

San Bernardino County Storm Water GIS Tools



Jim McPherson
David Jacobus



How We Started

- Evaluation of Retrofit Sites for Storm Water Quality

BMP Information	
Site ID	025408111
Co-Permittee	City of Colton
TDA (ac)	1,280.1
BMP Footprint (ac)	4.7
Soil Type	A
Feasibility of Infiltration?	Yes
BMP Type	Infiltration Basin

LID Offset	
DCV (ac-ft)	146.9
% of TDA Treated	3.5%
Max Offset Impervious Area (ac)	44.7

Harvest/Use	
Feasible?	Yes
Facility to be Irrigated	Hermosa Cemetery
BMP Depth (ft)	5
Harvest Demand (ac-ft/day)	10.7
Area Available of Irrigation (ac)	1,067.8

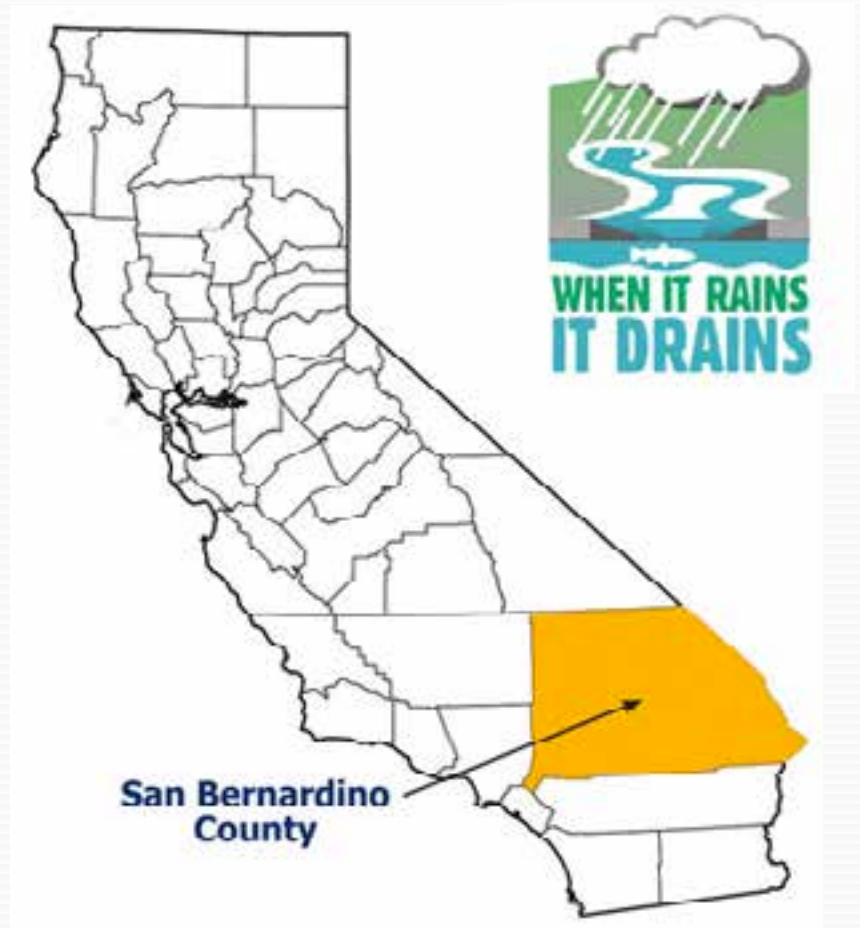
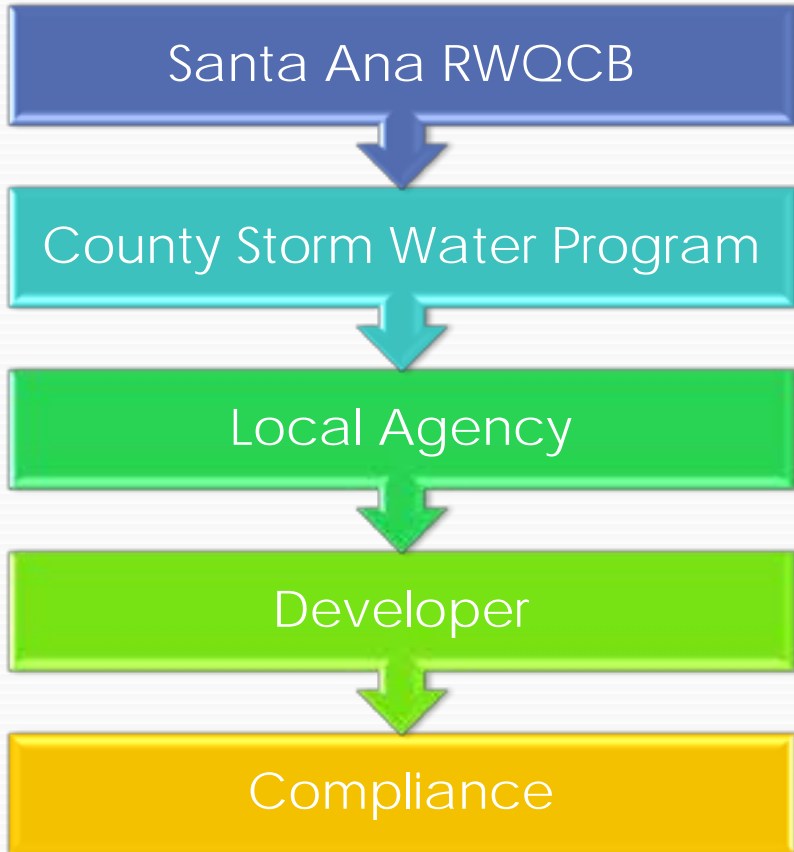
TMDLs		
TMDL	Middle SAR Bacterial Indicator for dry-weather	Middle SAR Bacterial Indicator for wet-weather
Downstream MS	Santa Ana River at MWD Crossing	Santa Ana River at MWD Crossing
Total Dry-weather Flow (gal/day)	1.28E+05	n/a
Influent E. Coll (cfu/100mL)	600	n/a
Expected Effluent E. Coll (cfu/100mL)	0	n/a
Annual load reduction E. Coll (cfu/yr)	6.85E+12	n/a
Influent Fecal Coliform (MPN/100mL)	n/a	3.94E+04
Expected Effluent Fecal Coliform (MPN/100 mL)	n/a	0.00E+00
Annual load reduction Fecal Coliform (MPN)	n/a	6.22E+13

Hydromodification*	
Existing Imperviousness	65.3%
Max Additional Imp Offset (%)	2.9%
Impervious Surface Area Offset (ac)	37.4

*Based on volumetric analysis only; mitigation of peak flow and duration will be address by the design of BMP outlet structure.



Santa Ana Region MS4 Permit



Stakeholders



- § Santa Ana RWQCB
- § Counties & Regional Agencies
- § Local Agencies
- § Water Masters
- § Water Purveyors
- § Educational Institutions
- § Private Development
- § Environmental Community
- § Construction Industry
- § Product Manufacturing
- § Technical Professionals
- § Planning Professionals
- § Legal Professionals



Data Collection

CITIES	Storm Drain	Drainage Area Boundary	Parcels	County/District Owned Parcels	Existing Land Use	General Plan	Vacant Lands	Specific Plan	BMPS	Catch Basins	Groundwater Basins/Aquifers	Plumes	Depth to GW Contours	SW Recharge Areas	Slopes	Soils	Flow Data	Rainfall	Stream Gauge Stations	Streams/Channels	DEM 10 mtr or better	Habitat Restoration	Environmental	Sensitive Species/Habitat Areas	As-Builts (provided by RCFCWCD)	Local Drainage Studies	Storm Drain Master Plans	TMDL/303d Listed Waters	FEMA	Control Release Points (Adequate Sumps)	Known or Preferred Recharge Points
Adelanto																								X							
Barstow																															
Big Bear																															
Chino	X	X	X	X						X	X		X	X	X					X				X	X	X					
County of San Bernardino	X	X	X	X	X	X	X		X											X		X	X	X	X	X	X				
Chino	X	X				X	X													X											
Chino Hills																										X					
Colton																								X		X					
Fontana	X										X								X	X											
Grand Terrace					X	X		X																X							
Hesperia	X	X	X		X	X		X															X		X						
Highland	X			X		X	X													X											
Loma Linda																															
Montclair	X		X		X																										
Needles																															
Ontario	X									X														X							
Rancho Cucamonga	X									X	X													X							
Redlands																X		X													

More Data Collection

County of San Bernardino Regional Geodatabase

County of San Bernardino Regional Geodatabase

Table of Contents

San Bernardino County Storage Data Dictionary
April 6, 2012

Table of Contents

San Bernardino County Storage Data Dictionary

Layer Name	Storage Type	Projection	Coordinate System	Units	SRID	Geometry Type	Dimensions	SRID	Geometry Type	Dimensions
...



- [Home](#)
- [Find Facility](#)
- [Biological Visits](#)
- [Emergency Request](#)
- [Maintenance Request](#)
- [Report ▶](#)

Home Page

Welcome

Click on the Map to go directly to Interactive Mapping



Database Integration

CITY OF SAN BERNARDINO **Facility Tracking**
Thursday, June 20, 2014 2:37 PM

Home
Find Facility
Biological Waiver
Emergency Request
Maintenance Request
Report

General Information

General Info | Site Info | Maintenance Request | Emergency Request

System Number ID	Facility Name	System Location
5-101-1A-1	San Antonio Channel (Baby Village Channel)	4000 San Antonio Dam (NDC 400 495)

APNs: 020508110, 020508112, 020508113, 020508130, 020508131, 020508132, 020508133, 020508134, 020508135, 020508140

Township/Range & Section (NAD83): T11N00E01 Section 11, T11N00E01 Section 14

7.5' Quad: MOUNT BALDY

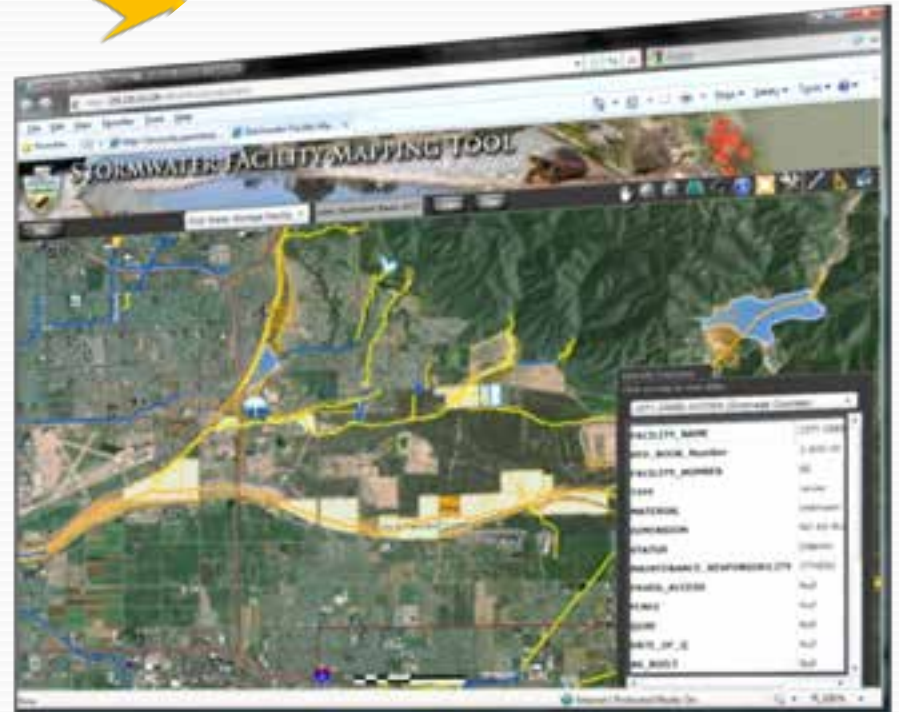
Thomas Guide Page: 511

California State Plane Zone 5 XY Coordinates:
Ene 1: (9852145.9, 1882372.0)
Ene Point (9852123.3, 1882858.9)
Ene 2: (9852145.9, 1882372.0)

Coordinates: Northing Easting 2781045.59243021, 4371010.039521483
U.T. Long Central 34 109497026, -117.875481719
U.T. Long (Radians) 269498

Maintenance Reach:
Name of Stream or LAR: Tributary to:

Facility Type:



Web Mapping Tool Overview



Map Layers

The screenshot displays the "STORMWATER FACILITY MAPPING TOOL" interface. The main map area shows a satellite view of a city with overlaid stormwater data. A legend on the left side, highlighted with a red border, lists the following layers:

- Stormwater Data
 - Drainage Facilities
 - EHM
 - Santa Ana River
 - Non-EHM (low)
 - Non-EHM (medium)
 - Non-EHM (high)
 - Non-EHM (default-high)
 - 2006 - 303d/TMDL
 - Water Storage Facility
 - Interim
 - Ultimate
 - Other
 - Drainage Area Boundaries
 - HCOC Exempt Areas
 - City Storm Drains
 - Ground Water Basins
 - Ground Water Contours
 - Septic

The map shows a network of blue lines representing drainage facilities, with a prominent yellow line for the Santa Ana River. Major highways like I-15, I-5, and I-10 are visible. The interface includes a search bar at the top with "Choose search item from list" and "Enter Value" fields, and a toolbar with navigation icons. The bottom left corner shows a scale bar for 3 miles and the RBF logo.

Metadata & Search Tools

The screenshot displays the 'STORMWATER FACILITY MAPPING TOOL' interface. At the top, there is a search bar with a dropdown menu labeled 'Choose search item from list' and an input field labeled 'Enter Value'. Below the search bar, a 'Metadata' button is highlighted with a red box. The left sidebar contains a list of data layers, including 'Stormwater Data', '2006 - 303d/TMDL', 'Water Storage Facility', 'Drainage Area Boundaries', 'HCOE Exempt Areas', 'City Storm Drains', and 'Ground Water Basins'. The main map area shows a satellite view with overlaid stormwater features in various colors (blue, yellow, red). A pop-up window on the right provides metadata for an 'Aquifer' feature class, including a table with 'Description', 'Spatial', and 'Attributes' columns, and a small map of the feature class.

STORMWATER FACILITY MAPPING TOOL

TOC Choose search item from list Enter Value Locate Clear

Clear All Metadata

Stormwater Data

- Drainage Facilities Metadata
 - EHM
 - Santa Ana River
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 - Non-EHM (medium)
 - Non-EHM (high)
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- Drainage Area Boundaries Metadata
- HCOE Exempt Areas Metadata
- City Storm Drains Metadata
- Ground Water Basins Metadata

Aquifer
RBF Feature Class

Description	Spatial	Attributes

Keywords
#Name: Aquifer, Groundwater, Hydrogeology, Geohydrology
#State: California, San Bernardino County

Description
Abstract

From the U.S. Geological Survey: Principal Aquifers in San Bernardino County
From the U.S. Geological Survey: Principal Aquifers in San Bernardino County

3 Miles

RBF GIS

Pencil Tool

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WQMP Project Report

County of San Bernardino Stormwater Program
 Santa Ana River Watershed Geodatabase
 Thursday, June 26, 2014

Note: The information provided in this report and on the Stormwater Geodatabase for the County of San Bernardino Stormwater Program is intended to provide basic guidance in the preparation of the applicant's Water Quality Management Plan (WQMP) and should not be relied upon without independent verification.

Project Site Parcel Number(s):	022802141, 022810140, 022802141, 022802140
Project Site Acreage:	140.944
HCOC Exempt Area:	Yes. Verify that the project is completely within the HCOC exemption area.
Closest Receiving Waters:	System Number - 312 Facility Name - Highland Channel Owner - SBCFCD
Closest channel segment's susceptibility to Hydromodification:	EHM
Highest downstream hydromodification susceptibility:	EHM
Is this drainage segment subject to TMDLs?	No
Are there downstream drainage segments subject to TMDLs?	No
Is this drainage segment a 303d listed stream?	No
Are there 303d listed streams downstream?	No
Are there unlined downstream waterbodies?	No
Project Site Onsite Soil Group(s):	A, B
Environmentally Sensitive Areas within 200':	Hesperidian Alluvial Sage Scrub
Groundwater Depth (FT):	611
Parcels with potential septic tanks within 1000':	No
Known Groundwater Contamination Plumes within 1000':	No
Studies and Reports Related to Project Site:	Chino Basin Recharge Master Plan Chino Basin Water Master 32nd Annual Report San Servino Channel Bavaria Street - San Servino Channel Summary Report Master Storm Drainage Plan Study

Reports

STORMWATER FACILITY MAPPING TOOL

TOC Choose search item from list Enter Value Locate Clear

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1 Miles

USGS
United States Geological Survey

In cooperation with the
San Bernardino Valley Municipal Water District

Hydrology, Description of Computer Models, and
Evaluation of Selected Water-Management Alternatives
in the San Bernardino Area, California

U.S. Geological Survey Open-File Report 2005-1170
Posting release in USGS Professional Paper 1714

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

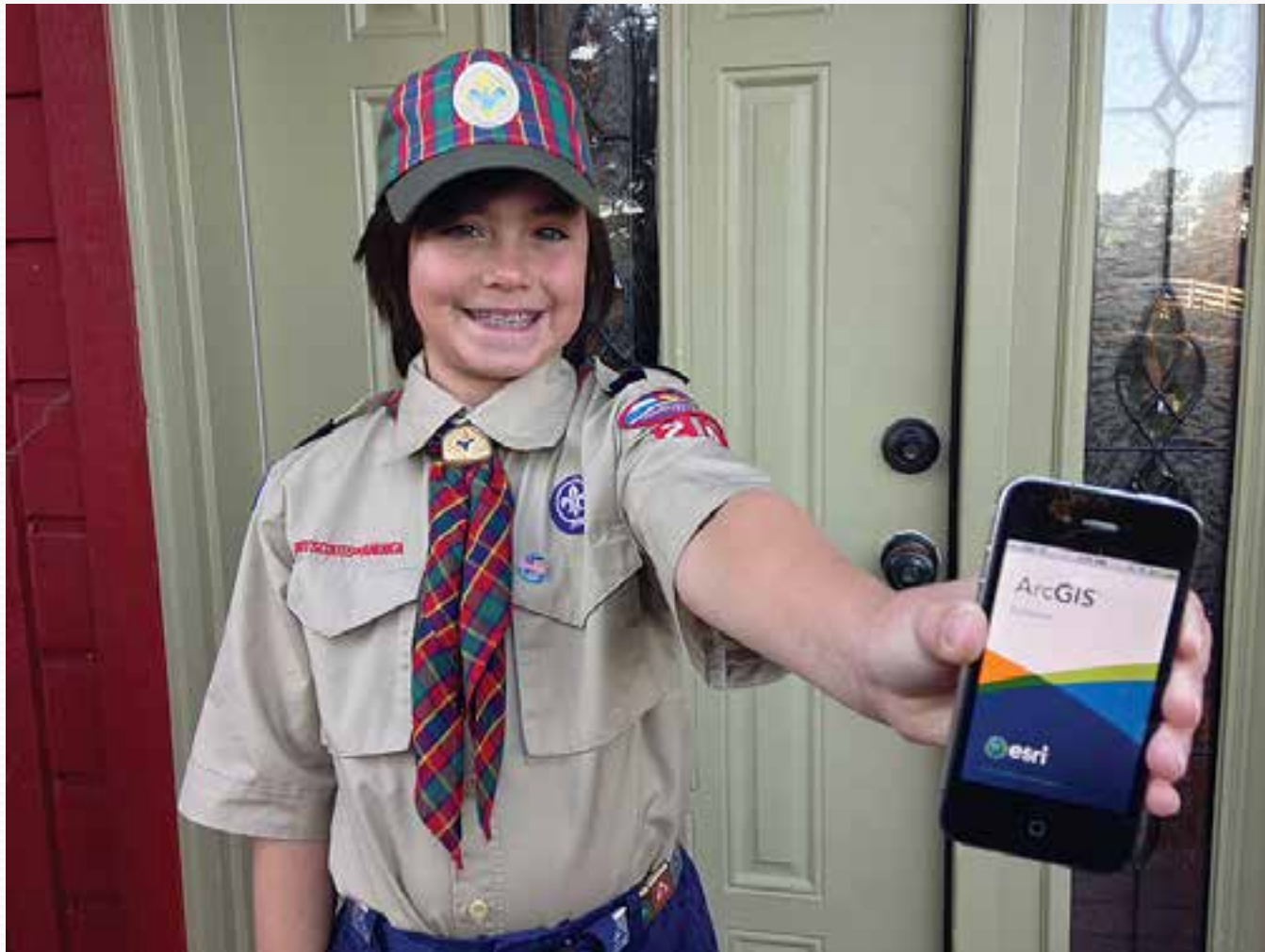
Reports

Report Name:

- CSDP #6 Existing Facilities and Capacities
- CSDP No. 6 Volume II
- CSDP No. 6 Deficiency Analysis
- CSDP No. 6 Deficiency Analysis
- CSDP No. 6 Existing Facilities

RBF GIS

Database Integration



Regional Geodatabase Mapping Tool



Contact

Jim McPherson
jmcpherson@mbakerintl.com
(949) 472-3505

@Dave_Jacobus
djacobus@mbakerintl.com
(949) 855-5786



Questions?

