft^3) [b]
Wet Basin [c]	$ 37	$13	$50
Extended Detention	$17	$ 2	$19
Infiltration Basin	$10	$ 2	$12

a. Adjusted costs are based on the treatment volume from a one-year, 24-hour storm over similar tributary areas of about 5 acres for all BMP types in the table.
b. Present value of operation and maintenance unit cost (20 years at 4%) plus construction unit cost.
c. Constructed wetland costs are similar to those for wet basins when land costs are not included, as in this comparison.

1.1.1.15 Operation and Maintenance Requirements

Wet Basin

Maintenance requirements of wet basins vary greatly depending on local regulations, aesthetic considerations, the quality of the baseflow that sustains the permanent pool, and climatic considerations. In Southern California, concern about vectors (mosquito breeding, primarily) is a major driver for maintenance. Local vector control agencies typically require annual removal of the majority of the vegetation to allow access to mosquito larvae by mosquito fish. Vegetation harvesting accounted for the vast majority of the 250 hours per year estimated for maintenance activities at a small Caltrans facility that treated runoff from only 4.2 acres (Caltrans, 2004). The vegetation at this site was particularly vigorous because of the high nutrient concentrations in the perennial base flow and the mild climate, which permits growth year round. It should be noted that vegetation harvesting removes nutrients from the system, thus potentially improving the removal of nutrients from stormwater.

Since wet basins are often selected for their aesthetic considerations as well as pollutant removal, they are often sited in areas of high visibility. Consequently, floating litter and debris are removed more frequently than would be required simply to support proper functioning of the pond and outlet, or captured at the basin inlet before reaching the permanent pool.

Operation and maintenance requirements for wet basins and constructed wetlands are similar, and both may require substantial vegetation management to facilitate vector control.

Extended Detention Basin

Routine maintenance activity for an extended detention basin is often thought to consist mostly of sediment and trash and debris removal, and ensuring that the outlet orifices remain free of trash, debris or other blockages. However, these activities may constitute only a small fraction of the maintenance hours. Results from a three-year study by Caltrans (Caltrans, 2004) showed that the largest recurring maintenance activity was vegetation management and routine mowing. The largest absolute number of hours was associated with vector control because of mosquito breeding that occurred in the stilling basins installed as energy dissipaters. Some activities such as major sediment removal were not performed during the study, but based on the amount of sediment accumulation; occurrence of this would be expected only every 10 years or more.

Infiltration Basin

Operation of infiltration basins is subject to more risk than extended detention, despite the similarity in average maintenance cost (Table 1). Changes in soil structure through time can severely reduce infiltration rates and cause failure of the facility. This type of failure can be very difficult to ameliorate. Maintenance of infiltration basins consists primarily of vegetation management, trash/debris, and sediment removal. If clogging occurs, reguarding and scarification will be required.

1.6 Potential BMP Types

A preliminary recommendation was provided at each potential retrofit opportunity site based the evaluation of the criteria defined in Section 2.3. The proposed BMP types for the identified sub-regional and regional sites are listed in the individual Retrofit Site Forms, provided in Appendix B. Recommended BMPs include wet basins, extended detention basins, subsurface wetlands, infiltration basins, bioretention devices, and media filters. If no BMP is listed, a site constraint prevented a BMP from being considered at the site.

Sub-regional BMPs were proposed for sites with the capability of treating neighborhood size areas and regional BMPs were proposed for larger drainage areas and in locations where there was an opportunity to divert water from the major storm drain or channel, treat the water with a BMP, and then discharge back into the storm drain or channel.

Table 2 identifies the maintenance activities associated with each potential BMP, as well as each BMP's estimated pollutant removal benefit for each of the watershed pollutants. The following are descriptions of the BMPs considered and the corresponding prioritized site IDs.

Constructed Wetlands/Wet Basins

Constructed wetlands and wet basins offer wildlife habitat, erosion control, surface water storage, flood control, ground water recharge, and pollutant removal.

Table 2 shows the targeted pollutant removal. Constructed wetlands and wet basins have a permanent pool of water and pollutant removal is achieved through settling and biological uptake of wetland plants. They can be useful in conjunction with other BMPs or they can function independently. Wet ponds or constructed wetlands are more effective for treating drainage areas with substantive perennial flows than the other regional BMPs under consideration. However, there is little or no perennial flow in most channels and creeks of the upper part of the Santa Ana Watershed. Implementation of wet basin opportunities is therefore limited.

Extended Detention Basins

Extended detention basins have outlets designed to detain stormwater runoff from a water quality design storm for a designated period of 48 hours, to allow particles and associated pollutants to settle out of the water column. Unlike wet ponds, these facilities do not have a large permanent pool that is sustained during dry periods. Extended detention ponds can also provide flood control benefits if they are designed to include additional flood detention storage. The upper part of the Santa Ana Watershed contains several flood control basins, which could potentially be retrofitted for water quality by adding an appropriate water quality riser as well as changing the morphology of the lower portion of the basin to mimic the functionality of a extended detention basin.

Bioretention

Bioretention devices function as soil and plant-based filtration devices that remove pollutants through a variety of physical, biological, and chemical treatment processes. The mulch layer is believed to play a significant role in the efficiency of these devices, with nearly all of the metals removal occurring within the top few inches of the bioretention system. Heavy metals accumulate in the organic matter in this layer. In addition, these systems have demonstrated high efficiencies for nutrient removal. Phosphorus removal appears to increase linearly with depth and reaches a maximum of approximately 80% by about 2 to 3 feet in depth. The likely mechanism for phosphorus removal is through sorption onto aluminum, iron, and clay minerals in the soil.

Media Filters

Media filters are structural BMPs designed to remove sediment and other pollutants from the first flush of runoff after a rainfall or storm event. Media filters are usually constructed underground and, as flow-based treatment BMPs, can be implemented in small footprints. Pollutant removal occurs in two acts with a preliminary settling of coarse sediments on the filter bed followed by a filtration of pollutants within the matrix of the media. The media is typically composed of sand mixtures. However, these BMPs are associated with high levels of required maintenance and usually require a minimum hydraulic head of 3 feet, which limits the implementation of such devices in flat areas.

Infiltration Basins

Infiltration basins are structural BMPs used to remove pollutants and to infiltrate stormwater through surrounding soil. Infiltration basin facilities are built within highly permeable soils that provide temporary storage of stormwater runoff and do not typically include a structural outlet. Pollutant removal occurs through filtration, as well as biological and chemical reactions within the soil matrix.

Table 2: BMP Maintenance Activities and Pollutant Removal Benefit

BMP Type	Maintenance Activity	Pollutant Removal Benefit [1]				
		TSS	Metals	Nutrients	Bacteria	Trash
Subregional/Neighborhood BMPs						

BMP Type	Maintenance Activity	Pollutant Removal Benefit [1]				
		TSS	Metals	Nutrients	Bacteria	Trash
Bioretention	• Annual inspection of structural components • Trash removal • Inspection for adequate drain time • Vegetation/mulch maintenance and replacement	High	High	Medium	High	High
Infiltration Basin	• Inspection for adequate drain time • Trash removal • Sediment removal • Vegetation trimming	High	High	High	High	High
Extended Detention Basin	• Inspection for adequate drain time • Trash removal • Sediment removal • Vegetation trimming	Medium	Medium	Low	Medium	High
Wet Basin/ Constructed Wetlands	• Inspection for adequate drain time • Sediment removal • Vegetation thinning/trimming • Vector control	High	High	Medium	High	High
Media Filter	• Inspection for adequate drain time • Sedimentation chamber: trash removal and sediment removal • Media chamber: media replacement	High	High	Low	Medium	High
Regional/Watershed BMPs (>10 acres)						
Infiltration Basin	• Inspection for adequate drain time • Trash removal • Sediment removal • Vegetation trimming	High	High	High	High	High
Wet Basin/ Constructed Wetland	• Inspection for adequate drain time • Sediment removal • Vegetation thinning/trimming • Vector control	High	High	Medium	High	High
Subsurface Wetland	• Inspection for adequate drain time • Vegetation thinning/trimming	High	High	Medium	High	High
Extended Detention Basin	• Inspection for adequate drain time • Trash removal • Sediment removal • Vegetation trimming	Medium	Medium	Low	Medium	High

[1] Source: California Stormwater Quality Association (CASQA) BMP Handbook

The selection of a particular BMP for an identified retrofit site will depend upon the main purpose for the BMP at that site. Each of the potential retrofit sites will need to be evaluated for their specific purpose, which may include TMDL implementation, hydromodification management, offsite mitigation for Low Impact Development (LID), or general water quality improvement. Because different BMPs are better suited for each of these purposes, the potential BMPs for implementation at each site have been identified without selecting a preferred BMP. The potential BMPs that are feasible for each site are identified in Table 3 as some potential retrofit sites have site constraints that preclude certain BMPs from being implemented at that site.

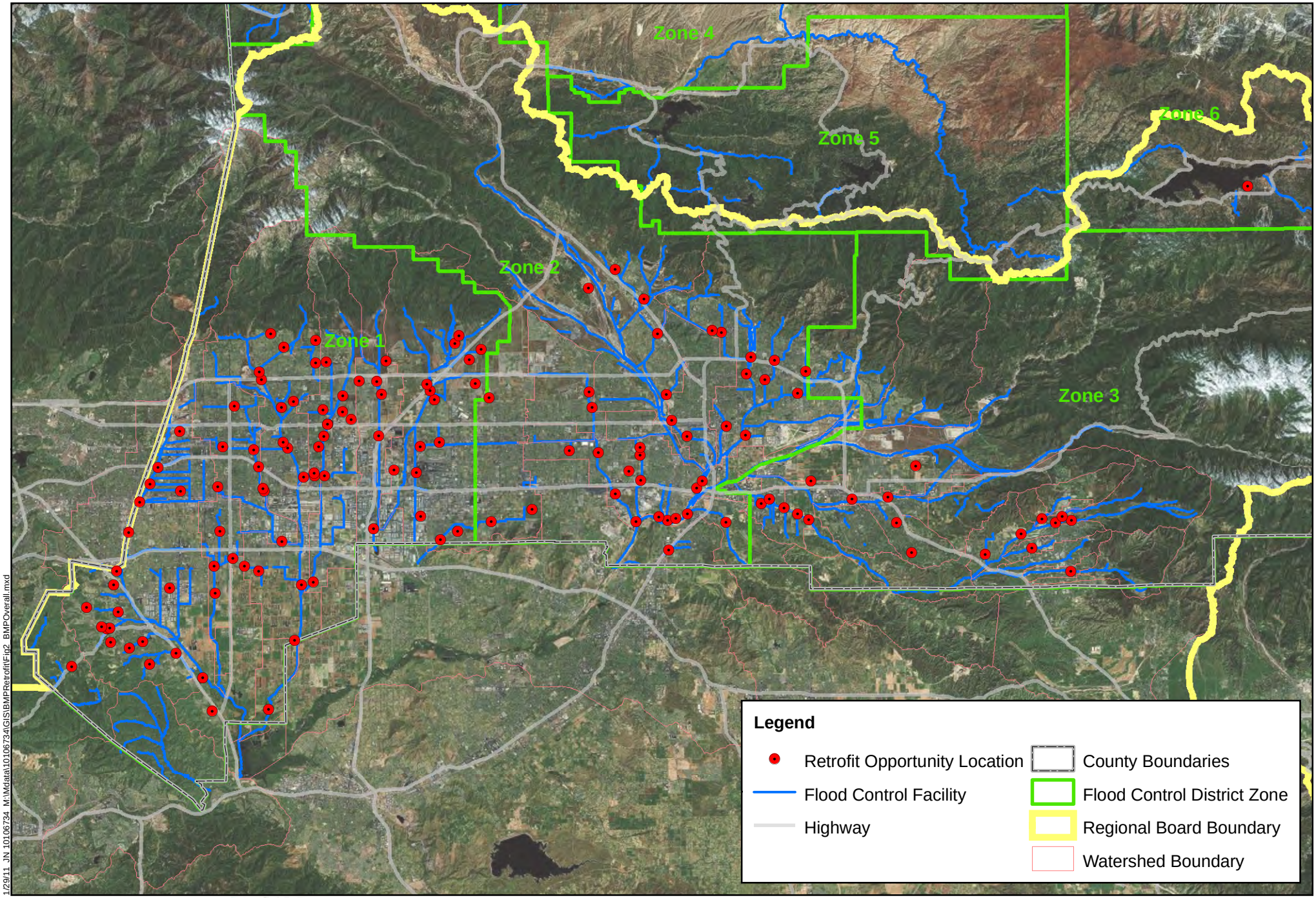
1.7 Results of the Identification Process

The iWATR GIS Watershed Assessment Tool helped identify 142 retrofit opportunities in the portion of Santa Ana River Watershed that is located in San Bernardino County. The GIS tool performed a desktop survey of public-owned parcels that encompass open or available space in proximity to storm drain infrastructures for retrofit opportunities. Publicly owned parcels that were considered included the existing conveyance systems, parks, and recreational areas. The iWATR GIS Watershed Assessment Tool determined the high potential for infiltration in the watershed, as the majority of soils are classified in hydrologic groups A and B. Infiltration basins were only considered for regional sites, as most subregional sites require flow-based BMPs or dual-use practices if implemented in parks. The identification process also integrated the necessity to reduce lifecycle costs and promote cost-effective BMPs for each retrofit opportunity by minimizing the use of pump stations and long conveyance systems. Figure 3 shows the geographic distribution of retrofit opportunities in the Santa Ana River Watershed. Retrofit opportunities are distributed as follows: 84 sites in Zone 1, 37 in Zone 2, 18 in Zone 3, and 1 in Zone 6.

Table 3 lists all the retrofit opportunities that were identified in the watershed, as well as the associated attributes to each potential site. The attributes that are provided for each retrofit opportunity are:

1. Site ID
2. Location information such as longitude and latitude coordinates and flood zone
3. Parcel ownership and jurisdiction
4. Footprint of the potential BMP
5. Tributary drainage area
6. Water quality volume
7. Percentage of treated tributary drainage area considering volume-based BMPs and a detention depth of 4 feet
8. Potential BMP types

Conceptual exhibits that show the conceptual footprint, the inlet and outlet pipes, and an aerial imagery were also created for each identified retrofit opportunity. Site forms were developed for each identified retrofit opportunity and with the noted constraints, as defined in Section 1.5.2 of this report. Conceptual exhibits and site forms are provided in Appendix A and Appendix B, respectively.



1/29/11 JN 10106734 M:\Mdata\10106734\GIS\BMPRetrofitFig2_BMPOverall.mxd

RBF CONSULTING GIS

0 5 10
Miles

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Figure 3: Retrofit Opportunity Summary Map

Table 3: Potential Structural BMP Locations and Type

Zone	Copermittee	BMP_ID	Parcel Owner	Tributary Area (AC)	Target Capture Volume (AC-FT)	BMP Type	Longitude	Latitude	BMP Footprint (AC)	Percent Treated
1	City of Chino	021830106	County of San Bernardino	57224	1925.29	Wet Basin, Constructed Wetland, Extended Detention Basin	-117.6042	33.9746	4.93	1.0%
1	City of Chino	105164214	San Bernardino Co Flood Control Dist	334	18.28	Extended Detention Basin, Media Filter, Bioretention	-117.6630	34.0199	0.09	2.0%
1	City of Chino	105722118	County of San Bernardino	119454	3791.07	Infiltration Basin, Wet Basin, Constructed Wetland, Extended Detention Basin	-117.6235	33.9323	2.20	0.2%
1	City of Chino	CypressTrails_C	City	3429	165.30	Infiltration Basin, Extended Detention Basin	-117.6622	34.0034	1.15	2.8%
1	City of Chino	Villa_C	City	13	0.57	Extended Detention Basin, Media Filter, Bioretention	-117.6958	34.0066	0.33	100.0%
1	City of Chino Hills	100005125	County Service Area #70	57	1.91	Extended Detention Basin, Media Filter, Bioretention	-117.7678	33.9590	0.18	38.0%
1	City of Chino Hills	102337170	County Service Area 70 Imp Zone Ch	17	0.76	Extended Detention Basin, Media Filter, Bioretention	-117.7369	34.0089	0.40	100.0%
1	City of Chino Hills	102835124	Co of San Bernardino	1368	43.88	Extended Detention Basin, Media Filter, Bioretention	-117.6911	33.9668	0.81	7.4%
1	City of Chino Hills	103226113	San Bernardino County	1194	55.41	Extended Detention Basin, Media Filter, Bioretention	-117.7396	33.9825	0.54	3.9%
1	City of Chino Hills	103260142	San Bernardino Co Flood Control Dist	738	41.03	Extended Detention Basin, Media Filter, Bioretention	-117.7419	33.9819	0.40	3.9%
1	City of Chino Hills	103309117	County Service Area 70 Imp Zone Ch	137	4.60	Extended Detention Basin, Media Filter, Bioretention	-117.6648	33.9316	1.92	100.0%
1	City of Chino Hills	Community_CH	City	824	26.92	Infiltration Basin, Extended Detention Basin	-117.7336	33.9922	7.56	100.0%
1	City of Chino Hills	Crossroads_CH	City	217	10.12	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.7457	33.9833	1.68	66.6%
1	City of Chino Hills	English_CH	City	513	16.26	Constructed Wetland	-117.7567	33.9952	1.69	41.6%
1	City of Chino Hills	Hickory_CH	City	372	14.68	Extended Detention Basin, Media Filter, Bioretention	-117.7155	33.9739	0.63	17.1%
1	City of Chino Hills	OakRidge_CH	City	128	4.71	Extended Detention Basin, Media Filter, Bioretention	-117.7390	33.9737	1.89	100.0%
1	City of Chino Hills	Prado_C	City	41652	1452.50	Infiltration Basin, Extended Detention Basin	-117.6716	33.9520	75.32	20.7%
1	City of Chino Hills	Rincon_CH	City	241	9.33	Extended Detention Basin, Media Filter, Bioretention	-117.7107	33.9603	0.88	37.9%
1	City of Chino Hills	Strickling_CH	City	101	4.38	Extended Detention Basin, Media Filter, Bioretention	-117.7254	33.9700	0.76	69.4%
1	City of Fontana	022809107	San Bernardino Co Flood Control Dist	16934	431.86	Infiltration Basin, Extended Detention Basin	-117.5038	34.1265	30.37	28.1%
1	City of Fontana	023809104	San Bernardino Co Flood Control Dist	330	28.01	Infiltration Basin, Extended Detention Basin	-117.5112	34.0499	62.04	100.0%
1	City of Fontana	Aquatic_F	City	46	1.70	Extended Detention Basin, Media Filter, Bioretention	-117.4662	34.1516	0.59	100.0%
1	City of Fontana	Hunters_F	City	152	6.82	Extended Detention Basin, Media Filter, Bioretention	-117.4824	34.1600	0.19	11.3%
1	City of Fontana	Koehler_F	City	62	3.17	Extended Detention Basin, Media Filter, Bioretention	-117.4706	34.1307	0.89	100.0%
1	City of Fontana	McDermott_F	City	1994	72.82	Infiltration Basin, Extended Detention Basin	-117.5007	34.1210	1.90	10.5%
1	City of Fontana	Oak_F	City	158	6.41	Extended Detention Basin, Media Filter, Bioretention	-117.4968	34.0355	1.08	67.4%
1	City of Fontana	SanSevaine_F	City	39	2.05	Extended Detention Basin, Media Filter, Bioretention	-117.4856	34.1554	0.19	37.4%
1	City of Fontana	Southridge_F	City	19	0.83	Extended Detention Basin, Media Filter, Bioretention	-117.4842	34.0405	0.95	100.0%
1	City of Fontana	SummitHeights_F	City	40	2.07	Extended Detention Basin, Media Filter, Bioretention	-117.4750	34.1451	0.84	100.0%
1	City of Montclair	101219104	San Bernardino Co Flood Control Dist	1460	87.12	Extended Detention Basin, Media Filter, Bioretention	-117.7175	34.0593	0.10	0.4%
1	City of Montclair	Saratoga_M	City	42	1.88	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.6875	34.0660	2.23	100.0%
1	City of Montclair	Sunset_M	City	88	3.16	Extended Detention Basin, Media Filter, Bioretention	-117.7098	34.0702	0.18	23.1%
1	City of Montclair	Wilderness_M	City	16198	509.63	Infiltration Basin, Extended Detention Basin	-117.7040	34.0802	7.75	6.1%
1	City of Ontario	011001310	San Bernardino Co Flood Control Dist	13	0.73	Extended Detention Basin, Media Filter, Bioretention	-117.6269	34.0673	0.10	57.3%
1	City of Ontario	011005159	San Bernardino Co Flood Control Dist	4904	245.99	Infiltration Basin, Wet Basin, Constructed Wetland, Extended Detention Basin	-117.6259	34.0658	1.59	2.6%
1	City of Ontario	011031112	San Bernardino Co Flood Control Dist	33259	1154.72	Infiltration Basin, Extended Detention Basin	-117.5971	34.0740	58.29	20.2%
1	City of Ontario	011045101	San Bernardino Co Flood Control Dist	1588	109.03	Infiltration Basin, Extended Detention Basin	-117.5890	34.0748	27.20	99.8%
1	City of Ontario	011347203	San Bernardino Co Flood Control Dist	9235	472.93	Infiltration Basin, Extended Detention Basin	-117.6131	34.0350	42.72	36.1%
1	City of Ontario	021018145	County of San Bernardino	11845	451.93	Infiltration Basin, Extended Detention Basin	-117.5893	34.0766	18.50	16.4%
1	City of Ontario	021813101	San Bernardino Co Flood Control Dist	47319	1636.77	Infiltration Basin, Wet Basin, Constructed Wetland, Extended Detention Basin	-117.5990	34.0083	67.68	16.5%
1	City of Ontario	023812103	San Bernardino Co Flood Control Dist	14205	616.24	Infiltration Basin, Extended Detention Basin	-117.5458	34.0426	62.84	40.8%
1	City of Ontario	104745104	San Bernardino Co Flood Control Dist	4429	227.81	Extended Detention Basin	-117.6299	34.0805	1.90	3.3%
1	City of Ontario	105029126	County of San Bernardino	325	15.64	Extended Detention Basin, Media Filter, Bioretention	-117.6586	34.0414	0.50	12.7%
1	City of Ontario	105141139	San Bernardino Flood Control Dist	13	0.58	Extended Detention Basin, Media Filter	-117.6491	34.0248	0.03	20.4%
1	City of Ontario	105216106	San Bernardino Co Flood Control Dist	1063	54.95	Wet Basin, Constructed Wetland, Extended Detention Basin	-117.6305	34.0170	17.54	100.0%

1	City of Ontario	Centennial_O	City	67	2.41	Extended Detention Basin, Media Filter, Bioretention	-117.6407	34.0199	0.97	100.0%
1	City of Ontario	MotorSpeedway_O	City	861	49.77	Infiltration Basin, Extended Detention Basin	-117.5818	34.0747	3.65	29.3%
1	City of Ontario	Ranch_O	City	12	0.48	Extended Detention Basin, Media Filter, Bioretention	-117.5903	34.0101	0.21	100.0%
1	City of Ontario	SanAntonio_O	City	345	15.71	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.6600	34.0683	1.19	30.3%
1	City of Rancho Cucamonga	020118315	San Bernardino Co Flood Control Dist	1477	64.84	Infiltration Basin, Extended Detention Basin	-117.5803	34.1442	30.83	100.0%
1	City of Rancho Cucamonga	020120141	San Bernardino Co Flood Control Dist	12095	275.58	Extended Detention Basin, Media Filter, Bioretention	-117.6277	34.1337	0.99	1.4%
1	City of Rancho Cucamonga	020199114	San Bernardino Co Flood Control Dist	1058	45.19	Infiltration Basin, Extended Detention Basin	-117.5880	34.1437	13.35	100.0%
1	City of Rancho Cucamonga	020727142	San Bernardino Co Flood Control Dist	3	0.35	Extended Detention Basin, Media Filter, Bioretention	-117.6121	34.0955	0.08	92.9%
1	City of Rancho Cucamonga	020909108	San Bernardino Co Flood Control Dist	369	28.25	Extended Detention Basin, Media Filter, Bioretention	-117.5822	34.0990	0.06	0.8%
1	City of Rancho Cucamonga	020915124	San Bernardino Co Flood Control Dist	206	10.81	Extended Detention Basin, Media Filter, Bioretention	-117.6087	34.0919	0.10	3.6%
1	City of Rancho Cucamonga	022707113	San Bernardino Co Flood Control Dist	989	35.25	Infiltration Basin, Extended Detention Basin	-117.5062	34.1304	24.26	100.0%
1	City of Rancho Cucamonga	022912114	San Bernardino Co Flood Control Dist	235	16.12	Extended Detention Basin, Media Filter, Bioretention	-117.5418	34.0990	0.06	1.4%
1	City of Rancho Cucamonga	022928370	County of San Bernardino	342	24.51	Infiltration Basin, Extended Detention Basin	-117.5306	34.0781	8.53	100.0%
1	City of Rancho Cucamonga	106121125	San Bernardino Co Flood Control Dist	122	4.92	Extended Detention Basin, Media Filter, Bioretention	-117.6208	34.1616	0.14	11.4%
1	City of Rancho Cucamonga	106164106	San Bernardino Co Flood Control Dist	257	10.69	Extended Detention Basin, Media Filter, Bioretention	-117.6113	34.1534	4.06	100.0%
1	City of Rancho Cucamonga	106233221	San Bernardino Co Flood Control Dist	28	1.33	Extended Detention Basin, Media Filter, Bioretention	-117.6294	34.1383	0.49	100.0%
1	City of Rancho Cucamonga	107419132	San Bernardino Co Flood Control Dist	55	2.70	Extended Detention Basin, Media Filter, Bioretention	-117.5879	34.1576	0.49	72.9%
1	City of Rancho Cucamonga	108902101	San Bernardino Co Flood Control Dist	5469	127.26	Infiltration Basin, Extended Detention Basin	-117.5431	34.1323	72.16	100.0%
1	City of Rancho Cucamonga	108903114	San Bernardino Co Flood Control Dist	666	30.00	Infiltration Basin, Extended Detention Basin	-117.5396	34.1244	1.03	13.8%
1	City of Rancho Cucamonga	020833122e	San Bernardino Co Flood Control Dist	517	35.80	Extended Detention Basin, Media Filter, Bioretention	-117.5791	34.1063	0.06	0.7%
1	City of Rancho Cucamonga	020833122w	San Bernardino Co Flood Control Dist	171	9.07	Extended Detention Basin, Media Filter, Bioretention	-117.5794	34.1063	0.03	1.5%
1	City of Rancho Cucamonga	Central_RC	City	5453	130.22	Infiltration Basin, Extended Detention Basin	-117.5680	34.1235	26.73	82.1%
1	City of Rancho Cucamonga	Church_RC	City	16	0.75	Extended Detention Basin, Media Filter, Bioretention	-117.5826	34.1151	0.55	100.0%
1	City of Rancho Cucamonga	DayCreek_RC	City	330	15.43	Extended Detention Basin, Media Filter, Bioretention	-117.5362	34.1447	0.34	8.9%
1	City of Rancho Cucamonga	Kenyon_RC	City	22	1.80	Extended Detention Basin, Media Filter, Bioretention	-117.5559	34.1326	0.43	96.3%
1	City of Rancho Cucamonga	Lions_RC	City	14	0.96	Extended Detention Basin, Media Filter, Bioretention	-117.6043	34.1203	0.15	61.7%
1	City of Rancho Cucamonga	OldTown_RC	City	142	7.56	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.5860	34.0926	2.11	100.0%
1	City of Rancho Cucamonga	RalphLewis_RC	City	197	11.57	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.5620	34.1092	0.73	25.1%
1	City of Rancho Cucamonga	RedHill_RC	City	261	11.79	Extended Detention Basin, Media Filter, Bioretention	-117.6130	34.1166	0.53	18.0%
1	City of Rancho Cucamonga	Spruce_RC	City	238	12.63	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.5682	34.1139	1.29	40.9%
1	City of Upland	100729106	San Bernardino Co Flood Control Dist	174	14.08	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.6879	34.1023	2.80	79.6%
1	City of Upland	104712102	San Bernardino Co Flood Control Dist	4213	219.86	Infiltration Basin, Extended Detention Basin	-117.6335	34.0908	30.47	55.4%
1	City of Upland	Fern_U	City	752	46.88	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.6565	34.0927	0.55	4.7%
1	City of Upland	SierraVista_U	City	367	18.09	Extended Detention Basin, Media Filter, Bioretention	-117.6477	34.1176	0.72	16.0%
1	Unincorporated	022929109	San Bernardino Co Flood Control Dist	3213	151.15	Infiltration Basin, Extended Detention Basin	-117.5113	34.0925	14.78	39.1%
1	Unincorporated	023010202	San Bernardino Co Flood Control Dist	2930	139.46	Infiltration Basin, Extended Detention Basin	-117.4973	34.0948	8.81	25.3%
1	Unincorporated	023803129	County San Bernardino Redevelopment Agency	28131	918.45	Infiltration Basin, Extended Detention Basin	-117.5142	34.0765	1.92	0.8%
1	Unincorporated	101326117	County of San Bernardino	20700	740.01	Infiltration Basin, Extended Detention Basin	-117.7257	34.0407	0.39	0.2%
1	Unincorporated	102304109	San Bernardino Co Flood Control Dist	299	16.28	Extended Detention Basin	-117.7346	34.0172	1.06	26.0%
2	City of Colton	016336121	San Bernardino Co Flood Control Dist	635	23.06	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention, Wet Basin, Constructed Wetland	-117.3364	34.0488	1.19	20.7%
2	City of Colton	016336206	San Bernardino Co Flood Control Dist	857	34.57	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention, Wet Basin, Constructed Wetland	-117.3240	34.0478	6.73	77.9%
2	City of Colton	016336219	San Bernardino Co Flood Control Dist	846	35.27	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention, Wet Basin, Constructed Wetland	-117.3299	34.0464	0.81	9.1%
2	City of Colton	016338113	County of San Bernardino	3974	107.29	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.3155	34.0502	3.33	12.4%
2	City of Colton	016418236	San Bernardino Co Flood Control Dist	85469	2492.66	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention, Wet Basin, Constructed Wetland	-117.3085	34.0660	4.95	0.8%
2	City of Colton	016423118	San Bernardino Co Flood Control Dist	2519	50.98	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.2871	34.0451	0.46	3.6%
2	City of Colton	016428102	San Bernardino Co Flood Control Dist	85285	2508.60	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention, Wet Basin, Constructed Wetland	-117.3044	34.0706	28.12	4.5%
2	City of Colton	025408111	County of San Bernardino	1280	51.86	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention, Wet Basin, Constructed Wetland	-117.3496	34.0712	4.74	36.6%
2	City of Colton	027505122	San Bernardino Co Flood Control Dist	13102	474.82	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention, Wet Basin, Constructed Wetland	-117.3532	34.0458	2.20	1.9%
2	City of Colton	George E. Brown Jr. Park	City	207	5.66	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.3582	34.0767	3.94	100.0%
2	City of Fontana	Almeria_F	City	132	5.66	Extended Detention Basin, Media Filter, Bioretention	-117.4605	34.1219	0.27	19.0%

2	City of Fontana	Catawba_F	City	2725	126.75	Infiltration Basin, Extended Detention Basin	-117.4596	34.0463	9.31	29.4%
2	City of Fontana	Sycamore_F	City	133	7.97	Extended Detention Basin, Media Filter, Bioretention	-117.4295	34.0536	0.72	36.1%
2	City of Grand Terrace	116715111	San Bernardino Co Flood Control Dist	1195	43.16	Media Filter	-117.3293	34.0285	0.22	2.0%
2	City of Highland	028574212	San Bernardino Co Flood Control Dist	3066	56.93	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.2278	34.1368	2.63	18.5%
2	City of Rialto	012802134	San Bernardino Co Flood Control Dist	3745	149.83	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.3848	34.1158	2.55	6.8%
2	City of Rialto	024907103	San Bernardino Co Flood Control Dist	3909	157.22	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention, Wet Basin, Constructed Wetland	-117.4019	34.0895	2.53	6.4%
2	City of Rialto	025805111	San Bernardino Co Flood Control Dist	12137	470.85	Bioretention, Media Filter	-117.3681	34.0629	0.22	0.2%
2	City of Rialto	026421317	San Bernardino Co Flood Control Dist	3396	139.18	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.3871	34.1253	3.99	11.5%
2	City of Rialto	Andreson Park	City	8943	359.40	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.3806	34.0882	2.00	2.2%
2	City of San Bernardino	013705237	San Bernardino Co Flood Control Dist	1181	47.85	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.3153	34.0978	1.29	10.7%
2	City of San Bernardino	014218106	San Bernardino Co Flood Control Dist	705	31.26	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.3498	34.0912	2.65	33.9%
2	City of San Bernardino	014218110	San Bernardino Co Flood Control Dist	970	39.63	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.3499	34.0862	2.49	25.2%
2	City of San Bernardino	014722322	San Bernardino Co Flood Control Dist	3305	93.24	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.2579	34.1319	0.51	2.2%
2	City of San Bernardino	015328131	San Bernardino Co Flood Control Dist	11286	295.62	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.2681	34.1457	1.35	1.8%
2	City of San Bernardino	026528108	San Bernardino Co Flood Control Dist	3422	95.95	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.2964	34.1623	10.68	44.5%
2	City of San Bernardino	026607209	San Bernardino Co Flood Control Dist	768	47.52	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.3366	34.1604	3.62	30.5%
2	City of San Bernardino	027107108	San Bernardino Co Flood Control Dist	406	15.67	Bioretention, Extended Detention Basin, Media Filter	-117.2895	34.1610	0.72	18.4%
2	City of San Bernardino	027214142	San Bernardino Co Flood Control	2914	72.69	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.2507	34.1437	2.41	13.3%
2	City of San Bernardino	027932160	County of San Bernardino	31200	936.56	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.2724	34.0981	8.49	3.6%
2	City of San Bernardino	Anne Shirrells Park	City	1260	50.97	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.3304	34.1233	3.87	30.3%
2	City of San Bernardino	Littlefield-Shultis Memorial Park	City	99	4.46	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.3463	34.1817	6.71	100.0%
2	City of San Bernardino	Meadowbrook Park	City	889	39.17	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention, Wet Basin, Constructed Wetland	-117.2864	34.1038	4.98	50.9%
2	City of San Bernardino	Nunez Park	City	878	36.75	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.3266	34.1077	2.67	29.1%
2	City of San Bernardino	Perris Hill Park	City	148	6.15	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.2714	34.1355	1.97	100.0%
2	City of San Bernardino	Speicher Park	City	4373	110.02	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.2338	34.1235	1.61	5.8%
2	City of San Bernardino	Verdemont Park	City	5460	122.56	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.3674	34.2000	2.54	8.3%
2	Unincorporated	026203115	County of San Bernardino	391	7.09	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.3871	34.1884	13.73	100.0%
3	City of Loma Linda	028309202	San Bernardino Co Flood Control Dist	39728	856.17	Bioretention, Extended Detention Basin, Media Filter, Constructed Wetland, Wet Basin	-117.2552	34.0590	0.30	0.1%
3	City of Loma Linda	029303231	San Bernardino County Flood Cont Dis	120	3.82	Media Filter	-117.2263	34.0464	0.26	27.2%
3	City of Loma Linda	Baseball Field Park	City	604	11.45	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.2445	34.0537	1.67	58.2%
3	City of Loma Linda	Bryn Mawr Veterans Memorial Park	City	375	13.49	Media Filter	-117.2345	34.0498	0.29	8.5%
3	City of Loma Linda	Elmer Digneo Park	City	741	26.26	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.2611	34.0562	1.23	18.7%
3	City of Redlands	029240101	County of San Bernardino	208	10.90	Bioretention, Extended Detention Basin, Media Filter, Constructed Wetland, Wet Basin	-117.2247	34.0698	3.49	100.0%
3	City of Redlands	Ford Park	City	1463	53.25	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.1620	34.0441	2.09	15.7%
3	City of Redlands	Jennie Davis Park	City	10095	328.90	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.1946	34.0588	0.70	0.9%
3	City of Redlands	Redlands Country Club	City	449	14.20	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.1510	34.0257	3.11	87.7%
3	City of Redlands	Redlands Sports Park	City	278	9.12	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.1475	34.0787	7.02	100.0%
3	City of Redlands	Sylvan Park	City	5425	148.51	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.1682	34.0596	4.18	11.3%
3	City of Yucaipa	030113274	San Bernardino Co Flood Control Dist	991	23.51	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.0971	34.0244	1.64	27.8%
3	City of Yucaipa	030312104	County of San Bernardino	3288	89.55	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.0551	34.0457	10.67	47.7%
3	City of Yucaipa	030315136	San Bernardino Co Flood Control Dist	7467	165.55	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.0453	34.0433	3.73	9.0%
3	City of Yucaipa	030318119	San Bernardino Co Flood Control Dist	2893	59.66	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.0404	34.0469	12.59	84.4%
3	City of Yucaipa	032131111	San Bernardino County Flood Control	4454	109.31	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.0336	34.0445	1.08	4.0%
3	City of Yucaipa	7th Street Park	City	1116	52.13	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.0628	34.0277	1.92	14.8%
3	City of Yucaipa	Yuaipa Valley Golf Club	City	11956	285.28	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.0706	34.0366	4.72	6.6%
3	City of Yucaipa	Yucaipa Equestrian Center	City	4901	121.47	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-117.0345	34.0135	5.60	18.4%
6	City of Big Bear Lake	030905101	Big Bear Valley Recreation And Park	189	10.82	Infiltration Basin, Extended Detention Basin, Media Filter, Bioretention	-116.9015	34.2473	2.17	80.3%

2 FUTURE STEPS AND RETROFIT STUDY RECOMMENDATIONS

The purpose of the system-wide evaluation was to identify opportunities to retrofit the existing conveyance systems, parks, and other recreational areas with water quality protection measures. The desktop investigation identified 144 sites potential BMP retrofit sites. The next step in the retrofit process is to evaluate the sites to identify their specific purpose. The purpose of each site will need to be evaluated in the context of the water quality improvement needs of the sub-watershed and watershed. These needs may include TMDL implementation, hydromodification management, offsite mitigation for LID, or general water quality improvement. Evaluation of these needs should come in the form of specific individual retrofit studies focused on 1) TMDLs; 2) Hydromodification Management; and 3) the LID Offset Program.

TMDL Retrofit Study

A study should be developed that assesses the potential retrofit sites that were identified for the ability to help achieve TMDL compliance. TMDLs within the permitted area that have been adopted or that are likely to be adopted within the current permit term should be evaluated to identify if regional structural BMPs will help with meeting wasteload allocations assigned to the Permittees. If structural BMPs are identified to be part of or potentially part of a TMDL Implementation Plan the potential retrofit sites that were identified should be evaluated, and potential BMP implementation scenarios should be developed. These implementation scenarios should be prioritized based on the level of TMDL compliance the scenario would achieve and the feasibility of constructing the BMPs.

Hydromodification Management Retrofit Study

After the development of the Hydromodification Management Plan as part of Phase 2 of the WAP, the development of a study to assess if the identified retrofit sites can assist with hydromodification management should be evaluated. If it is found that a study to assess the retrofit sites for hydromodification management is needed, a study assessing each of the identified retrofit sites for hydromodification management should be performed. This study will assess each identified retrofit site for its ability to assist in reducing the affects of hydromodification in the permitted area of the watershed.

LID Offset Program Retrofit Study

Section XI.E.10 of the San Bernardino MS4 permit identifies that if conditions exist at a development site where infiltration, harvesting and use, and/or evapotranspiration, and or bio-treatment is not feasible LID can be implemented on either a sub-regional or regional basis. A study should be developed to assess each of the identified retrofit sites feasibility to serve as an offset project for LID implementation. This study should incorporate forecasting development for each sub-watershed in the permitted area and the development of regional and sub-regional LID project scenarios for each sub-watershed consistent with the forecast of development. These LID project implementation scenarios should be prioritized based on water quality benefit and feasibility of constructing the LID BMPs.

Once these retrofit studies are performed and the needs of the sub-watersheds and watershed are identified, they can be prioritized. Once the studies are complete, the BMPs that best meet the prioritized need can be selected for the identified BMP retrofit sites. The next step would be to prioritize the identified sites for potential implementation. Suitability, constructability, and

performance of each individual site and the needs assessment may be evaluated during the prioritization process. A non-exhaustive list of factors that may be included in the prioritization process is as follows:

- Ability to accommodate a BMP with best pollutant removal capability for the pollutants of concern
- Ability to accommodate a BMP for the specific needs of the site per the needs assessment
- Tributary drainage area treated
- Pollutant removal
- Planning and constructability
- Reduction of environmental impact
- BMP maintenance considerations
- Lifecycle Cost

Pollutant removal and hydromodification reduction impacts may be evaluated through the development of water quality/watershed modeling to provide a better understanding of the benefits that different BMP placement strategies will have upon receiving waters. The locations that will provide the greatest water quality and watershed benefits can then be identified and prioritized for construction.

Before final selection and implementation of these identified potential retrofit locations can occur, a project-specific detailed design and engineering analysis must be accomplished to demonstrate that the original uses (such as flood control and drainage) of the facility will not be compromised. Cost estimating, environmental assessment, and regulatory permit work must also be conducted, and property or lease restrictions must be investigated to ensure that there are no requirements that would preclude implementation of a potential BMP retrofit project (e.g., a park parcel with narrowly defined recreational use restrictions).

APPENDICES

Additional detailed information supporting the initial findings:

Appendix A: Retrofit Opportunity Exhibits

Appendix B: Retrofit Opportunity Site Forms

APPENDIX A

RETROFIT OPPORTUNITIES EXHIBITS

Zone 2

Zone 1

106121125
107419132
106164106
Hunters_F
SanSevaine_F
Aquatic_F
SummitHeights_F
DayCreek_RC
020199114
020118315
106233221
020120141
Kenyon_RC
108902101
022707113
Koehler_F
022809107
Central_RC
108903114
McDermott_F
Lions_RC
SierraVista_U
RedHill_RC
Church_RC
Spruce_RC
RalphLewis_RC
020833122w
020833122e
100729106
020909108
022912114
020727142
020915124
Fern_U
104712102
OldTown_RC
022929109
023010202
Wilderness_M
104745104
021018145
011031112
MotorSpeedway_O
011045101
022928370
023803129
Sunset_M
SanAntonio_O
011001310
011005159
Saratoga_M
101219104
023809104
023812103
Southridge_F
101326117
105029126
Oak_F
011347203
105141139
105164214
102304109
Centennial_O
105216106
102337170
Villa_C
021813101
Ranch_O
CypressTrails_C
English_CH
Community_CH
Crossroads_CH
103226113
103260142
OakRidge_CH
Hickory_CH
Strickling_CH
102835124
021830106
Rincon_CH
100005125
Prado_C
103309117
105722118

210
66
10
15
57
71
60

Legend

- Retrofit Opportunity Location
- Flood Control Facility
- Highway
- County Boundaries
- Flood Control District Zone
- Regional Board Boundary

1/17/11 JN 10106734 M:\Mdata\10106734\GIS\BMPRetrofitZone1 Retrofit Summary Exhibit.mxd DER

RBF CONSULTING GIS

0 1 2
Miles

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Zone 1 Retrofit Opportunity Summary Map

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP ID020118315

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

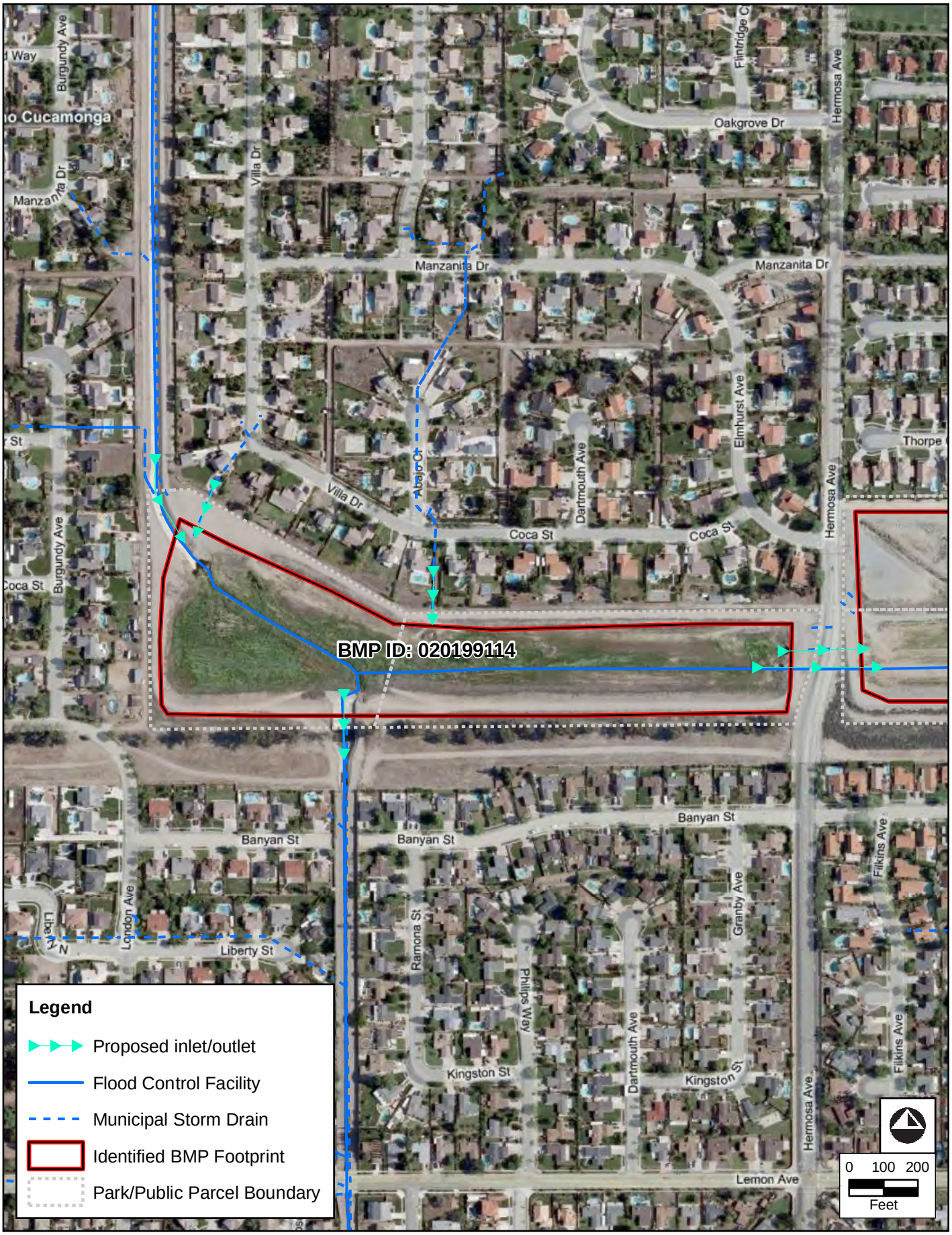
Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP ID020120141



1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP ID020199114

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

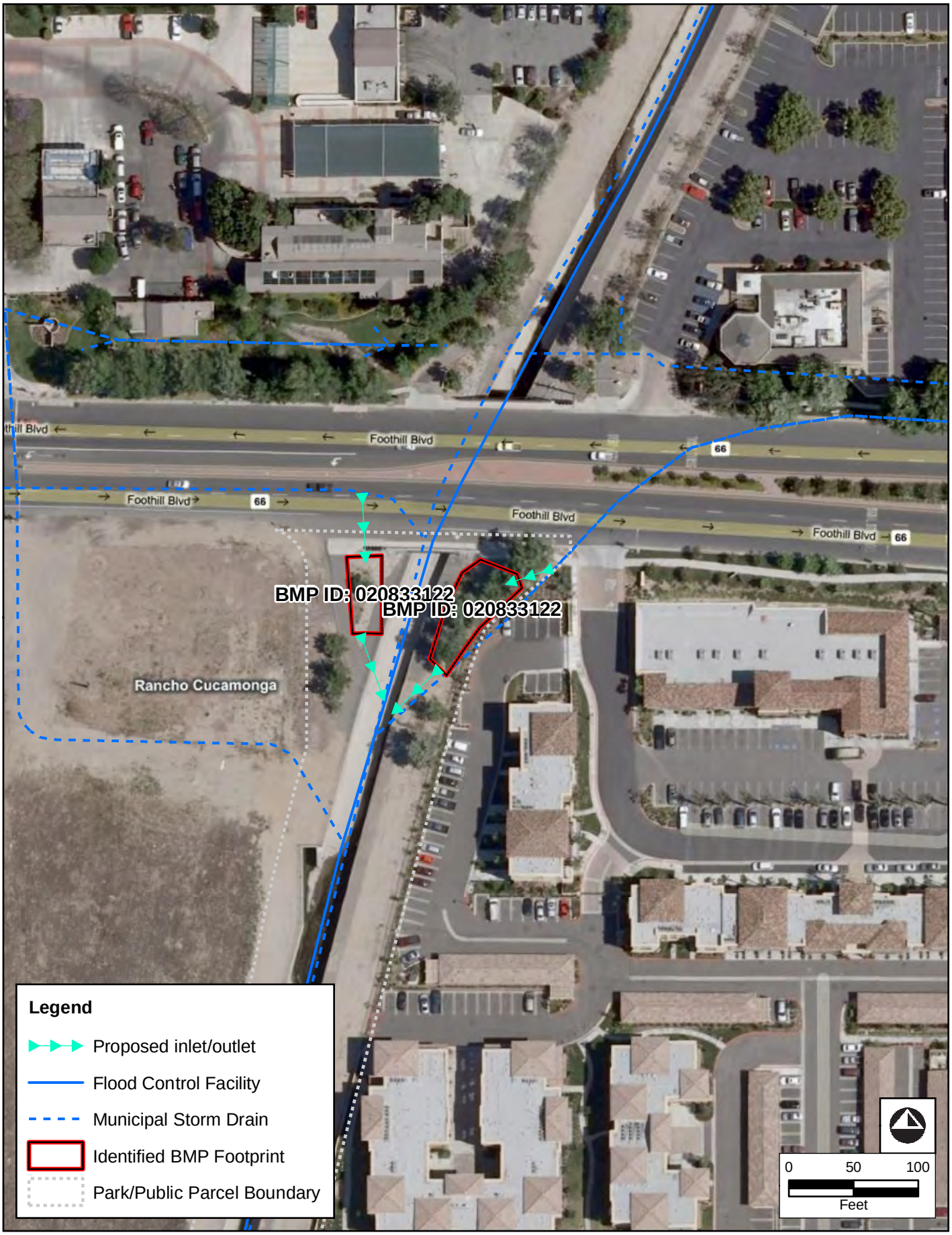
Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP ID020727142



1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

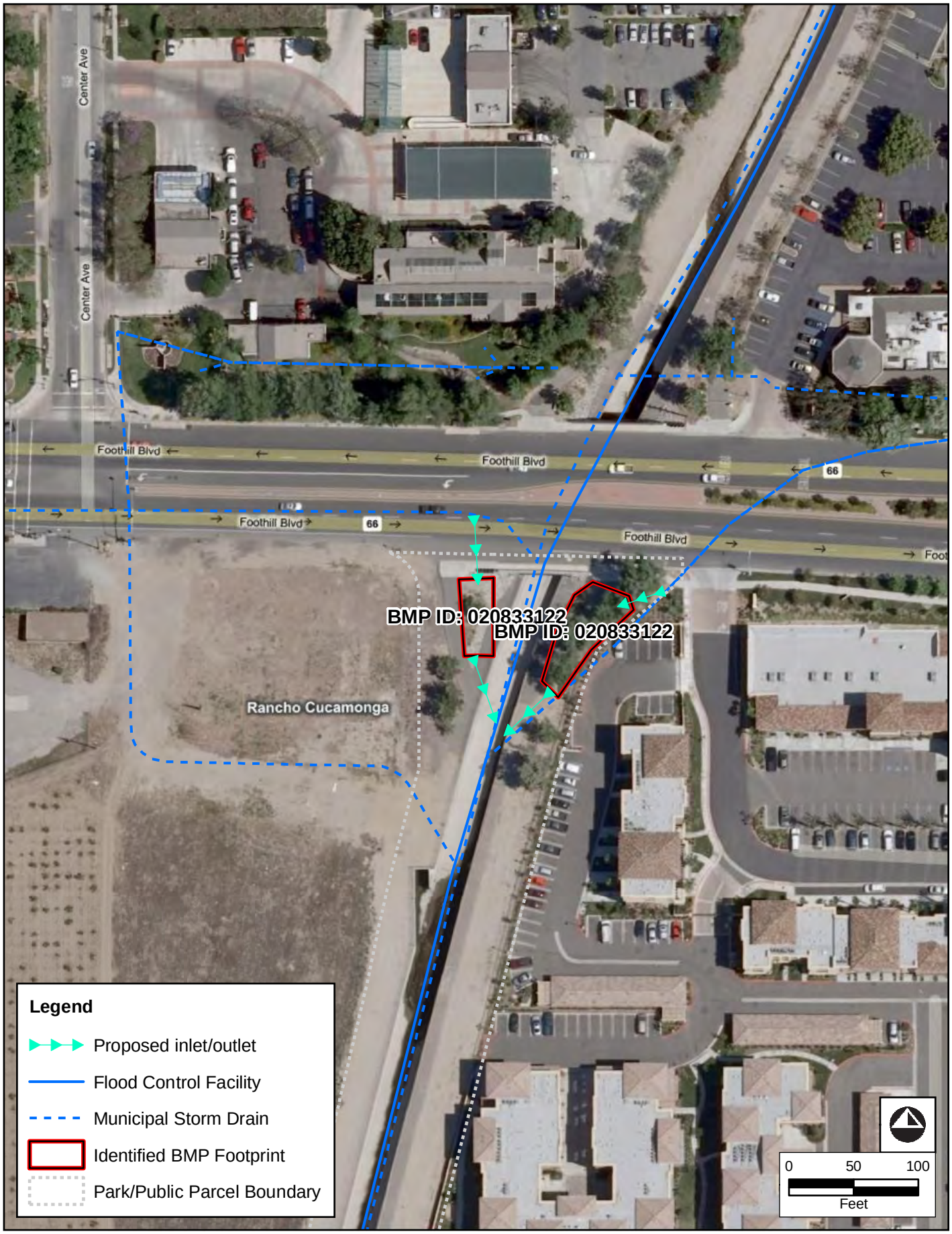
Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP ID020833122e



1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP ID020833122w

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP ID020909108

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP ID020915124

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Chino

BMP ID021830106

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

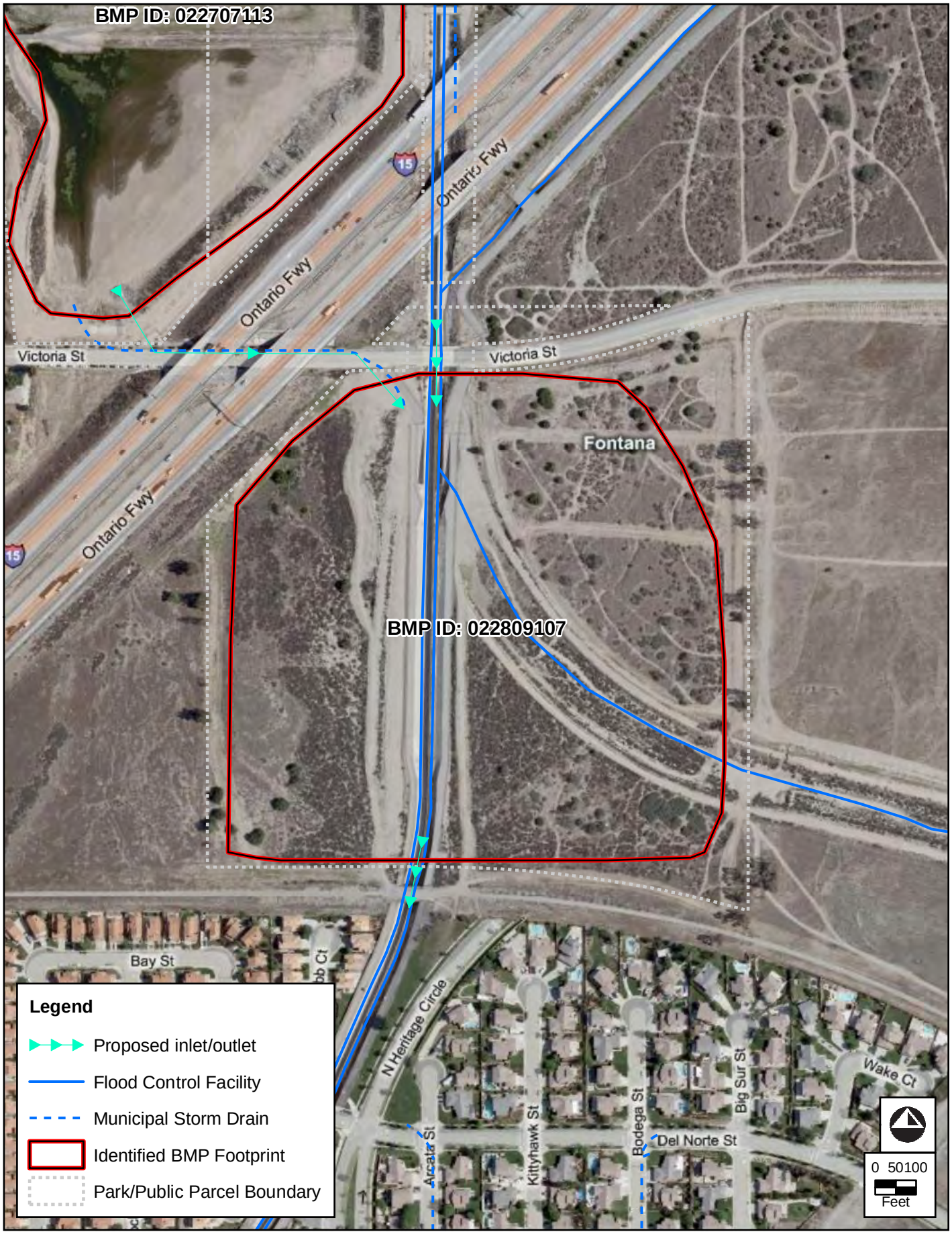
Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP ID022707113



1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

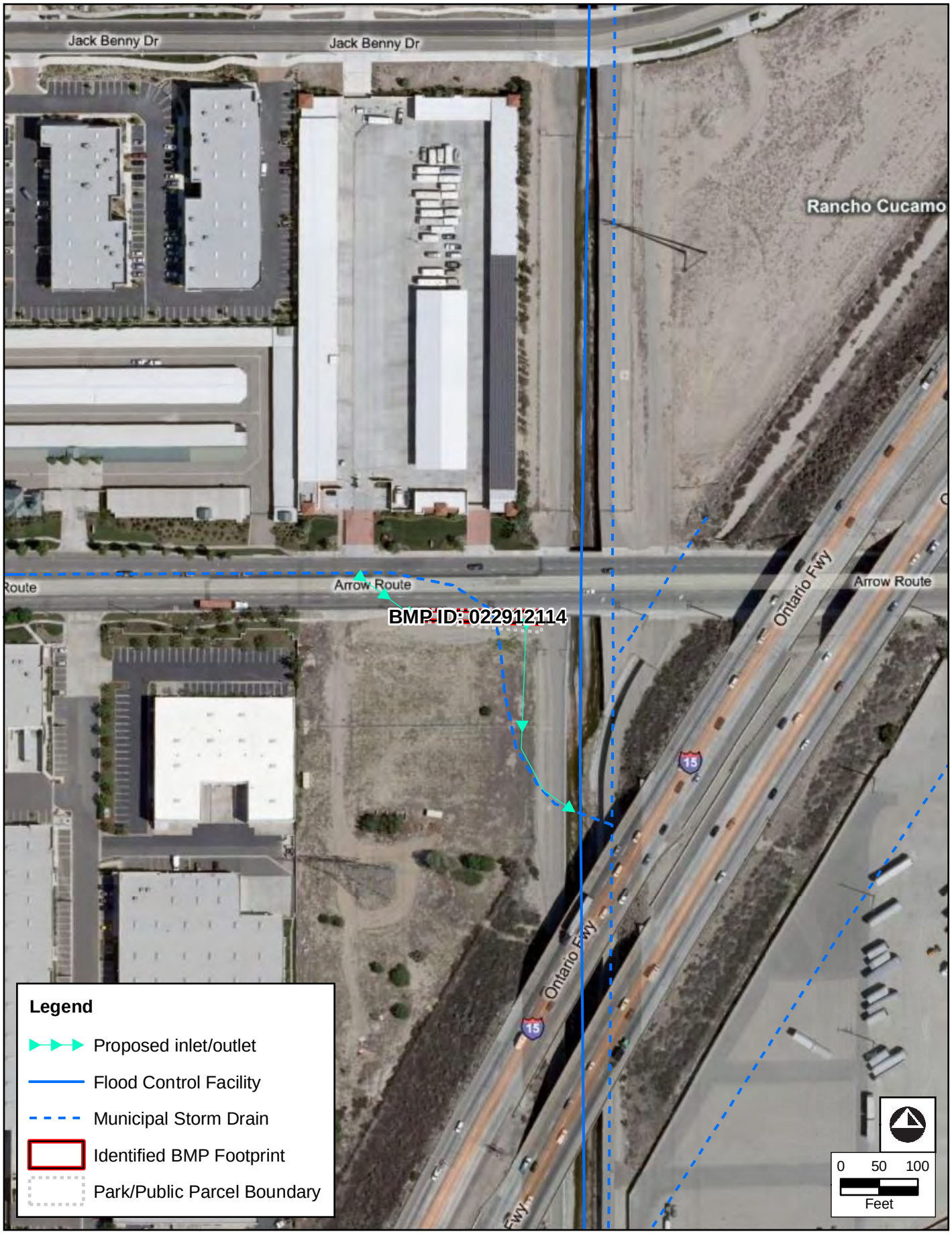
Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Fontana

BMP ID022809107



1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

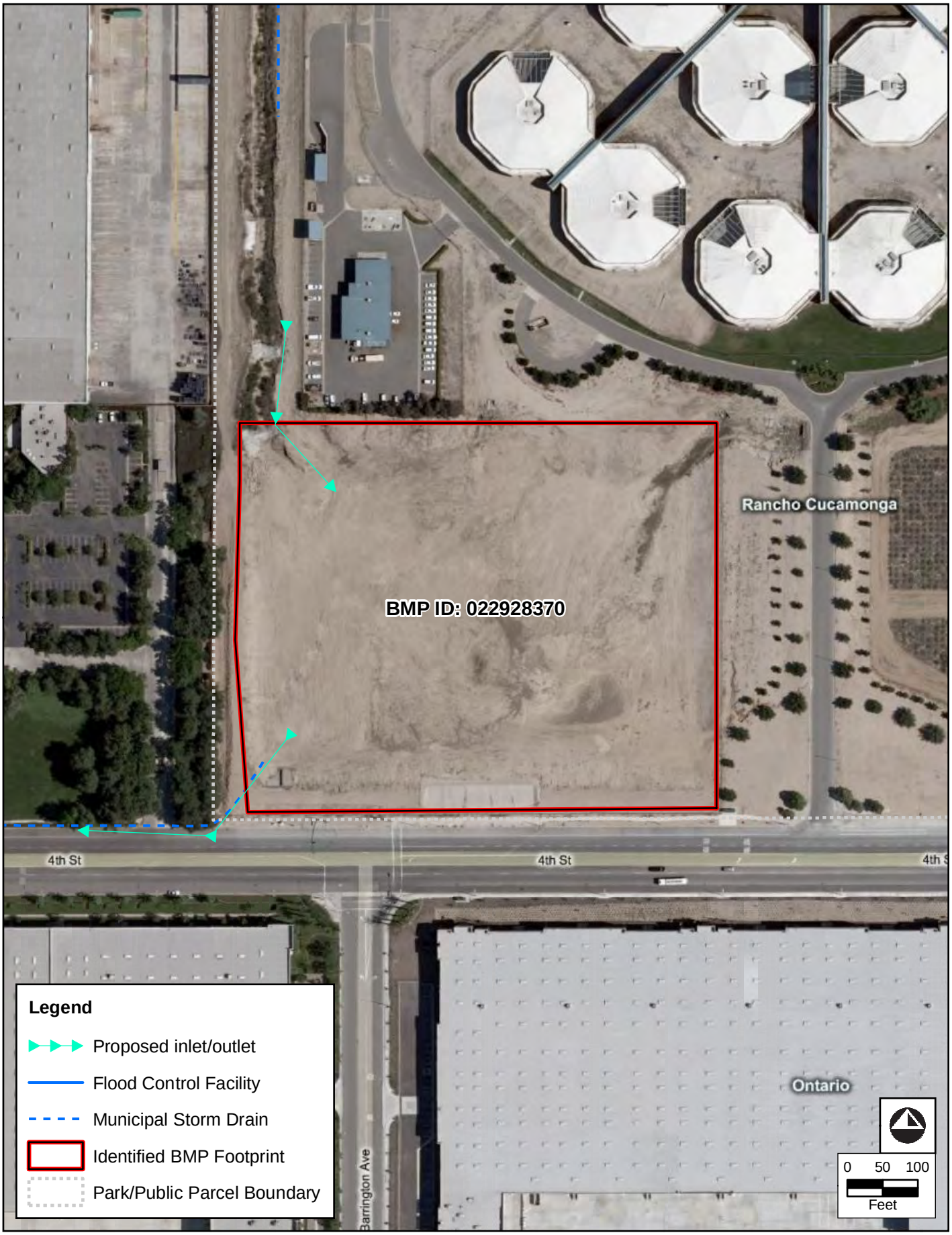
Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP ID022912114



1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP ID022928370

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

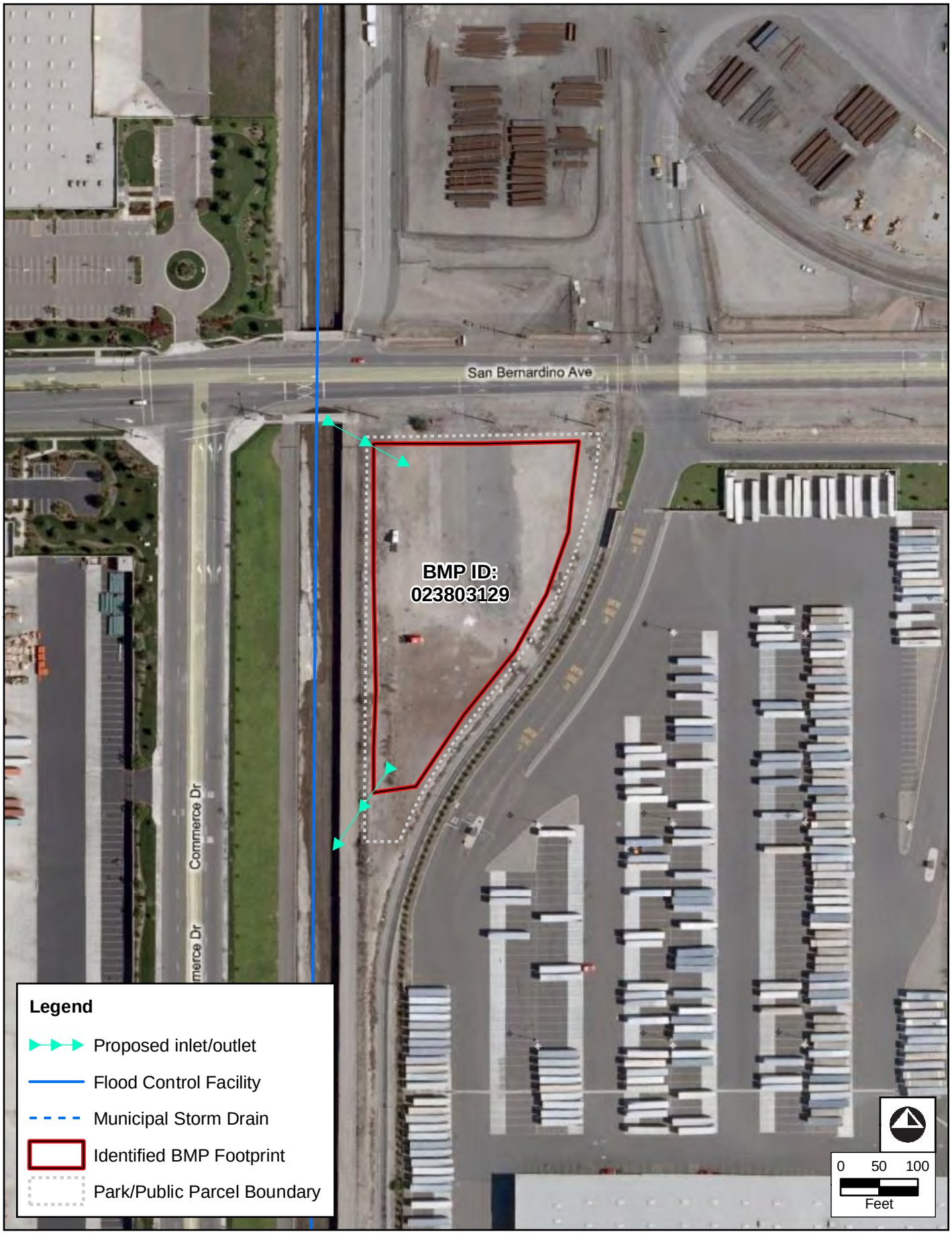
Flood Zone 1
Unincorporated
BMP ID022929109

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1
Unincorporated
BMP ID023010202



1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

RBF CONSULTING GIS

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1
Unincorporated
BMP ID023803129

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Fontana

BMP ID023809104

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Chino Hills

BMP ID100005125

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1
City of Upland
BMP ID100729106

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Montclair

BMP ID101219104

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1
Unincorporated
BMP ID101326117

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1
Unincorporated
BMP ID102304109

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Chino Hills

BMP ID102337170

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Chino Hills

BMP ID102835124

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Chino Hills

BMP ID103226113

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Chino Hills

BMP ID103260142

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Chino Hills

BMP ID103309117

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1
City of Upland
BMP ID104712102

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Ontario

BMP ID104745104

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Ontario

BMP ID105029126

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Ontario

BMP ID105141139

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

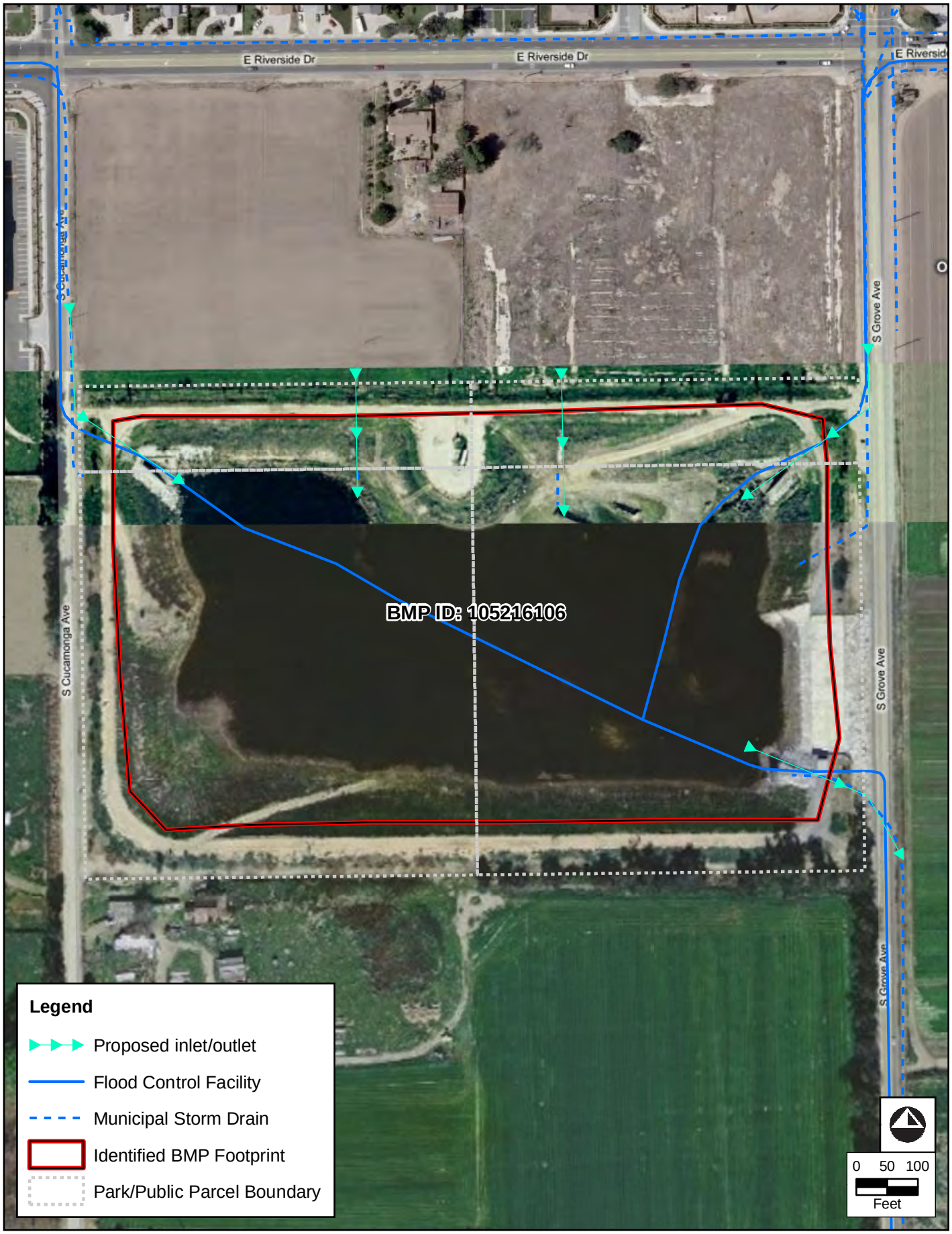
Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Chino

BMP ID105164214



1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

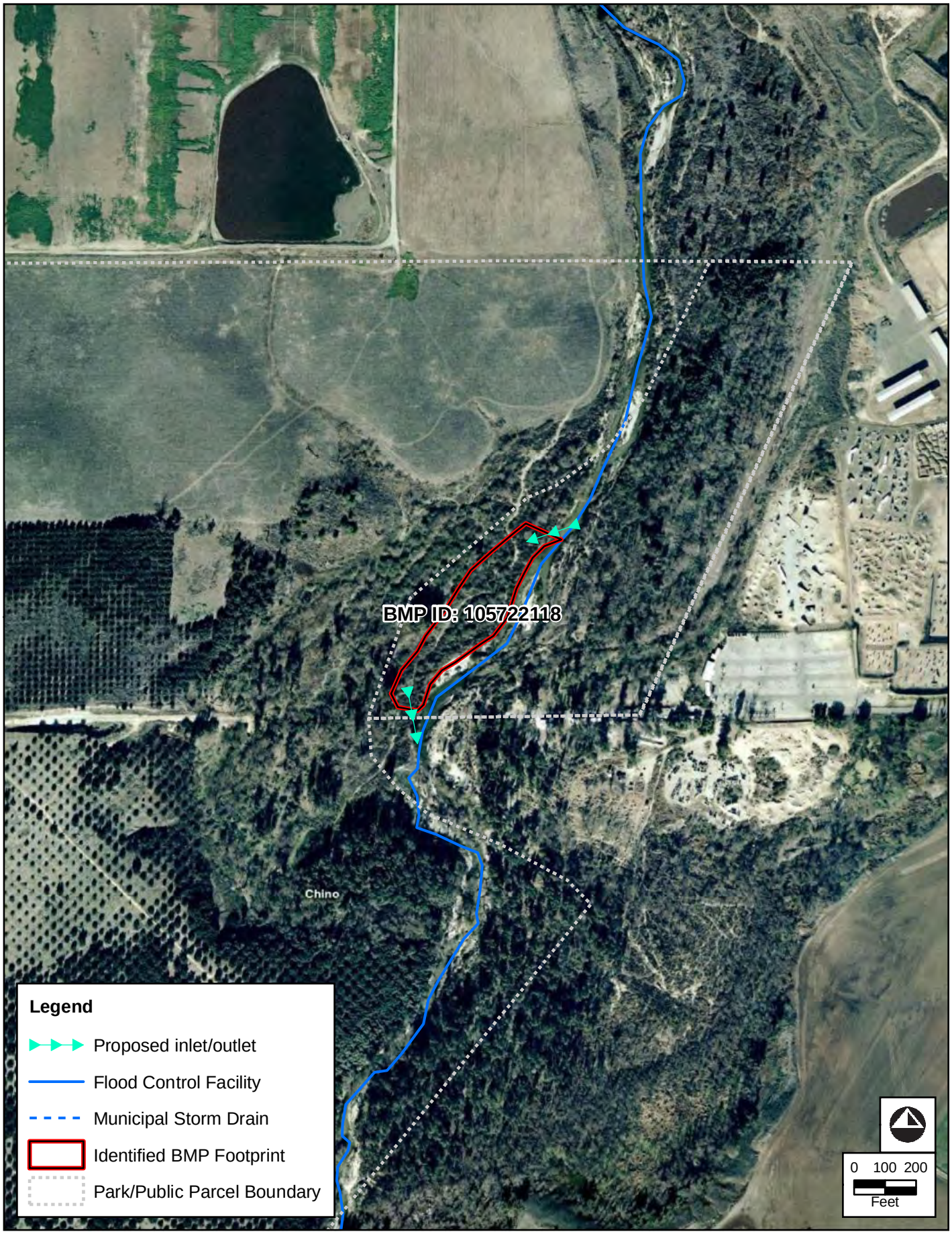
Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Ontario

BMP ID105216106



1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1
City of Chino
BMP ID105722118

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP ID106121125

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP ID106164106

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP ID106233221

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

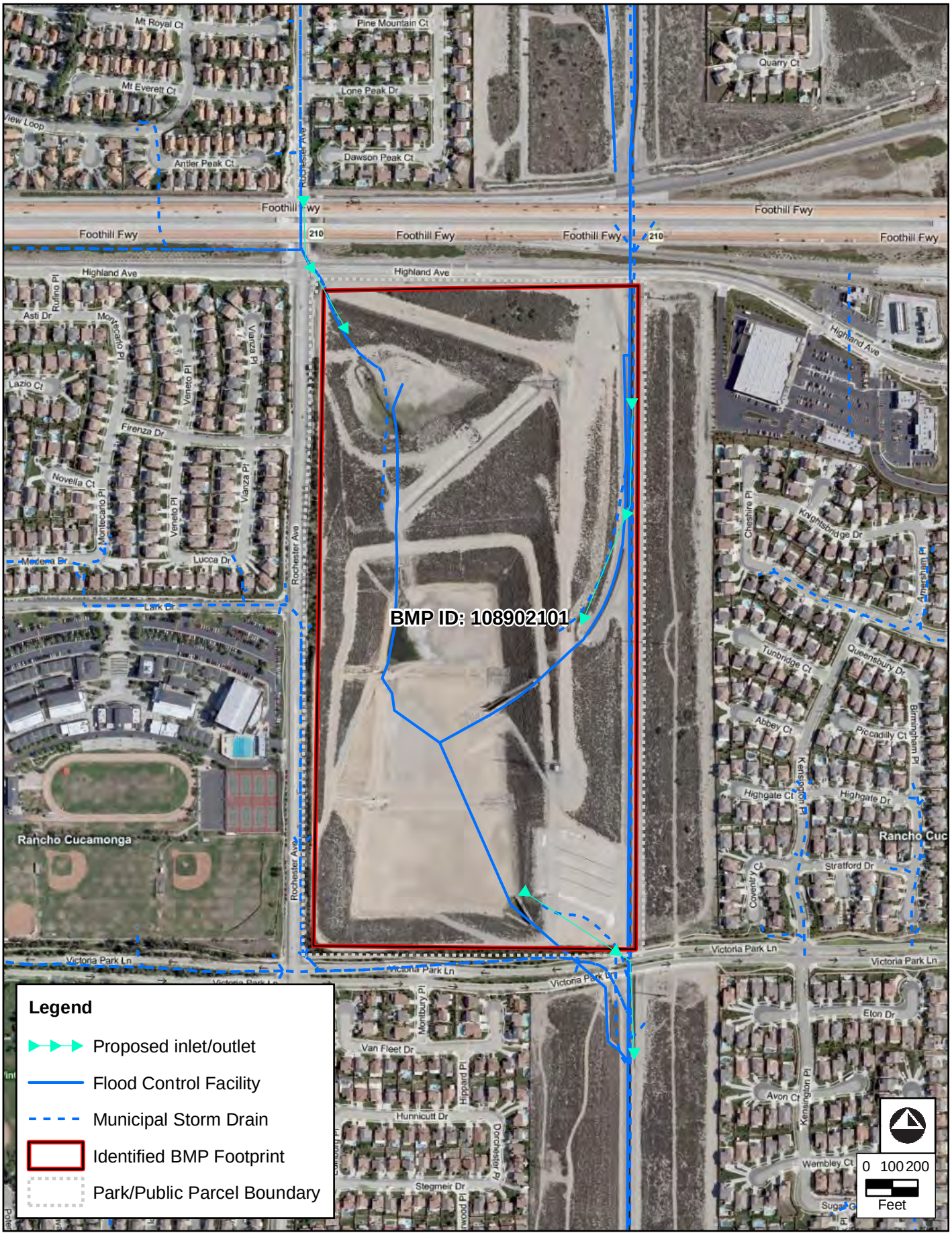
Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP ID107419132



1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP ID108902101

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP ID108903114

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Ontario

BMP ID011001310

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Ontario

BMP ID011005159

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Ontario

BMP ID011031112

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

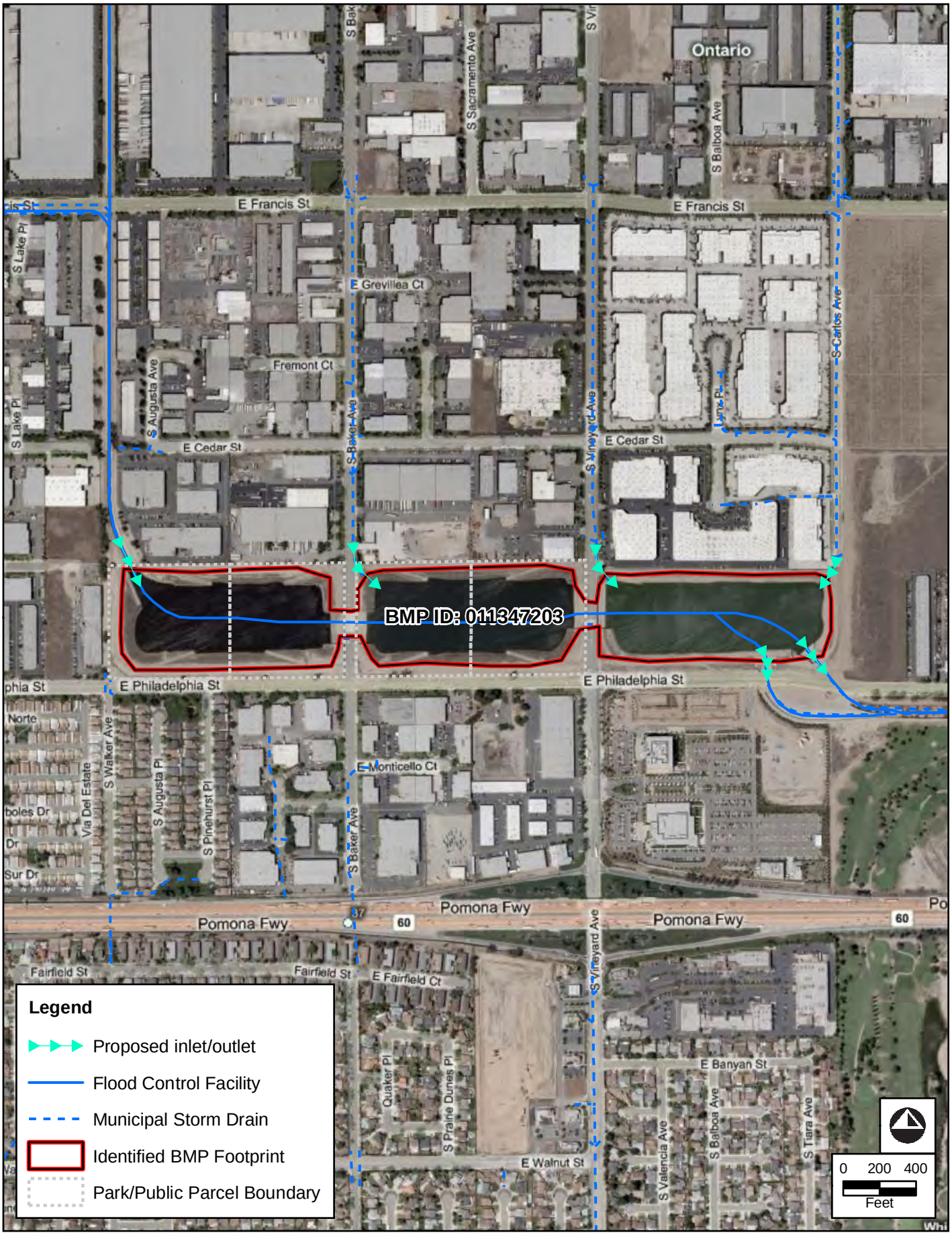
Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Ontario

BMP ID011045101



1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Ontario

BMP ID011347203

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

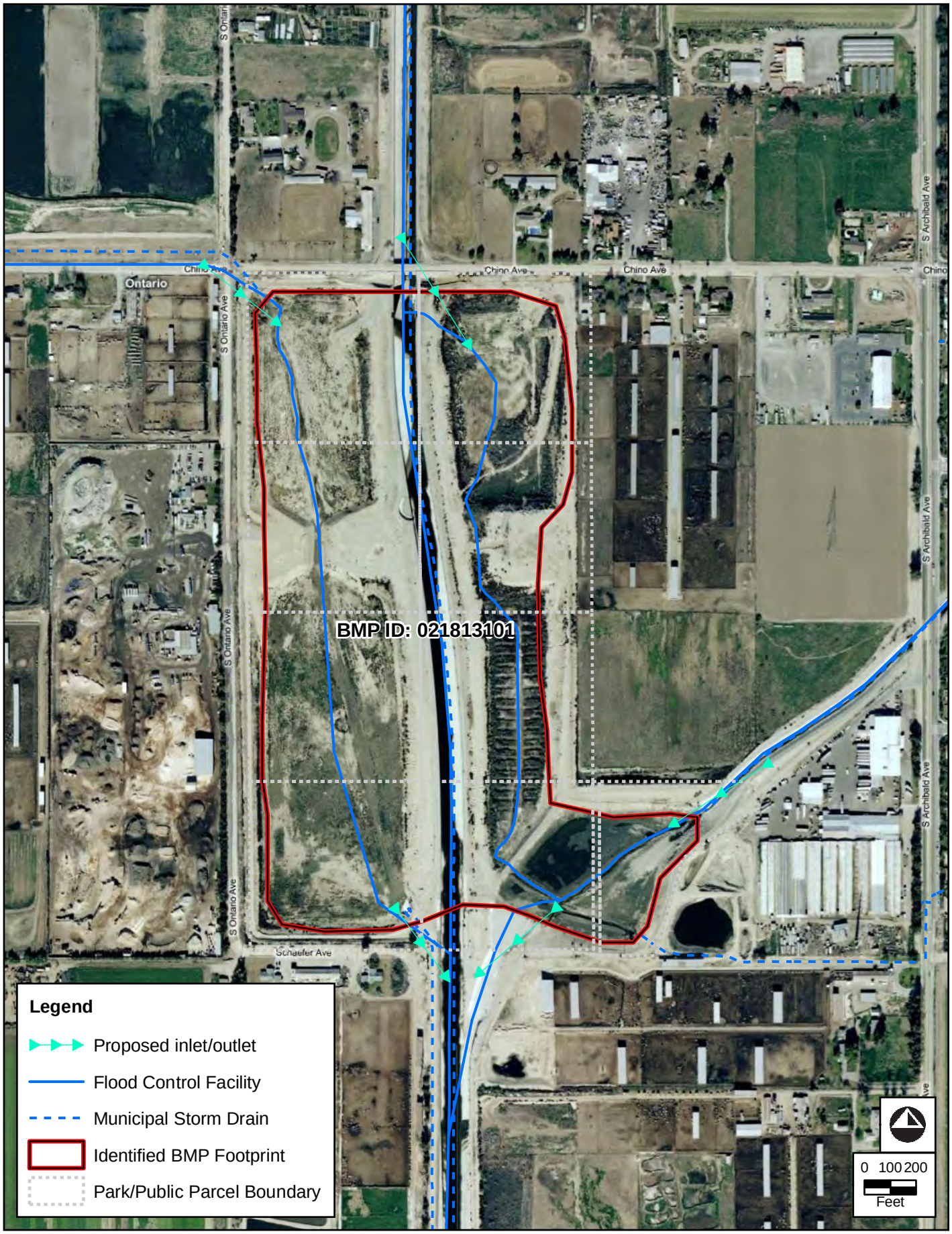
Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Ontario

BMP ID021018145



1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Ontario

BMP ID021813101

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Ontario

BMP ID023812103

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Fontana

BMP IDAquatic_F

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Ontario

BMP IDCentennial_O

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP IDCentral_RC

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP IDChurch_RC

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Chino Hills

BMP IDCommunity_CH

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

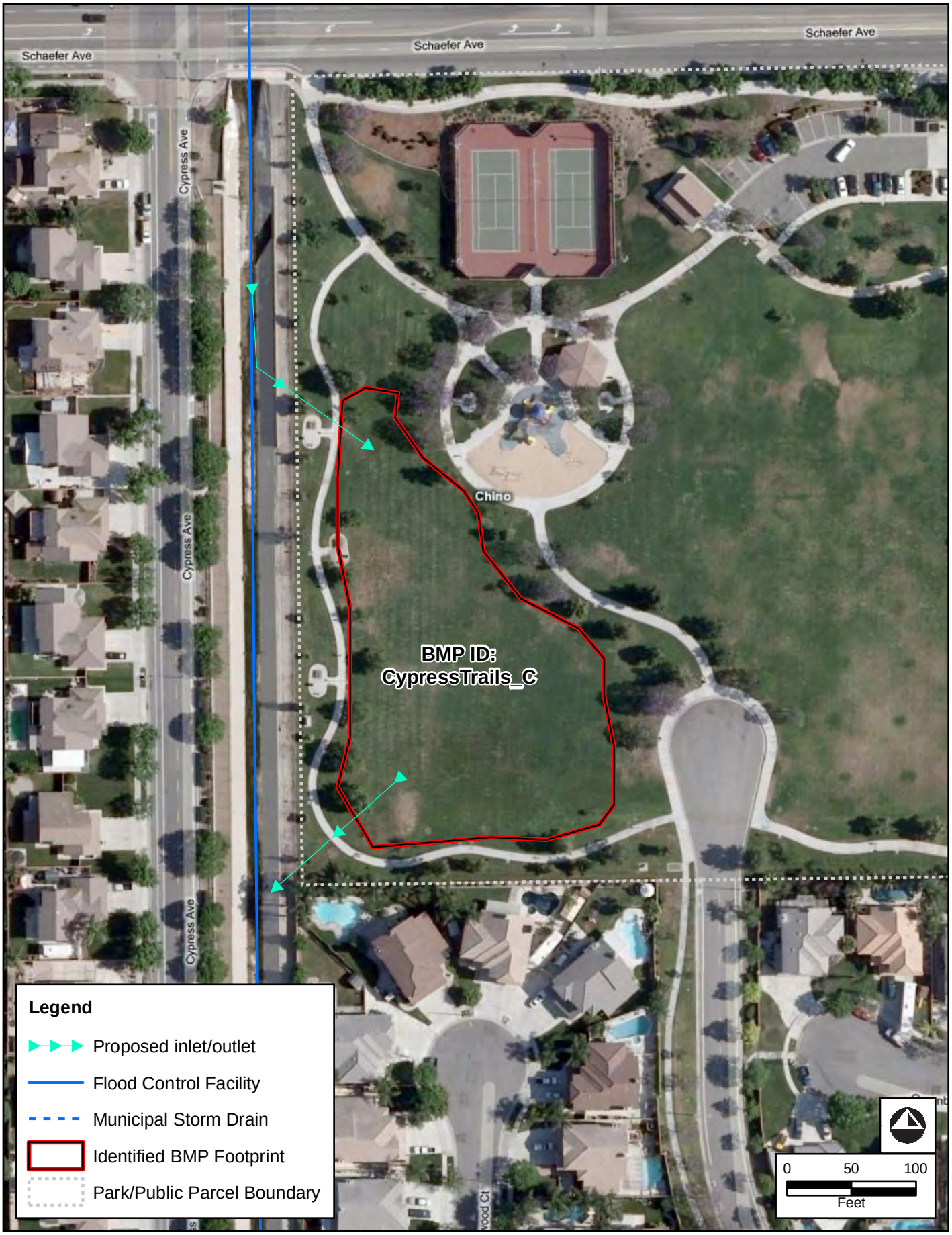
Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Chino Hills

BMP IDCrossroads_CH



1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Chino

BMP IDCypressTrails_C

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP IDDayCreek_RC

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Chino Hills

BMP IDEnglish_CH

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Upland

BMP IDFern_U

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Chino Hills

BMP IDHickory_CH

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Fontana

BMP IDHunters_F

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP IDKenyon_RC

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Fontana

BMP IDKoehler_F

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP IDLions_RC

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Fontana

BMP IDMcDermott_F

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Ontario

BMP IDMotorSpeedway_O

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Fontana

BMP IDOak_F

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Chino Hills

BMP IDOakRidge_CH

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP IDOldTown_RC

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Chino Hills

BMP IDPrado_C

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

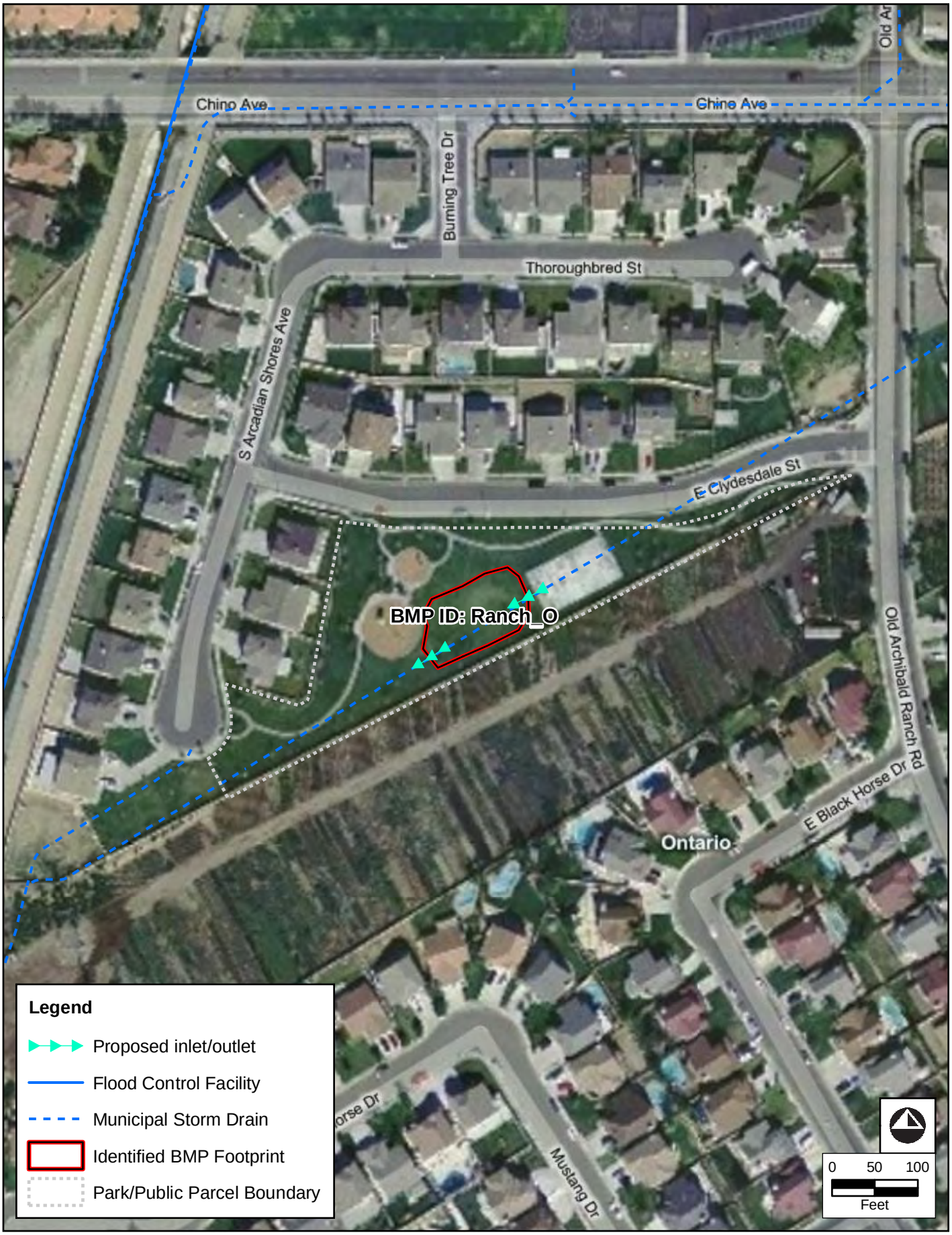
Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP IDRalphLewis_RC



1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

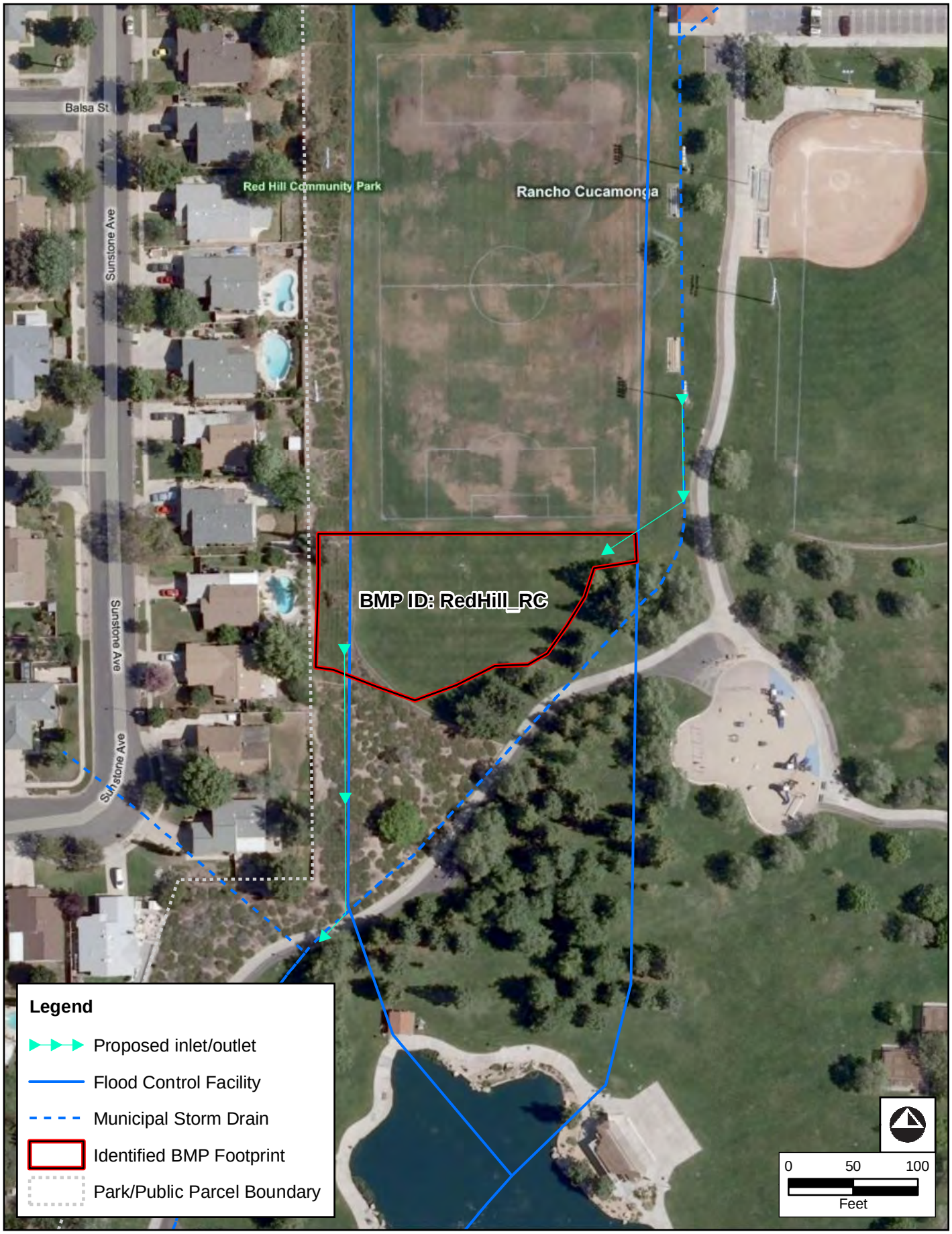
Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Ontario

BMP IDRanch_O



1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP IDRedHill_RC

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Chino Hills

BMP IDRincon_CH

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Ontario

BMP IDSanAntonio_O

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Fontana

BMP IDSanSevaine_F

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Montclair

BMP IDSaratoga_M

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Upland

BMP IDSierraVista_U

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Fontana

BMP IDSouthridge_F

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Rancho Cucamonga

BMP IDSpruce_RC

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

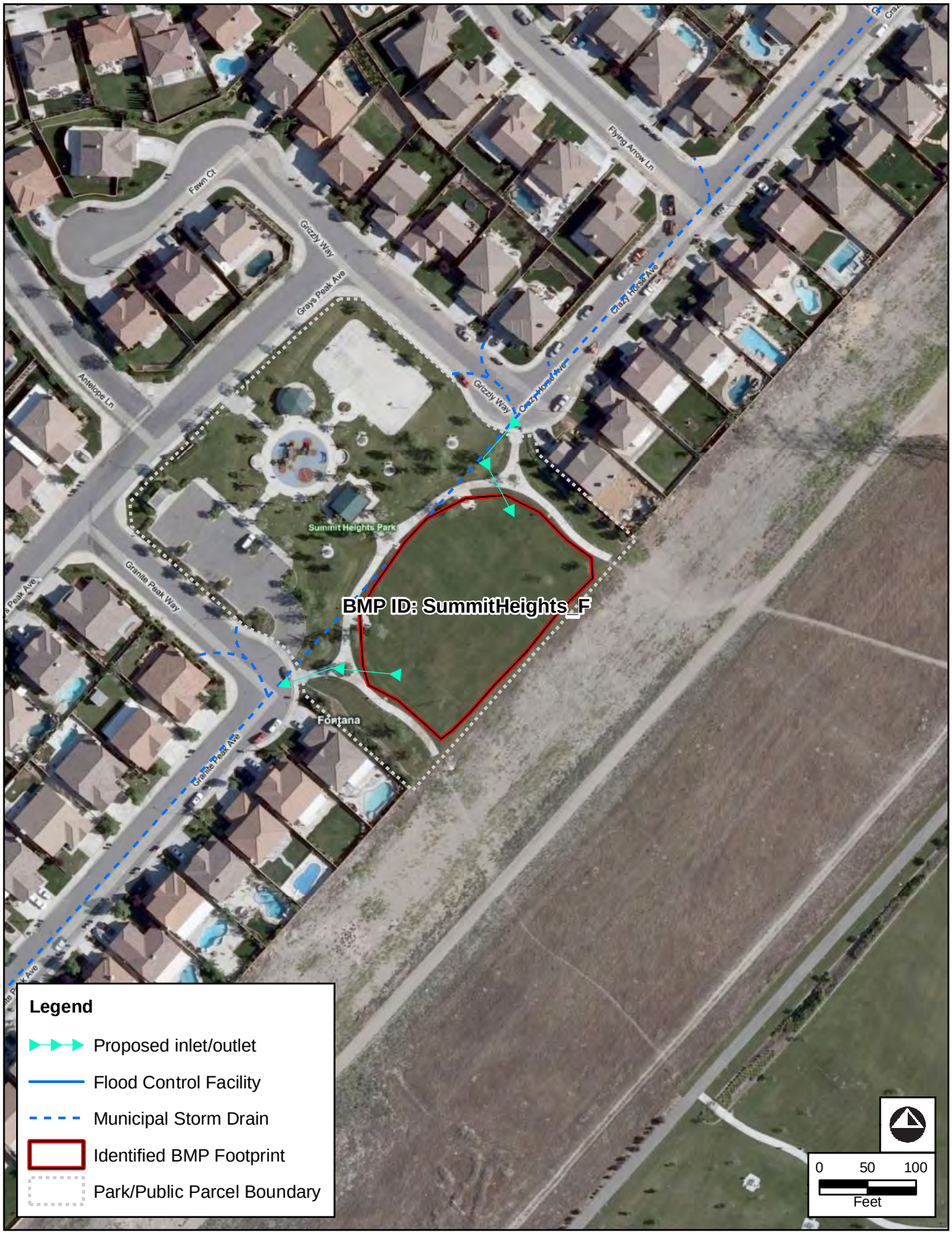
Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Chino Hills

BMP IDStrickling_CH



1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Fontana

BMP IDSummitHeights_F

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Montclair

BMP IDSunset_M

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Chino

BMP IDVilla_C

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 1

City of Montclair

BMP IDWilderness_M

Zone 4

Zone 5

Zone 1

Zone 2

Zone 3

Verdemont Park

026203115

Littlefield-Shultis Memorial Park

026607209

026528108

027107108

015328131

027214142

Perris Hill Park

028574212

014722322

Speicher Park

Anne Shirrells Park

026421317

Almeria_F

012802134

Nunez Park

Meadowbrook Park

013705237

027932160

024907103

Andreson Park

014218106

014218110

George E. Brown Jr. Park

025408111

016428102

016418236

025805111

Sycamore_F

Catawba_F

016336121

016336206

016338113

016423118

027505122

016336219

116715111

15

210

66

10

215

60

Legend

- Retrofit Opportunity Location
- Flood Control Facility
- Highway
- County Boundaries
- Flood Control District Zone
- Regional Board Boundary

1/17/11 JN 10106734 M:\Wdata\10106734\GIS\BMPRetrofit\Zone2 Retrofit Summary Exhibit.mxd DER

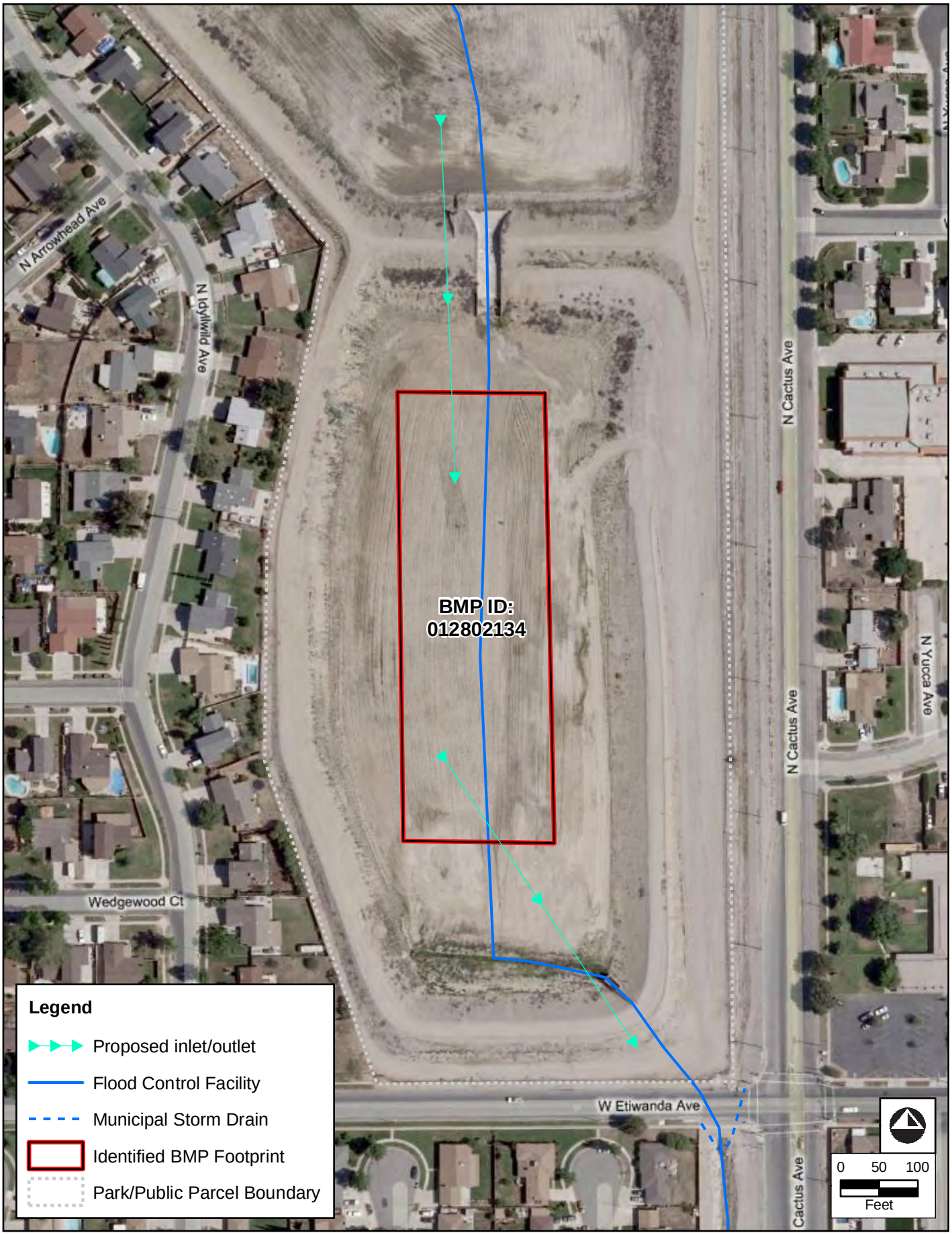
0 1 2

Miles

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Zone 2 Retrofit Opportunity Summary Map



1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2
City of Rialto
BMP ID012802134

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of San Bernardino

BMP ID013705237

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of San Bernardino

BMP ID014218106

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of San Bernardino

BMP ID014218110

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of San Bernardino

BMP ID014722322

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of San Bernardino

BMP ID015328131

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2
City of Colton
BMP ID016336121

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2
City of Colton
BMP ID016336206

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2
City of Colton
BMP ID016336219

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2
City of Colton
BMP ID016338113

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2
City of Colton
BMP ID016418236

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2
City of Colton
BMP ID016423118

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2
City of Colton
BMP ID016428102

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of Rialto

BMP ID024907103

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2
City of Colton
BMP ID025408111

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of Rialto

BMP ID025805111

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2
Unincorporated
BMP ID026203115

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2
City of Rialto
BMP ID026421317

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of San Bernardino

BMP ID026528108

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of San Bernardino

BMP ID026607209

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of San Bernardino

BMP ID027107108

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of San Bernardino

BMP ID027214142

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2
City of Colton
BMP ID027505122

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of San Bernardino

BMP ID027932160

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of Highland

BMP ID028574212

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of Grand Terrace

BMP ID116715111

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of Fontana

BMP IDAlmeria_F

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of Rialto

BMP IDAndreson Park

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of San Bernardino

BMP IDAnne Shirrells Park

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of Fontana

BMP IDCatawba_F

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of Colton

BMP IDGeorge E. Brown Jr. Park

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of San Bernardino

BMP IDLittlefield-Shultis Memorial Park

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of San Bernardino

BMP IDMeadowbrook Park

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of San Bernardino

BMP IDNunez Park

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of San Bernardino

BMP IDPerris Hill Park

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of San Bernardino

BMP IDSpeicher Park

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of Fontana

BMP IDSycamore_F

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

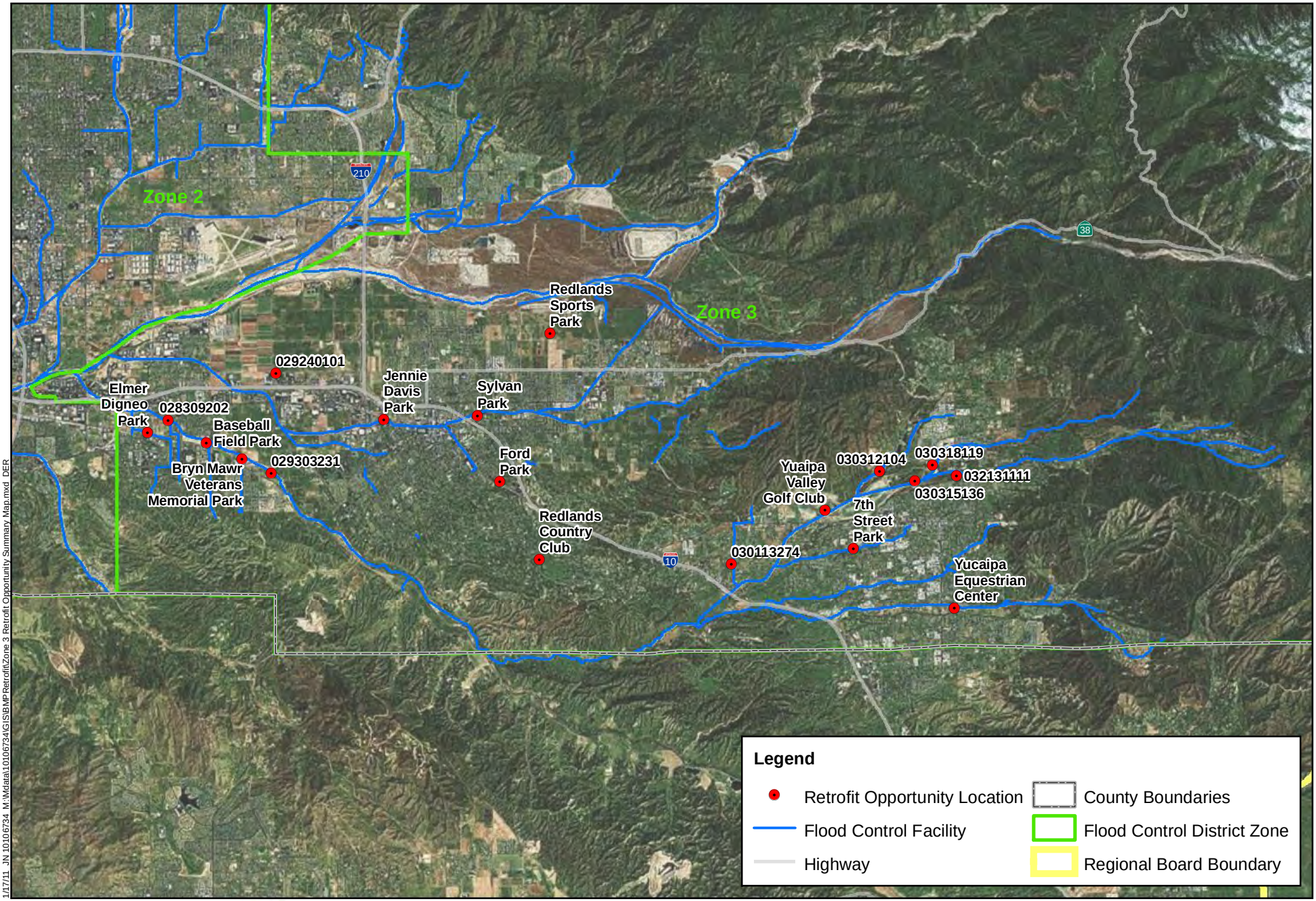
Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 2

City of San Bernardino

BMP IDVerdemont Park



1/17/11 JN 10106734 M:\Mdata\10106734\GIS\BMPRetrofit\Zone 3 Retrofit Opportunity Summary Map.mxd DER

RBF CONSULTING GIS

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

0 1 2
Miles

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Zone 3 Retrofit Opportunity Summary Map

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3

City of Yucaipa

BMP IDYucaipa Equestrian Center

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3

City of Yucaipa

BMP IDYuaipa Valley Golf Club

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3

City of Loma Linda

BMP ID028309202

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3
City of Redlands
BMP ID029240101

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3

City of Loma Linda

BMP ID029303231

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3

City of Yucaipa

BMP ID030113274

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3
City of Yucaipa
BMP ID030312104

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3
City of Yucaipa
BMP ID030315136

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3

City of Yucaipa

BMP ID030318119

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3

City of Yucaipa

BMP ID032131111

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3

City of Yucaipa

BMP ID7th Street Park

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3

City of Loma Linda

BMP IDBaseball Field Park

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3

City of Loma Linda

BMP IDBryn Mawr Veterans Memorial Park

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3

City of Loma Linda

BMP IDElmer Digneo Park

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3
City of Redlands
BMP IDFord Park

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3

City of Redlands

BMP IDJennie Davis Park

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3

City of Redlands

BMP IDRedlands Country Club

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3

City of Redlands

BMP IDRedlands Sports Park

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

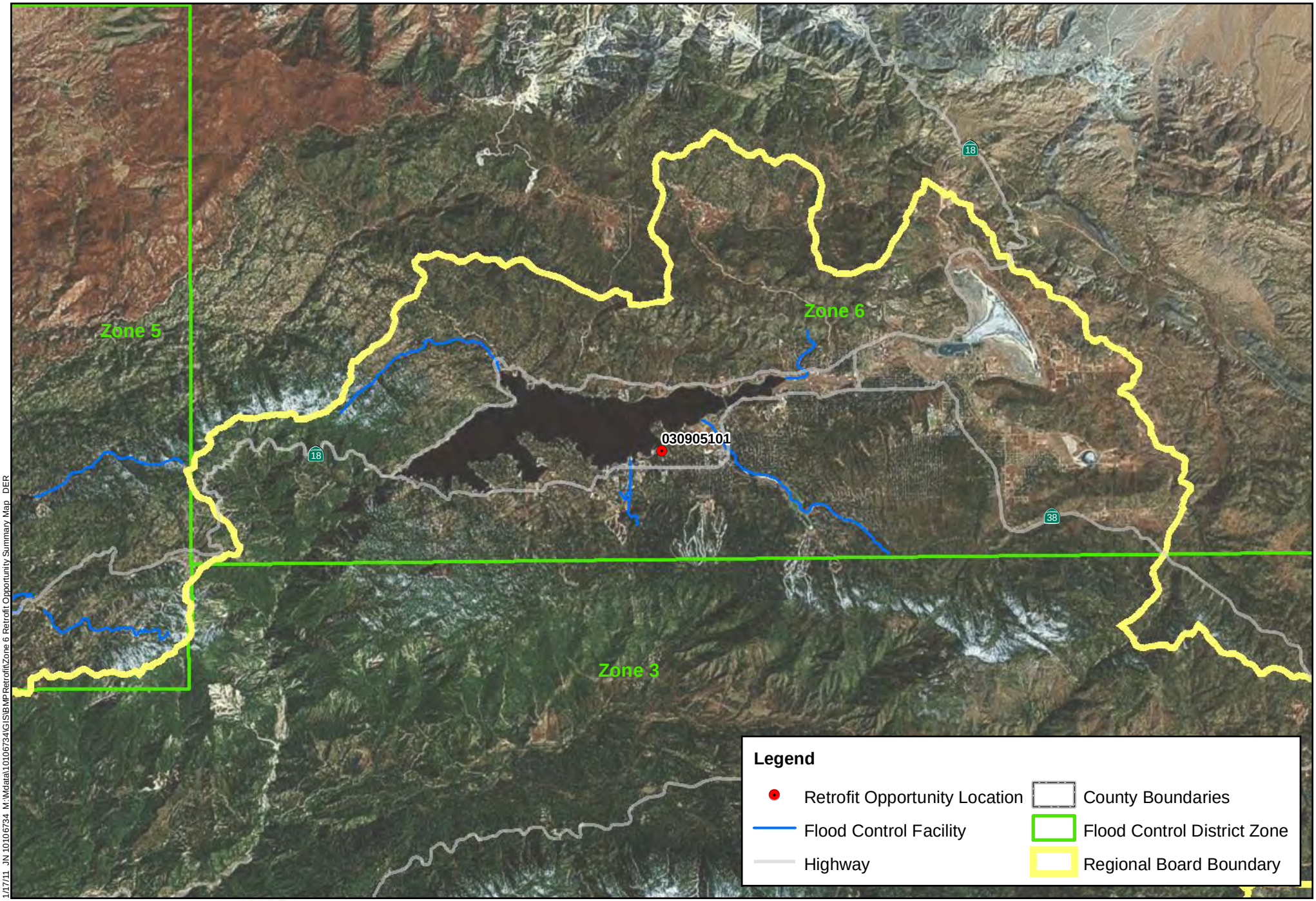
Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 3

City of Redlands

BMP IDSylvan Park



1/17/11 JN 10106734 M:\Mdata\10106734\GIS\BMPRetrofit\Zone 6 Retrofit Opportunity Summary Map DER

RBF CONSULTING GIS

0 1 2
Miles

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Zone 6 Retrofit Opportunity Summary Map

1/29/11 JN 10106734 Fig2_RetrofitRetardingBasin_MB_P.mxd JM

Sources: Caltrans; ESRI; SB DPW; SB Permittees; Microsoft Satellite Imagery

SAN BERNARDINO RETROFIT OPPORTUNITIES STUDY

Flood Zone 6

City of Big Bear Lake

BMP ID030905101

APPENDIX B

RETROFIT OPPORTUNITY SITE FORMS

Site No.	11001310			Acceptable BMP Options
Route	E D St at N Grove Ave			
Member Initials	RC			
Direction	WB			
Cross Street	Grove Ave			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Diversion of SD runoff to concrete channel
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	30 ft	Bioretention	15 ft min for bioretention	
How much length available?	70 ft	Bioretention	40 ft min for bioretention	
Total Area available	2100 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	N	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 375ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group is A
Landuse	Mixed			
Pump Station	Y			depending on grade elevation

Site No.	11005159			Acceptable BMP Options
Route	E D St at N Grove Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	EB			WET BASIN
Parcels	11005159			CONSTRUCTED WETLAND
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Flood Control Park - Enlargement of channel or pump station configuration
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		
Does the site have 4H:1V slope or flatter?		Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	265 ft	Bioretention	15 ft min for bioretention	
How much length available?	350 ft	Bioretention	40 ft min for bioretention	
Total Area available	92750 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	Y	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 375ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group is A
Landuse	Mixed			
Pump Station	Y			Depending on chosen configuration

Site No.	11031112			Acceptable BMP Options
Route	E 7th St at Virginia Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	EB			
Parcels	011031106_12_29_30_31_42_021016113_14_021040104			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Retrofit of existing 2-stage retarding basin
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	670 ft	Bioretention	15 ft min for bioretention	
How much length available?	2000 ft	Bioretention	40 ft min for bioretention	
Total Area available	1340000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		creation of low-flow channel
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 375ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	A&B soils
Landuse	Mixed			
Pump Station	N			

Site No.	11045101			Acceptable BMP Options
Route	E 4th st at N Archibald Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	EB			
Parcels	021018136_41 011045101_46102_47101 21040104			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control / San Bernardino County			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Retrofit of existing retarding basins
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	350 ft	Bioretention	15 ft min for bioretention	
How much length available?	2000 ft	Bioretention	40 ft min for bioretention	
Total Area available	700000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		creation of low-flow channel
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 375ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	11347203			Acceptable BMP Options
Route	E Philadelphia St at S Walker Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	WB			
Parcels	11347203	11347204 011348102_03		
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Retrofit of existing retarding basins
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	520 ft	Bioretention	15 ft min for bioretention	
How much length available?	2550 ft	Bioretention	40 ft min for bioretention	
Total Area available	1326000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		creation of low-flow channel
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 250ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		Sandfly soils
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	12802134			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			
Cross Street	N Cactus Avenue			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	260 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	580 ft	Bioretention	40 ft min for bioretention	
Total Area available	150800 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	-350	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	13705237			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			
Cross Street	South Mt Vernon Ave			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	115 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	450 ft	Bioretention	40 ft min for bioretention	
Total Area available	51750 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	-200	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	Y			Depending on configuration

Site No.	14218106			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			
Cross Street	S Meridian Ave			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	400 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	320 ft	Bioretention	40 ft min for bioretention	
Total Area available	128000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	-250	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		tbd
Are there known environmental issues?	Y/N	Infiltration Basin		Sand Fly
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	14218110			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			
Cross Street	S Meridian Ave			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	100 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	500 ft	Bioretention	40 ft min for bioretention	
Total Area available	50000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	-250	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	Y/N	Infiltration Basin		Sand Fly
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	14722322			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			
Cross Street	N Fairfx Dr			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	70 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	240 ft	Bioretention	40 ft min for bioretention	
Total Area available	16800 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	-250	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	B	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	15328131			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			
Cross Street	Holly Vista Blvd			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	150 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	400 ft	Bioretention	40 ft min for bioretention	
Total Area available	60000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	-350	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	Y/N	Infiltration Basin		Riversidian Alluvial Sage Scru
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	16336121			Acceptable BMP Options
Route	Santa Ana River Trail			INFILTRATION BASIN
Member Initials	JH			
Direction	EB			WET BASIN
Cross Street	S Rancho Avenue			CONSTRUCTED WETLAND
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	140 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	330 ft	Bioretention	40 ft min for bioretention	
Total Area available	46200 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	Y	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weather flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	-200	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	Y/N	Infiltration Basin		CATOSTOMUS SANTAANAE, Southwestern Willow Flycatcher, and FEMA 1995 100Y FLO(
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	16336206			Acceptable BMP Options
Route	Santa Ana River Trail			INFILTRATION BASIN
Member Initials	JH			
Direction	EB			WET BASIN
Cross Street	W Washington Street			CONSTRUCTED WETLAND
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	200 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	850 ft	Bioretention	40 ft min for bioretention	
Total Area available	170000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	Y	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weather flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	-200	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	Y/N	Infiltration Basin		Riparian Wetland, Santa Ana Sucker, Southwestern Willow Flycatcher, and FEMA 1995 100Y
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	16336219			Acceptable BMP Options
Route	Santa Ana River Trail			INFILTRATION BASIN
Member Initials	JH			
Direction	EB			WET BASIN
Cross Street	S La Cadena Drive			CONSTRUCTED WETLAND
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	85 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	400 ft	Bioretention	40 ft min for bioretention	
Total Area available	34000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	Y	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weather flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	-200	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	Y/N	Infiltration Basin		Riparian Wetland, Santa Ana Sucker, Southwestern Willow Flycatcher, and FEMA 1995 100Y
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	16338113			Acceptable BMP Options
Route	Santa Ana River Trail			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			
Cross Street	E Washington Street			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	140 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	1000 ft	Bioretention	40 ft min for bioretention	
Total Area available	140000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	-150	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	Y/N	Infiltration Basin		Riparian Wetland and Santa Ana Sucker
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	16418236			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	NB			WET BASIN
Cross Street	Fairway Drive			CONSTRUCTED WETLAND
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	170 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	870 ft	Bioretention	40 ft min for bioretention	
Total Area available	147900 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	Y	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	Y			Depending on configuration

Site No.	16423118			Acceptable BMP Options
Route	Reche Canyon Creek			INFILTRATION BASIN
Member Initials	JH			
Direction	NB			
Cross Street	Reche Canyon Rd			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	40 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	130 ft	Bioretention	40 ft min for bioretention	
Total Area available	5200 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	Y			Depending on configuration

Site No.	16428102			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			WET BASIN
Cross Street	Fairway Drive			CONSTRUCTED WETLAND
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	640 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	1140 ft	Bioretention	40 ft min for bioretention	
Total Area available	729600 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	Y	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	Y			Depending on configuration

Site No.	20118315			Acceptable BMP Options
Route	Hermosa Ave at Banyan St			INFILTRATION BASIN
Member Initials	RC			
Direction	WB			
Parcels	20118315 020118302_03_04_05_06_07_08_09_10_11_14			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Retrofit of existing retarding basin
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	550 ft	Bioretention	15 ft min for bioretention	
How much length available?	2400 ft	Bioretention	40 ft min for bioretention	
Total Area available	1320000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		low-flow channel
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	20120141			Acceptable BMP Options
Route	E 19th St at Sapphire St			
Member Initials	RC			
Direction	WB			
Parcels	20120141			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options available: (1) enlarge channel to create wetlands (2) pump flow from concrete channel to the east bank - small footprint compared to TDA
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?		Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?		Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	100 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	440 ft	Bioretention	40 ft min for bioretention	
Total Area available	44000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	Y			Depending on configuration

Site No.	20199114			Acceptable BMP Options
Route	Hermosa Ave at Banyan St			INFILTRATION BASIN
Member Initials	RC			
Direction	WB			
Parcels	20199114			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Retrofit of existing retarding basin
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	430 ft	Bioretention	15 ft min for bioretention	
How much length available?	1800 ft	Bioretention	40 ft min for bioretention	
Total Area available	774000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	20727142			Acceptable BMP Options
Route	E 9th St at Vineyard Ave			
Member Initials	RC			
Direction	WB			
Parcels	020727142_47_48_51			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Treats runoff from 3 SDs (9th St) before discharge to concrete channel
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?		Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?		Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	35 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	40 ft	Bioretention	40 ft min for bioretention	
Total Area available	1400 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	N	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 475ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	20833122			Acceptable BMP Options
Route	Foothill blvd at Haven Ave			
Member Initials	RC			
Direction	EB			
Parcels	20833122			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		2 options: (1) treatment of eastern SD before discharge to channel (2) treatment of western SD
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	45 ft	Bioretention	15 ft min for bioretention	
How much length available?	70 ft	Bioretention	40 ft min for bioretention	
Total Area available	3150 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		low-flow channel
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 475ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			not expected

Site No.	20909108			Acceptable BMP Options
Route	Arrow route at Center Ave			
Member Initials	RC			
Direction	WB			
Parcels	20909108			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		treatment of eastern SD before discharging to channel
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	N	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	40 ft	Bioretention	15 ft min for bioretention	
How much length available?	50 ft	Bioretention	40 ft min for bioretention	
Total Area available	2000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	N	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 475ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			not expected

Site No.	20915124			Acceptable BMP Options
Route	E 8th St at Vineyard Ave			
Member Initials	RC			
Direction	WB			
Parcels	20915110 20915124			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Treats runoff in SD from E 8th st before discharging to concrete channel
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?		Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?		Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	50 ft	Bioretention	15 ft min for bioretention	
How much length available?	60 ft	Bioretention	40 ft min for bioretention	
Total Area available	3000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	N	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 450ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	21018145			Acceptable BMP Options
Route	E 4th st at N Archibald Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	EB			
Parcels	21037105 021018134_43_44_45_46 21040104			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control / San Bernardino County			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Secondary Priority - Upstream of existing retarding basins - 2 options: divert runoff from SD on Archibald; or pump flow from channel
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	500 ft	Bioretention	15 ft min for bioretention	
How much length available?	900 ft	Bioretention	40 ft min for bioretention	
Total Area available	450000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		creation of low-flow channel
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 375ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Groups A&B
Landuse	Mixed			
Pump Station	Y			Depending on configuration

Site No.	21813101			Acceptable BMP Options
Route	Ontario Ave at Chino Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	NB			WET BASIN
Parcels	021813101_02_03_04_05_06_07_08_23_36			CONSTRUCTED WETLAND
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Existing Retarding/Sediment basin
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	190 ft	Bioretention	15 ft min for bioretention	
How much length available?	2500 ft	Bioretention	40 ft min for bioretention	
Total Area available	475000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	Y	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 175ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		Sandfly soils
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	21830106			Acceptable BMP Options
Route	Remington at Carpenter			
Member Initials	RC			
Direction	EB			WET BASIN
Parcels	21830122	21830107 021830106_021830121		CONSTRUCTED WETLAND
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Existing farm land. Could treat runoff from SD or pump/discharge flow from/to channel
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?		Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	540 ft	Bioretention	15 ft min for bioretention	
How much length available?	890 ft	Bioretention	40 ft min for bioretention	
Total Area available	480600 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?		Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		low-flow channel
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 100ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	N	Infiltration Basin	A or B needed for IFD	Soil Group B&C
Landuse	Mixed			
Pump Station	Y			Yes if flow from channel

Site No.	22707113			Acceptable BMP Options
Route	Victoria St at I-15S			INFILTRATION BASIN
Member Initials	RC			
Direction	SB			
Parcels	22801106	22707113		
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion	Bioretetion/ Extended Detention Basin (Fenced area, very simillar and parallel to SC-07 site)			
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Local BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	900 ft	Bioretention	15 ft min for bioretention	
How much length available?	10000 ft	Bioretention	40 ft min for bioretention	
Total Area available	9000000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Creation of a low-flow channel is possible
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 575ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	22809107			Acceptable BMP Options
Route	I-15 at Victoria St			INFILTRATION BASIN
Member Initials	RC			
Direction	NB			
Parcels	22809107			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Creation of a basin at confluence of several channels - Enlargement of channels - FC bypass
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	1100 ft	Bioretention	15 ft min for bioretention	
How much length available?	1200 ft	Bioretention	40 ft min for bioretention	
Total Area available	1320000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		low-flow channel
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 575ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		Partially Riversidian Alluvial Sage Scrub
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	22912114			Acceptable BMP Options
Route	I-15 at Arrow route			
Member Initials	RC			
Direction	SB			
Parcels	22912114			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Inline with existing SD. Footprint is of longitudinal shape.
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	1100 ft	Bioretention	15 ft min for bioretention	
How much length available?	2300 ft	Bioretention	40 ft min for bioretention	
Total Area available	2530000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 475ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		Potential sensitive biological areas: Grassland/Remanent RAFSS ; S
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	22928370			Acceptable BMP Options
Route	4th street at Edwards Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	WB			
Parcels	22928370			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Basin potentially capturing concentrated flow from 2 SDs
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	500 ft	Bioretention	15 ft min for bioretention	
How much length available?	600 ft	Bioretention	40 ft min for bioretention	
Total Area available	300000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		low-flow channel
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 375ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		Partially in Sandfly soils
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	22929109			Acceptable BMP Options
Route	Whittram Ave at Hickory Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	EB			
Parcels	22929109	22929108		
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Retrofit of existing retarding basin for WQ
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	300 ft	Bioretention	15 ft min for bioretention	
How much length available?	2000 ft	Bioretention	40 ft min for bioretention	
Total Area available	600000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		low-flow channel
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 425ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	23010202			Acceptable BMP Options
Route	Whittram Ave at Banana Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	SB			
Parcels	23010202	23012201	23012202	
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion				

Requirement	Answer	BMP Criteria No.	Explanation	Comments
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Retrofit of existing retarding basin
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	470 ft	Bioretention	15 ft min for bioretention	
How much length available?	1070 ft	Bioretention	40 ft min for bioretention	
Total Area available	502900 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		low-flow channel
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 450ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	23803129			Acceptable BMP Options
Route	San Bernardino Ave at Kaiser Way			INFILTRATION BASIN
Member Initials	RC			
Direction	EB			
Parcels	23803129			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino Redevelopment Agency			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Pump concentrated flow from channel - Discharge back to channel
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	270 ft	Bioretention	15 ft min for bioretention	
How much length available?	300 ft	Bioretention	40 ft min for bioretention	
Total Area available	81000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Weather station
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 375ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	Y			

Site No.	23809104			Acceptable BMP Options
Route	Jurupa Ave at Mulberry Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	WB			
Parcels	23809104			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Retrofit of existing retarding basin
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	1100 ft	Bioretention	15 ft min for bioretention	
How much length available?	2300 ft	Bioretention	40 ft min for bioretention	
Total Area available	2530000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?		Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 275ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	23812103			Acceptable BMP Options
Route	I-15 at Jurupa St			INFILTRATION BASIN
Member Initials	RC			
Direction	NB			
Parcels	23812103			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Retrofit of existing basin - tributary areas from several residential areas
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	1100 ft	Bioretention	15 ft min for bioretention	
How much length available?	2300 ft	Bioretention	40 ft min for bioretention	
Total Area available	2530000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 250ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		Potential sensitive biological areas: Grassland/Remanent RAFSS ; S
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	24907103			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			WET BASIN
Cross Street	S Linden Avenue			CONSTRUCTED WETLAND
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	300 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	450 ft	Bioretention	40 ft min for bioretention	
Total Area available	135000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	Y	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	25408111			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			WET BASIN
Cross Street	Meridian Ave			CONSTRUCTED WETLAND
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	N	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	470 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	360 ft	Bioretention	40 ft min for bioretention	
Total Area available	169200 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	Y	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		tbd
Are there known environmental issues?	Y/N	Infiltration Basin		Sand Fly
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	25805111			Acceptable BMP Options
Route	S Riverside Avenue			
Member Initials	JH			
Direction	SB			
Cross Street	E Slover Avenue			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	40 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	180 ft	Bioretention	40 ft min for bioretention	
Total Area available	7200 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	N	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		
Are there known environmental issues?	Y/N	Infiltration Basin		Sand Fly
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	Y			Depending on configuration

Site No.	26203115			Acceptable BMP Options
Route	Lytle Creek			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			
Cross Street	Verdemonte Road			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	380 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	1400 ft	Bioretention	40 ft min for bioretention	
Total Area available	532000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	Y/N	Infiltration Basin		SAN BERNARDINO KANGAROO RAT and Riversidian Alluvial Sag
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	26421317			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			
Cross Street	N Cactus Avenue			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	240 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	750 ft	Bioretention	40 ft min for bioretention	
Total Area available	180000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	26528108			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	WB			
Cross Street	W 40th Street			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	280 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	900 ft	Bioretention	40 ft min for bioretention	
Total Area available	252000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	26607209			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	WB			
Cross Street	Cajon Blvd			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	300 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	500 ft	Bioretention	40 ft min for bioretention	
Total Area available	150000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	27107108			Acceptable BMP Options
Route	Santa Ana River Lateral			
Member Initials	JH			
Direction	WB			
Cross Street	W 40th Street			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	280 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	900 ft	Bioretention	40 ft min for bioretention	
Total Area available	252000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	27214142			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			
Cross Street	E Date Street			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	280 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	340 ft	Bioretention	40 ft min for bioretention	
Total Area available	95200 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	B	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	27505122_3			Acceptable BMP Options
Route	Santa Ana River Trail			
Member Initials	JH			
Direction	SB			WET BASIN
Cross Street	Santa Ana River Trail			CONSTRUCTED WETLAND
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	170 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	520 ft	Bioretention	40 ft min for bioretention	
Total Area available	88400 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	Y	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	N	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	Y	Infiltration Basin		Santa Ana Sucker and Riparian/Wetland
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Open Space/ Park			
Pump Station	N			Depending on configuration

Site No.	27932160			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	WB			
Cross Street	Tennis Court Lane			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	180 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	960 ft	Bioretention	40 ft min for bioretention	
Total Area available	172800 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	B	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	Y			Depending on configuration

Site No.	28309202			Acceptable BMP Options
Route	Santa Ana River Lateral			
Member Initials	JH			
Direction	WB			WET BASIN
Cross Street	Poplar Street			CONSTRUCTED WETLAND
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 3**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	45 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	300 ft	Bioretention	40 ft min for bioretention	
Total Area available	13500 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	Y	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	Y			Depending on configuration

Site No.	28574212			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			
Cross Street	Highland Ave			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	340 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	350 ft	Bioretention	40 ft min for bioretention	
Total Area available	119000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	29240101			Acceptable BMP Options
Route	Santa Ana River Lateral			
Member Initials	JH			
Direction	WB			WET BASIN
Cross Street	West Lugonia Ave			CONSTRUCTED WETLAND
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 3**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	220 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	660 ft	Bioretention	40 ft min for bioretention	
Total Area available	145200 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	Y	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	B	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	Y			Depending on configuration

Site No.	29303231			Acceptable BMP Options
Route	Santa Ana River			
Member Initials	JH			
Direction	WB			WET BASIN
Cross Street	1st Street			CONSTRUCTED WETLAND
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 3**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	80 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	170 ft	Bioretention	40 ft min for bioretention	
Total Area available	13600 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	Y	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	B	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	30113274			Acceptable BMP Options
Route	Santa Ana River			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			
Cross Street	Kentucky Street			
BMP Type	Subregional/Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 3**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	200 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	280 ft	Bioretention	40 ft min for bioretention	
Total Area available	56000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	B	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	30312104			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			
Cross Street	Oak Glen Road			
BMP Type	Subregional/Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 3**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	500 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	700 ft	Bioretention	40 ft min for bioretention	
Total Area available	350000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	30315136			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	WB			
Cross Street	Date Ave			
BMP Type	Subregional/Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 3**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	400 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	650 ft	Bioretention	40 ft min for bioretention	
Total Area available	260000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	30318119			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			
Cross Street	Oak Glen Road			
BMP Type	Subregional/Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2?**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	670 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	760 ft	Bioretention	40 ft min for bioretention	
Total Area available	509200 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	30905101			Acceptable BMP Options
Route	Big Bear Lake			
Member Initials	JH			
Direction	WB			
Cross Street	Park Avenue			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 6**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	260 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	310 ft	Bioretention	40 ft min for bioretention	
Total Area available	80600 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	B	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	32131111			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	WB			
Cross Street	Bryant Street			
BMP Type	Subregional/Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2?**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	120 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	340 ft	Bioretention	40 ft min for bioretention	
Total Area available	40800 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	B	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	100005125			Acceptable BMP Options
Route	Carbon Canyon Rd at Canon Ln			
Member Initials	RC			
Direction	SB			
Parcels	100005125			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	COUNTY SERVICE AREA 70			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Online treatment device with golf course SD
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?		Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?		Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	70 ft	Bioretention	15 ft min for bioretention	
How much length available?	100 ft	Bioretention	40 ft min for bioretention	
Total Area available	7000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Bypass system
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Mixed			
Pump Station	N			to be verified - depending on invert elevation

Site No.	100729106			Acceptable BMP Options
Route	W 11th St at N Central Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	EB			
Parcels	100729106	100728121	100728144	
BMP Type	Regional/Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	San Bernardino County Flood Control District			
Conclusion				BIORETENTION

Requirement	Answer	BMP Criteria No.	Explanation	Comments
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Divert flow from existing SD (W 11th St) to basin. Discharge to Arrow Route SD. Diversion box on SD.
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	230 ft	Bioretention	15 ft min for bioretention	
How much length available?	540 ft	Bioretention	40 ft min for bioretention	Footprint can be extended.
Total Area available	124200 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		unlikely
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		diversion box or low-flow channel
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 550ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Residential			
Pump Station	N			Possible / Verify SD invert

Site No.	101219104			Acceptable BMP Options
Route	State St at Kadota Ave			
Member Initials	RC			
Direction	EB			
Parcels	101219104	101219118		
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	San Bernardino County			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Capture Runoff from eastern SD & discharge to channel after treatment - Footprint available may only allow treatment of a small portion of the TDA (2) eastern SD has retarding basin upstream
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	50 ft	Bioretention	15 ft min for bioretention	
How much length available?	120 ft	Bioretention	40 ft min for bioretention	
Total Area available	6000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Pump setup
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 300ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	101326117			Acceptable BMP Options
Route	Francis Ave at East End Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	EB			
Parcels	101326117			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Pump concentrated flow from channel & discharge back, if needed, to channel after treatment - 500 feet of pipeline needed
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	80 ft	Bioretention	15 ft min for bioretention	
How much length available?	220 ft	Bioretention	40 ft min for bioretention	
Total Area available	17600 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Pump setup
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 225ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil A
Landuse	Mixed			
Pump Station	Y			required

Site No.	102304109			Acceptable BMP Options
Route	Riverside Dr at Reservoir Ave			
Member Initials	RC			
Direction	EB			
Parcels	102304109			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options: (1)Pump concentrated flow from channel & discharge back to channel after treatment (2) Enlarge both channel to detention system - Verify drainage system
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	170 ft	Bioretention	15 ft min for bioretention	
How much length available?	330 ft	Bioretention	40 ft min for bioretention	
Total Area available	56100 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		to be determined
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Pump setup or low-flow channel
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 125ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	N	Infiltration Basin	A or B needed for IFD	Soil Groups B&C
Landuse	Mixed			
Pump Station	Y			depending on configuration

Site No.	102337170			Acceptable BMP Options
Route	Hwy 71 at Chino Ave			
Member Initials	RC			
Direction	SB			
Parcels	102337170			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	COUNTY SERVICE AREA 70 IMP ZONE CH			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert concentrated flow from residential SD - treatment device in park
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	120 ft	Bioretention	15 ft min for bioretention	
How much length available?	270 ft	Bioretention	40 ft min for bioretention	
Total Area available	32400 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		to be determined
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Pump setup or low-flow channel
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 100ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	N	Infiltration Basin	A or B needed for IFD	Soil Groups B&C
Landuse	Mixed			
Pump Station	N			to be verified - depending on invert elevation

Site No.	102835124			Acceptable BMP Options
Route	Hwy 71 at Soquel Canyon Pkwy			
Member Initials	RC			
Direction	SB			
Parcels	102835124			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	San Bernardino County			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Divert or pump concentrated flow from existing concrete channel - See slope & inverts - Treats only portion of TDA
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?		Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?		Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	N	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	80 ft	Bioretention	15 ft min for bioretention	
How much length available?	240 ft	Bioretention	40 ft min for bioretention	
Total Area available	19200 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Bypass system / weather station
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 50ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		Riparian/Wetlands
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Mixed			
Pump Station	Y			Verify inverts and possible configurations

Site No.	103226113			Acceptable BMP Options
Route	Chino Hills Pkwy at Carbon Canyon Rd			
Member Initials	RC			
Direction	WB			
Parcels	103226113 103226114_18		103258172	
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	San Bernardino County Flood Control District			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Pump concentrated flow from existing concrete channel - Excavation needed
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?		Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?		Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	N	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	60 ft	Bioretention	15 ft min for bioretention	
How much length available?	400 ft	Bioretention	40 ft min for bioretention	
Total Area available	24000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Bypass system / weather station
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Mixed			
Pump Station	Y			

Site No.	103260142			Acceptable BMP Options
Route	Chino Hills Pkwy at Carbon Canyon Rd			
Member Initials	RC			
Direction	WB			
Parcels	103260142			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	San Bernardino County Flood Control District			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Online treatment device with existing SD - Modify course of existing SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?		Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?		Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	60 ft	Bioretention	15 ft min for bioretention	
How much length available?	320 ft	Bioretention	40 ft min for bioretention	
Total Area available	19200 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Bypass system
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Mixed			
Pump Station	N			to be verified - depending on invert elevation

Site No.	103309117			Acceptable BMP Options
Route	Brookwood Ln and Butterfly Ranch Rd			
Member Initials	RC			
Direction	SB			
Parcels	103309117			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	County Service Area 70 Imp Zone CH			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Existing metaswale to be retrofitted / Online structural BMP
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	90 ft	Bioretention	15 ft min for bioretention	
How much length available?	800 ft	Bioretention	40 ft min for bioretention	
Total Area available	72000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		
If IFD is proposed, can dry weathe flows be diverted around?		Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Mixed			
Pump Station	N			

Site No.	104712102			Acceptable BMP Options
Route	E 7th St at Virginia Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	EB			
Parcels	104712101_102_201_3101_5101_6101_8104_8105_8106			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Retrofit of existing 2-stage retarding basin
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	670 ft	Bioretention	15 ft min for bioretention	
How much length available?	2000 ft	Bioretention	40 ft min for bioretention	
Total Area available	1340000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		creation of low-flow channel
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 500ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	104745104			Acceptable BMP Options
Route	I-10W at N Grove Ave			
Member Initials	RC			
Direction	WB			
Parcels	104746209 104745104			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Retrofit of existing retarding basin
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	240 ft	Bioretention	15 ft min for bioretention	
How much length available?	375 ft	Bioretention	40 ft min for bioretention	
Total Area available	90000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		creation of low-flow channel
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Groundwater Level: 450ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	105029126			Acceptable BMP Options
Route	1776 S. San Antonio St.			
Member Initials	RC			
Direction	SB			
Parcels	105029126			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	County of San Bernardino			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		See System Drainage #79 - Drainage Master Plan
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?		Bioretention		
Does ≥ 3ft of hydraulic head exist?		Media Filter		
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	150 ft	Bioretention	15 ft min for bioretention	
How much length available?	200 ft	Bioretention	40 ft min for bioretention	
Total Area available	30000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		
If IFD is proposed, can dry weathe flows be diverted around?	N	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 275ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			Maybe

Site No.	105141139			Acceptable BMP Options
Route	Hwy 83 at Hazeline			
Member Initials	RC			
Direction	NB			
Parcels	105141139	105141107		
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	37 ft	Bioretention	15 ft min for bioretention	
How much length available?	32 ft	Bioretention	40 ft min for bioretention	
Total Area available	1184 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		Access along channel
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Creation of a low-flow channel is possible
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Groundwater Level: 200ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	105164214			Acceptable BMP Options
Route	Riverside Ave at Cypress St			
Member Initials	RC			
Direction	SB			
Parcels	105164214	105150106		
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	70 ft	Bioretention	15 ft min for bioretention	
How much length available?	70 ft	Bioretention	40 ft min for bioretention	
Total Area available	4900 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Creation of a low-flow channel is possible
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 200ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	N	Infiltration Basin	A or B needed for IFD	Soil Group C
Landuse	Mixed			
Pump Station	N			

Site No.	105216106			Acceptable BMP Options
Route	Riverside at Grove			
Member Initials	RC			
Direction	EB			WET BASIN
Parcels	105216106	105216103	105215111	CONSTRUCTED WETLAND
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion				

Requirement	Answer	BMP Criteria No.	Explanation	Comments
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Existing Retarding Basin
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	690 ft	Bioretention	15 ft min for bioretention	
How much length available?	1190 ft	Bioretention	40 ft min for bioretention	
Total Area available	821100 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	Y	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		low-flow channel
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Groundwater Level: 175ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	N	Infiltration Basin	A or B needed for IFD	Soil Groups A&C
Landuse	Mixed			
Pump Station	N			

Site No.	105722118			Acceptable BMP Options
Route	McCarty Rd at Hellman St			INFILTRATION BASIN
Member Initials	RC			
Direction	WB			WET BASIN
Cross Street	Hellman St			CONSTRUCTED WETLAND
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Pump/discharge flow from/to channel - BMP footprint can be located on either bank - Vegetation is present at the site.
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?		Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	120 ft	Bioretention	15 ft min for bioretention	
How much length available?	600 ft	Bioretention	40 ft min for bioretention	
Total Area available	72000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?		Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 25ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		VIREO BELLII PUSILLUS
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Mixed			
Pump Station	Y			

Site No.	106121125			Acceptable BMP Options
Route	Almond St at Via Verde			
Member Initials	RC			
Direction	WB			
Parcels	106116124	106121125		
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert flow from SD (pump necessary)
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	45 ft	Bioretention	15 ft min for bioretention	
How much length available?	200 ft	Bioretention	40 ft min for bioretention	
Total Area available	9000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Mixed			
Pump Station	Y			Depending on configuration

Site No.	106164106			Acceptable BMP Options
Route	Hillside Rd at Beryl St			
Member Initials	RC			
Direction	WB			
Parcels	106164106			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert flow from residential SD (pump necessary) or inline treatment
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	70 ft	Bioretention	15 ft min for bioretention	
How much length available?	260 ft	Bioretention	40 ft min for bioretention	
Total Area available	18200 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Mixed			
Pump Station	Y			Depending on configuration

Site No.	106233221			Acceptable BMP Options
Route	Sapphire St at Alta Loma Dr			
Member Initials	RC			
Direction	SB			
Parcels	106233221	106233224		
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?		Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?		Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	120 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	260 ft	Bioretention	40 ft min for bioretention	
Total Area available	31200 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	Y			Depending on configuration

Site No.	107419132			Acceptable BMP Options
Route	Hillside Rd at Hermosa Ave			
Member Initials	RC			
Direction	WB			
Parcels	107419132			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert flow from SD and convey it back to channel
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	90 ft	Bioretention	15 ft min for bioretention	
How much length available?	200 ft	Bioretention	40 ft min for bioretention	
Total Area available	18000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	N	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		to be verified / path along concrete channel
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			depending on configuration

Site No.	108902101			Acceptable BMP Options
Route	Victoria Pk Ln at Day Creek Blvd			INFILTRATION BASIN
Member Initials	RC			
Direction	WB			
Parcels	108902101			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Retrofit of existing retarding basin
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	1300 ft	Bioretention	15 ft min for bioretention	
How much length available?	2600 ft	Bioretention	40 ft min for bioretention	
Total Area available	3380000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		Riversidian Alluvial Sage Scrub
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	180903114			Acceptable BMP Options
Route	Base Line Rd at Day Creek Rd			INFILTRATION BASIN
Member Initials	RC			
Direction	EB			
Parcels	108903114	108903113		
BMP Type	Regional/Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	San Bernardino County Flood Control			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options: (1) Divert flow from channel to Tr. BMP then back to channel (2) If local SD is treated then footprint is at south end of parcel. 800 feet of pipeline needed
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?		Bioretention		to be verified
Does ≥ 3ft of hydraulic head exist?		Media Filter		to be verified
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	200 ft	Bioretention	15 ft min for bioretention	
How much length available?	230 ft	Bioretention	40 ft min for bioretention	
Total Area available	46000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		Riversidian Alluvial Sage Scrub
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	Y			If regional site

Site No.	116715111			Acceptable BMP Options
Route	Santa Ana River Lateral			
Member Initials	JH			
Direction	EB			
Cross Street	De Berry Street			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	35 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	300 ft	Bioretention	40 ft min for bioretention	
Total Area available	10500 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?		Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	Y	Infiltration Basin		
Is hydrologic soil group A or B?	C	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	Y			Depending on configuration

Site No.	7th Street Park			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	NB			
Cross Street	7th Street			
BMP Type	Subregional/Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 3**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	160 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	540 ft	Bioretention	40 ft min for bioretention	
Total Area available	86400 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	B	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	Almeria_F			Acceptable BMP Options
Route	Baseline Ave at Almeria Ave			
Member Initials	RC			
Direction	WB			
Parcels	Almeria Park - City of Fontana			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Fontana			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert/Pump flow from existing SD (from Almeria Ave back to Baseline Ave) - Inline/Offline with SD - Verify TDA
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	80 ft	Bioretention	15 ft min for bioretention	
How much length available?	135 ft	Bioretention	40 ft min for bioretention	
Total Area available	10800 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Weather station
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 625ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Residential			
Pump Station	N			Not likely

Site No.	Andreson Park			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			
Cross Street	S Lilac Avenue			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	280 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	280 ft	Bioretention	40 ft min for bioretention	
Total Area available	78400 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	Y			Depending on configuration

Site No.	Anne Shirrells Park.			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	WB			
Cross Street	North California Street			
BMP Type	Subregional/Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	250 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	540 ft	Bioretention	40 ft min for bioretention	
Total Area available	135000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	Aquatic_F			Acceptable BMP Options
Route	Lytle Creek Rd at Summit Ave			
Member Initials	RC			
Direction	NB			
Parcels	Aquatic Park - City of Fontana			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Fontana			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert/Pump flow from existing SD (from Lytle Creek Rd) - Offline with SD - Verify TDA
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?		Infiltration Basin Wet Basin Constructed Wetland		tbd
How much width available?	70 ft	Bioretention	15 ft min for bioretention	
How much length available?	140 ft	Bioretention	40 ft min for bioretention	
Total Area available	9800 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Weather station
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		San Bernardino Kangaroo Rat
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Residential			
Pump Station	N			Maybe / Verify SD invert

Site No.	Baseball Field Park			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	WB			
Cross Street	Mountain View Ave			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	230 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	290 ft	Bioretention	40 ft min for bioretention	
Total Area available	66700 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	B	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	Bryn Mawr Veterans Memorial Park			Acceptable BMP Options
Route	Santa Ana River			
Member Initials	JH			
Direction	WB			WET BASIN
Cross Street	Mayberry Street			CONSTRUCTED WETLAND
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 3**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	86 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	120 ft	Bioretention	40 ft min for bioretention	
Total Area available	10320 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	Y	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	B	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	Catawba_F			Acceptable BMP Options
Route	Poplar ave at Jurupa Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	NB			
Parcels	Catawba Park - City of Fontana			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	City of Fontana			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Pump/Divert flow from existing channel to park (EDB). Verify TDA/footprint. Diversion box with leveling
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	260 ft	Bioretention	15 ft min for bioretention	
How much length available?	1610 ft	Bioretention	40 ft min for bioretention	
Total Area available	418600 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		unlikely
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		diversion box or low-flow channel
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 275ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		Sandfly soils
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	Y			Most likely / Verify SD invert

Site No.	Centennial_O			Acceptable BMP Options
Route	S Campus Ave at E Riverside Dr			
Member Initials	RC			
Direction	NB			
Parcels	Centennial Park - City of Ontario			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Ontario			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert neighborhood SD (S Campus) to park. See TDA/Footprint. Diversion box
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	180 ft	Bioretention	15 ft min for bioretention	
How much length available?	240 ft	Bioretention	40 ft min for bioretention	
Total Area available	43200 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		unlikely
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		diversion box
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 200ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		Sandfly soils
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	N	Infiltration Basin	A or B needed for IFD	Soil Groups A&C
Landuse	Residential			
Pump Station	N			Possible / Verify SD invert

Site No.	Central_RC			Acceptable BMP Options
Route	Base Line Rd at Milliken Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	WB			
Parcels	Central Park - City of Rancho Cucamonga			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	City of Rancho Cucamonga			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Create WQ basin and divert channel through basin - Verify TDA
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	670 ft	Bioretention	15 ft min for bioretention	
How much length available?	1300 ft	Bioretention	40 ft min for bioretention	
Total Area available	871000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		low-flow channel
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			Unlikely

Site No.	Church_RC			Acceptable BMP Options
Route	Church St at Hermosa Ave			
Member Initials	RC			
Direction	EB			
Parcels	Church Street Park - City of Rancho Cucamonga			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Rancho Cucamonga			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert/Pump flow from existing SD (from Candlewood St) - Inline/Offline with SD - Verify TDA
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	130 ft	Bioretention	15 ft min for bioretention	
How much length available?	190 ft	Bioretention	40 ft min for bioretention	
Total Area available	24700 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	N	Infiltration Basin		Unlikely if bioretention system
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Residential			
Pump Station	N			Not likely

Site No.	Community_CH			Acceptable BMP Options
Route	Chino Hills Pkwy at Grand Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	SB			
Parcels	Chino Hills Community Park			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	City of Chino Hills			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options: (1) Enlarge creek into basin (2) Pump concentrated flow from creek to EDB
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	330 ft	Bioretention	15 ft min for bioretention	
How much length available?	900 ft	Bioretention	40 ft min for bioretention	
Total Area available	297000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?		Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Residential			
Pump Station	Y			Configuration-related

Site No.	Crossroads_CH			Acceptable BMP Options
Route	Chino Hills Pkwy at Eucalyptus Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	SB			
Parcels	Chino Hills Crossroads Park			
BMP Type	Regional/Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Chino Hills			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Two options: (1) Divert flow from western SD (eucalyptus ave) (2) Divert flow from major SD on Chino Hills Pkwy. Verify drainage area / available footprint
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		See configuration
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		See configuration
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	140 ft	Bioretention	15 ft min for bioretention	
How much length available?	430 ft	Bioretention	40 ft min for bioretention	
Total Area available	60200 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		weather station
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Residential			
Pump Station	N			Unlikely / to be verified

Site No.	CypressTrails_C			Acceptable BMP Options
Route	Schaefer Ave at Cypress Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	EB			
Parcels	Cypress Trails Park - City of Chino			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	City of Chino			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Pump concentrated flow from Cypress Channel or from Rancho del Chino SD (81-1). Dual use basin with riser. After treatment, discharge to channel. Weather station. Verify TDA/Footprint
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	170 ft	Bioretention	15 ft min for bioretention	
How much length available?	420 ft	Bioretention	40 ft min for bioretention	Footprint can be extended.
Total Area available	71400 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		unlikely
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		diversion box / weather-station
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Groundwater Level: 150ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Residential			
Pump Station	Y			Most likely / Verify SD invert

Site No.	DayCreek_RC			Acceptable BMP Options
Route	Day Creek Blvd at Banyan St			
Member Initials	RC			
Direction	NB			
Parcels	Day Creek Park - City of Rancho Cucamonga			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Rancho Cucamonga			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert/Pump flow from existing SD (from Day Creek Blvd) - Offline with SD - Verify TDA
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	70 ft	Bioretention	15 ft min for bioretention	
How much length available?	190 ft	Bioretention	40 ft min for bioretention	
Total Area available	13300 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Weather station
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		Riversidian Alluvial Sage Scrub ; San Bernardino Kangaroo Rat
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Residential			
Pump Station	N			Possibly / Verify SD invert

Site No.	Elmer Digneo Park			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	WB			
Cross Street	Anderson St			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 3**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	150 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	400 ft	Bioretention	40 ft min for bioretention	
Total Area available	60000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		to be verified
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	B	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	English_CH			Acceptable BMP Options
Route	Chino Hills Pkwy at Grand Ave			
Member Initials	RC			
Direction	SB			
Parcels	English Springs Park			CONSTRUCTED WETLAND
BMP Type	Regional/Subregional			
Flood Zone	**Zone 1**			
Owner	City of Chino Hills			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Retrofit of existing pond for WQ.
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	N	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	N	Bioretention		See configuration
Does ≥ 3ft of hydraulic head exist?		Media Filter		See configuration
Does the site have 4H:1V slope or flatter?		Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	160 ft	Bioretention	15 ft min for bioretention	
How much length available?	540 ft	Bioretention	40 ft min for bioretention	
Total Area available	86400 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	Y	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	N	Infiltration Basin		existing pond
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Residential			
Pump Station	N			Unlikely / to be verified

Site No.	Fern_U			Acceptable BMP Options
Route	W 8th St at San Antonio Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	WB			
Parcels	Fern Reservoir Park - City of Upland			
BMP Type	Regional/Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Upland			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Divert concentrated flow from existing SD (W 8th St) to Fern Reservoir Park. Add berm to or lower existing field. Diversion box with weather/rainfall - Verify TDA/footprint
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	100 ft	Bioretention	15 ft min for bioretention	
How much length available?	230 ft	Bioretention	40 ft min for bioretention	
Total Area available	23000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		low-flow channel or diversion box with weather/rainfall station
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 550ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	Y			Possibly / Verify SD invert

Site No.	Ford Park			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	WB			
Cross Street	East Redlands Blvd			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 3**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	215 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	415 ft	Bioretention	40 ft min for bioretention	
Total Area available	89225 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	B	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	George E. Brown Jr. Park			Acceptable BMP Options
Route	Santa Ana River Lateral			
Member Initials	JH			
Direction	SB			
Cross Street	San Bernardino Avenue			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	270 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	480 ft	Bioretention	40 ft min for bioretention	
Total Area available	129600 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	Y/N	Infiltration Basin		Sand Fly
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	HIckory_CH			Acceptable BMP Options
Route	Pipeline Ave at Los Serranos Blvd			
Member Initials	RC			
Direction	EB			
Parcels	Chino Hills Hickory Creek Park			
BMP Type	Regional/Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Chino Hills			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert / Pump concentration flow from creek/SD in Hickory Creek park to OS parcel. Verify TDA / Upstream of Lake Serrano (potential retrofit)
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		If pump used
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		If pump used
Does the site have 4H:1V slope or flatter?	N	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	140 ft	Bioretention	15 ft min for bioretention	
How much length available?	250 ft	Bioretention	40 ft min for bioretention	
Total Area available	35000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		pump configuration / weather station
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Mixed			
Pump Station	Y			Most likely / verify invert of creek

Site No.	Hunters_F			Acceptable BMP Options
Route	Cherry Ave at Hillstone Ave			
Member Initials	RC			
Direction	NB			
Parcels	Hunters Ridge Park - City of Fontana			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Fontana			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert/Pump flow from existing SD (from Cherry Ave) - Offline with SD - Verify TDA
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	N	Infiltration Basin Wet Basin Constructed Wetland		tbd - excavation of lateral slope
How much width available?	65 ft	Bioretention	15 ft min for bioretention	
How much length available?	130 ft	Bioretention	40 ft min for bioretention	
Total Area available	8450 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Weather station
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Residential			
Pump Station	N			Unlikely / Verify SD invert

Site No.	Jennie Davis Park			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			
Cross Street	West Redlands Blvd			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 3**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	50 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	350 ft	Bioretention	40 ft min for bioretention	
Total Area available	17500 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	Kenyon_RC			Acceptable BMP Options
Route	Kenyon Way at Woodruff Pl			
Member Initials	RC			
Direction	SB			
Parcels	Kenyon Park - City of Rancho Cucamonga			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Rancho Cucamonga			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Structural BMP inline with existing residential SD - Verify TDA
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	100 ft	Bioretention	15 ft min for bioretention	
How much length available?	160 ft	Bioretention	40 ft min for bioretention	
Total Area available	16000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		weather station
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Residential			
Pump Station	N			Unlikely

Site No.	Koehler_F			Acceptable BMP Options
Route	Beach Ave at Walnut Ave			
Member Initials	RC			
Direction	NB			
Parcels	Dr Charles Koehler Park - City of Fontana			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Fontana			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert/Pump flow from existing SD (from Beach Ave) - Inline/Offline with SD - Verify TDA
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	120 ft	Bioretention	15 ft min for bioretention	ctual footprint can be enlarged or reshaped to the geometry of the B
How much length available?	320 ft	Bioretention	40 ft min for bioretention	
Total Area available	38400 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Weather station
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 650ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Residential			
Pump Station	N			Not likely

Site No.	Lions_RC			Acceptable BMP Options
Route	Base Line Rd at Lion St			
Member Initials	RC			
Direction	EB			
Parcels	Lions Park - City of Rancho Cucamonga			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Rancho Cucamonga			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert/Pump flows from two existing SDs (on Rancho Rd & Lemonwood Pl) - Offline with both Sd - Verify TDA
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	65 ft	Bioretention	15 ft min for bioretention	
How much length available?	95 ft	Bioretention	40 ft min for bioretention	
Total Area available	6175 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	N	Infiltration Basin		Unlikely if bioretention system
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Residential			
Pump Station	Y			Configuration-related

Site No.	Littlefield-Shultis Memorial Park			Acceptable BMP Options
Route	Santa Ana River Lateral			
Member Initials	JH			
Direction	SB			
Cross Street	Kendall Way			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	330 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	600 ft	Bioretention	40 ft min for bioretention	
Total Area available	198000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	McDermott_F			Acceptable BMP Options
Route	Baseline Ave at S Heritage Cir			INFILTRATION BASIN
Member Initials	RC			
Direction	EB			
Parcels	McDermott Park - City of Fontana			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	City of Fontana			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Divert concentrated flow from existing SD to McDermott Park. Diversion box with weather/rainfall - Verify TDA/footprint - Lower soccer field or Surround with berm
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	250 ft	Bioretention	15 ft min for bioretention	
How much length available?	400 ft	Bioretention	40 ft min for bioretention	
Total Area available	100000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	Can be extended to entire parcel if needed + 1km of pipeline at outlet
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		weather/rainfall station
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 550ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			Possibly / Verify SD invert

Site No.	Meadowbrook Park			Acceptable BMP Options
Route	Santa Ana River Lateral			
Member Initials	JH			
Direction	WB			WET BASIN
Cross Street	W 2nd Street			CONSTRUCTED WETLAND
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	360 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	450 ft	Bioretention	40 ft min for bioretention	
Total Area available	162000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	Y	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	MotorSpeedway_O			Acceptable BMP Options
Route	N Center Ave at Concourse Dr			INFILTRATION BASIN
Member Initials	RC			
Direction	SB			
Parcels	Ontario Motor Speedway Park - City of Ontario			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	City of Ontario			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Lower existing soccer field and/or add surrounding berms. Upstream of existing retarding basin which can be retrofitted. Could treat flow from 2 SDs. Verify TDA/footprint
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	380 ft	Bioretention	15 ft min for bioretention	
How much length available?	420 ft	Bioretention	40 ft min for bioretention	
Total Area available	159600 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		tbd
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		low-flow channel
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 375ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	Nunez Park			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	WB			
Cross Street	West 5th Street			
BMP Type	Subregional/Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	150 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	520 ft	Bioretention	40 ft min for bioretention	
Total Area available	78000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	Oak_F			Acceptable BMP Options
Route	Live Oak Ave at Cherry Ave			
Member Initials	RC			
Direction	WB			
Parcels	Oak Park - City of Fontana			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Fontana			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert concentrated flow from existing SD (Live Oak Ave) to park. Verify TDA/Footprint. Diversion box with weather station
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	165 ft	Bioretention	15 ft min for bioretention	
How much length available?	275 ft	Bioretention	40 ft min for bioretention	
Total Area available	45375 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		unlikely
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		diversion box - weather station
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Groundwater Level: 175ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		Sandfly soils
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			Unlikely / Verify SD invert

Site No.	OakRidge_CH			Acceptable BMP Options
Route	Valle Vista Dr at Oakview Ln			
Member Initials	RC			
Direction	WB			
Parcels	Chino Hills Oak Ridge Park			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Chino Hills			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Inline structural BMP with residential SD.
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		See configuration
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		See configuration
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	225 ft	Bioretention	15 ft min for bioretention	
How much length available?	325 ft	Bioretention	40 ft min for bioretention	
Total Area available	73125 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		weather station
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Residential			
Pump Station	N			Unlikely / to be verified

Site No.	OldTown_RC			Acceptable BMP Options
Route	Baseline Ave at S Heritage Cir			INFILTRATION BASIN
Member Initials	RC			
Direction	EB			
Parcels	Old Town Park - City of Rancho Cucamonga			
BMP Type	Regional/Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Rancho Cucamonga			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Divert concentrated flow from existing SD to Old Town Park. Add berm to or lower baseball field. Diversion box with weather/rainfall - Verify TDA/footprint
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	280 ft	Bioretention	15 ft min for bioretention	
How much length available?	320 ft	Bioretention	40 ft min for bioretention	
Total Area available	89600 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		low-flow channel
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 450ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			Unlikely / Verify SD invert

Site No.	Perris Hill Park			Acceptable BMP Options
Route	Santa Ana River Lateral			
Member Initials	JH			
Direction	WB			
Cross Street	East Highland Ave			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	130 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	550 ft	Bioretention	40 ft min for bioretention	
Total Area available	71500 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	Prado_RP			Acceptable BMP Options
Route	Hwy 71 at Pine Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	NB			
Parcels	Prado Regional Park - City of Chino			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	City of Chino			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Divert flow from creek/channel to offline EDB. Western residential SD alreadydrains to EDB
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	1100 ft	Bioretention	15 ft min for bioretention	
How much length available?	3000 ft	Bioretention	40 ft min for bioretention	
Total Area available	3300000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		unlikely
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		diversion system
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 25ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		Least Bell's Vireo / Sensitive Riparian Wetlands
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Mixed			
Pump Station	Y			Possible / Verify creek invert

Site No.	RalphLewis_RC			Acceptable BMP Options
Route	Church St at Elm Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	WB			
Parcels	Ralph M Lewis Park - City of Rancho Cucamonga			
BMP Type	Regional/Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Rancho Cucamonga			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Lower the field to create an EDB - Inline with multiple SDs - Verify TDA
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	130 ft	Bioretention	15 ft min for bioretention	
How much length available?	220 ft	Bioretention	40 ft min for bioretention	
Total Area available	28600 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		low-flow channel
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		Sandfly soils
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Residential			
Pump Station	N			Unlikely

Site No.	Ranch_O			Acceptable BMP Options
Route	E Clydesdale St at S Arcadian Shores Ave			
Member Initials	RC			
Direction	EB			
Parcels	Ranch Park - City of Ontario			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Ontario			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Inline/Offline with neighborhood SD (E Clydesdale) through ranch park. Verify invert of SD. Underground structural BMP. See TDA/Footprint. Diversion box
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	60 ft	Bioretention	15 ft min for bioretention	
How much length available?	120 ft	Bioretention	40 ft min for bioretention	
Total Area available	7200 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		unlikely
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		diversion box
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 175ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		Sandfly soils outside of BMP footprint
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	N	Infiltration Basin	A or B needed for IFD	Soil Group C
Landuse	Residential			
Pump Station	N			Possible / Verify SD invert

Site No.	RedHill_RC			Acceptable BMP Options
Route	Vineyard Ave at Candlewood St			
Member Initials	RC			
Direction	SB			
Parcels	Red Hill Community Park - City of Rancho Cucamonga			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Rancho Cucamonga			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert/Pump flow from existing SD (through Red Hill Community Park) - Inline/Offline with SD - Verify TDA & SD + Role of existing lake
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	100 ft	Bioretention	15 ft min for bioretention	
How much length available?	180 ft	Bioretention	40 ft min for bioretention	
Total Area available	18000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Weather station
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Mixed			
Pump Station	N			Possibly / Verify SD invert

Site No.	Redlands Country Club			Acceptable BMP Options
Route	Santa Ana River Lateral			
Member Initials	JH			
Direction	WB			
Cross Street	E Mariposa Drive			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 3**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	280 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	700 ft	Bioretention	40 ft min for bioretention	
Total Area available	196000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	B	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	Redlands Sports Park			Acceptable BMP Options
Route	Santa Ana River Lateral			
Member Initials	JH			
Direction	NB			
Cross Street	East San Bernardino Ave			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 3**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	50 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	350 ft	Bioretention	40 ft min for bioretention	
Total Area available	17500 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	Rincon_CH			Acceptable BMP Options
Route	Soquel Canyon pkwy at Pinehurst Dr			
Member Initials	RC			
Direction	NB			
Parcels	Chino Hills Rincon Park			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Chino Hills			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Underground inline structural BMP with residential SD - must be underground to preserve benefits of the recreational park. See footprint needed with TDA
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?		Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?		Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	180 ft	Bioretention	15 ft min for bioretention	
How much length available?	220 ft	Bioretention	40 ft min for bioretention	
Total Area available	39600 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		bypass system
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	N	Infiltration Basin	A or B needed for IFD	Soil Groups B&C
Landuse	Mixed			
Pump Station	N			Verify local configuration

Site No.	SanAntonio_O			Acceptable BMP Options
Route	N San Antonio Ave at W Flora St			INFILTRATION BASIN
Member Initials	RC			
Direction	NB			
Parcels	San Antonio Park - City of Ontario			
BMP Type	Regional/Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Ontario			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Divert/Pump flow from existing SD (on San Antonio) to park
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	200 ft	Bioretention	15 ft min for bioretention	
How much length available?	260 ft	Bioretention	40 ft min for bioretention	
Total Area available	52000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		pump with weather station'
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 400ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Residential			
Pump Station	Y			Configuration-related

Site No.	SanSevaine_F			Acceptable BMP Options
Route	Bridlepath Dr at Cherry Ave			
Member Initials	RC			
Direction	NB			
Parcels	San Sevaine Park - City of Fontana			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Fontana			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert/Pump flow from existing SD (from Bridlepath Dr) - Offline with SD - Verify TDA
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	75 ft	Bioretention	15 ft min for bioretention	
How much length available?	100 ft	Bioretention	40 ft min for bioretention	
Total Area available	7500 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Weather station
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Residential			
Pump Station	N			Unlikely / Verify SD invert

Site No.	Saratoga_M			Acceptable BMP Options
Route	Kingsley St at Vernon Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	EB			
Parcels	Saratoga Park - City of Montclair			
BMP Type	Regional/Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Montclair			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Lower existing soccer field and/or add surrounding berms. Divert existing SD to park. Verify TDA/drainage/footprint
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	250 ft	Bioretention	15 ft min for bioretention	
How much length available?	340 ft	Bioretention	40 ft min for bioretention	
Total Area available	85000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		tbd
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		diversion box - weather station
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 375ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	Y			Possibly / Verify SD invert

Site No.	SierraVista_U			Acceptable BMP Options
Route	Day Creek Blvd at Banyan St			
Member Initials	RC			
Direction	NB			
Parcels	Sierra Vista Park - City of Upland			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Upland			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert/Pump flow from existing SD (from E 15th St) - Offline with SD Verify TDA & SD
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	70 ft	Bioretention	15 ft min for bioretention	
How much length available?	190 ft	Bioretention	40 ft min for bioretention	
Total Area available	13300 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		Weather station
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		Riversidian Alluvial Sage Scrub ; San Bernardino Kangaroo Rat
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Residential			
Pump Station	N			Possibly / Verify SD invert

Site No.	Southridge_F			Acceptable BMP Options
Route	Live Oak Ave at Cherry Ave			
Member Initials	RC			
Direction	EB			
Parcels	Southridge Park - City of Fontana			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Fontana			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert concentrated flow from existing SD (Live Oak Ave) to park. Verify TDA/Footprint. Diversion box with weather station
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	110 ft	Bioretention	15 ft min for bioretention	
How much length available?	340 ft	Bioretention	40 ft min for bioretention	
Total Area available	37400 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		unlikely
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		diversion box - weather station
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 200ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Residential			
Pump Station	N			Unlikely / Verify SD invert

Site No.	Speicher Park			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	WB			
Cross Street	Arden Ave			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	120 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	570 ft	Bioretention	40 ft min for bioretention	
Total Area available	68400 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A/B	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	Y			Depending on configuration

Site No.	Spruce_RC			Acceptable BMP Options
Route	Base Line Rd at Milliken Ave			INFILTRATION BASIN
Member Initials	RC			
Direction	WB			
Parcels	Spruce Avenue Park - City of Rancho Cucamonga			
BMP Type	Regional/Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Rancho Cucamonga			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Lower the baseball field to create an EDB - Inline with SD - Verify TDA
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	170 ft	Bioretention	15 ft min for bioretention	
How much length available?	300 ft	Bioretention	40 ft min for bioretention	
Total Area available	51000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		low-flow channel
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Residential			
Pump Station	N			Unlikely

Site No.	Strickling_CH			Acceptable BMP Options
Route	Valle Vista Dr at Velour Dr			
Member Initials	RC			
Direction	EB			
Parcels	Chino Hills Strickling Park			
BMP Type	Regional/Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Chino Hills			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert / Pump concentration flow from creek/SD in Strickling park to OS parcels
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		If pump used
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		If pump used
Does the site have 4H:1V slope or flatter?	N	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	100 ft	Bioretention	15 ft min for bioretention	
How much length available?	270 ft	Bioretention	40 ft min for bioretention	
Total Area available	27000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		pump configuration / weather station
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Mixed			
Pump Station	Y			Most likely

Site No.	SummitHeights_F			Acceptable BMP Options
Route	Grays Peak Ave at Antelope Ln			
Member Initials	RC			
Direction	NB			
Parcels	Summit Heights Park - City of Fontana			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Fontana			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert/Pump flow from existing SD (from Crazy Horse Ave) - Inline/Offline with SD - Verify TDA
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	160 ft	Bioretention	15 ft min for bioretention	
How much length available?	240 ft	Bioretention	40 ft min for bioretention	
Total Area available	38400 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	N	Infiltration Basin		Unlikely if bioretention system
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Unknown
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		Riversidian Alluvial Sage Scrub
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Residential			
Pump Station	N			Not likely

Site No.	Sunset_M			Acceptable BMP Options
Route	Orchard St at Ramona Ave			
Member Initials	RC			
Direction	EB			
Parcels	Sunset Park - City of Montclair			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Montclair			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert concentrated runoff from residential SD (Orchard St). Potentia MF or bioretention system. Verify TDA/footprint
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	70 ft	Bioretention	15 ft min for bioretention	
How much length available?	120 ft	Bioretention	40 ft min for bioretention	Footprint can be extended.
Total Area available	8400 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		unlikely
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		diversion box
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 375ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Residential			
Pump Station	N			Possible / Verify SD invert

Site No.	Sycamore_F			Acceptable BMP Options
Route	Mayberry St at Underwood Dr			
Member Initials	RC			
Direction	NB			
Parcels	Sycamore Hill Park - City of Fontana			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Fontana			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Divert neighborhood SD to park. See TDA.
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	150 ft	Bioretention	15 ft min for bioretention	
How much length available?	160 ft	Bioretention	40 ft min for bioretention	
Total Area available	24000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		unlikely
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		diversion box
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		Groundwater Level: 300ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	Y	Infiltration Basin		Sandfly soils
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Residential			
Pump Station	N			Possible / Verify SD invert

Site No.	Sylvan Park			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	WB			
Cross Street	North University Street			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 3**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	260 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	600 ft	Bioretention	40 ft min for bioretention	
Total Area available	156000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		to be verified
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	B	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	Verdemont Park.			Acceptable BMP Options
Route	Lytle Creek Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	SB			
Cross Street	Magnolia Avenue			
BMP Type	Regional / Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 2**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	200 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	500 ft	Bioretention	40 ft min for bioretention	
Total Area available	100000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	A	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	Villa_C			Acceptable BMP Options
Route	3rd St at Shaefer Ave			
Member Initials	RC			
Direction	NB			
Parcels	Villa Park - City of Chino			
BMP Type	Subregional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			MEDIA FILTER
Owner	City of Chino			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	N	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		Storm drain 48-6 (3rd St). Diversion box to offline structural BMP.
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	90 ft	Bioretention	15 ft min for bioretention	
How much length available?	150 ft	Bioretention	40 ft min for bioretention	Footprint can be extended.
Total Area available	13500 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		unlikely
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		diversion box / weather-station
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 125ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group B
Landuse	Residential			
Pump Station	N			Possible / Verify SD invert

Site No.	Wilderness_M			Acceptable BMP Options
Route	Helena Ave at San Bernardino St			INFILTRATION BASIN
Member Initials	RC			
Direction	SB			
Parcels	Wilderness Park - City of Montclair			
BMP Type	Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 1**			
Owner	City of Montclair			
Conclusion				
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Retrofit existing retarding basin with perforated riser & WQ features. Verify TDA
Subregional BMP being Considered?	N	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		
How much width available?	500 ft	Bioretention	15 ft min for bioretention	
How much length available?	500 ft	Bioretention	40 ft min for bioretention	
Total Area available	250000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		tbd
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		Groundwater Level: 475ft
Are there fill materials?		Infiltration Basin		
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	Y	Infiltration Basin	A or B needed for IFD	Soil Group A
Landuse	Mixed			
Pump Station	N			

Site No.	Yuaipa Valley Golf Club			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	WB			
Cross Street	Oak Glen Road			
BMP Type	Subregional/Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 3**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	240 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	700 ft	Bioretention	40 ft min for bioretention	
Total Area available	168000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?	Y	EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	B	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration

Site No.	Yucaipa Equestrian Center			Acceptable BMP Options
Route	Santa Ana River Lateral			INFILTRATION BASIN
Member Initials	JH			
Direction	WB			
Cross Street	California Street			
BMP Type	Subregional/Regional			EXTENDED DETENTION BASIN
Flood Zone	**Zone 3**			MEDIA FILTER
Owner	San Bernardino County Flood Control			
Conclusion				BIORETENTION
Requirement	**Answer**	**BMP Criteria No.**	**Explanation**	**Comments**
Regional BMP Being Considered?	Y	Infiltration Basin Wet Basin/Constructed Wetland EDB Sub Surface Flow Wetland		Two options are available: (1) divert/pump flow from channel (2) treat runoff from residential SD
Subregional BMP being Considered?	Y	Wet Basin/Constructed Wetland EDB Media Filter Bioretention		
Does enough head exist that emergency riser/spillway can tie into a downstream drainage facility?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Does ≥ 2ft of hydraulic head exist?	Y	Bioretention		tbd
Does ≥ 3ft of hydraulic head exist?	Y	Media Filter		tbd
Does the site have 4H:1V slope or flatter?	Y	Infiltration Basin Wet Basin Constructed Wetland		to be verified
How much width available?	150 ft	Bioretention	15 ft min for bioretention	site-specific
How much length available?	780 ft	Bioretention	40 ft min for bioretention	
Total Area available	117000 sf	Media Filter Wet Basin Constructed Wetland	minimum 1000 sf needed for media filter, wet basin, constructed wetland	
Is BMP footprint at least 100 ft from bridges and wells, and at least 20 ft from buildings, slopes or pavement?	Y	Infiltration Basin		
Is site accessible for maintenance ?	Y	Infiltration Basin Wet Basin EDB Media Filter		
Is there a permanent Source of Water?	N	Wet Basin Constructed Wetland		to be verified
If IFD is proposed, can dry weathe flows be diverted around?	Y	Infiltration Basin		
Is GW more than 10 ft Below BMP Invert?		EDB Media Filter Wet Basin Bioretention		tbd
Are there fill materials?	N	Infiltration Basin		tbd
Are there known environmental issues?	N	Infiltration Basin		
Are restrictive soil layers present?	N	Infiltration Basin		
Is hydrologic soil group A or B?	B	Infiltration Basin	A or B needed for IFD	
Landuse	Mixed			
Pump Station	N			Depending on configuration