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October 12, 2017

Spencer Joplin, Grant Manager  
State Water Resources Control Board  
Division of Financial Assistance  
1001 I Street, 17th Floor  
Sacramento, CA 95814  
Submitted via post and electronically via: [Spencer.Joplin@waterboards.ca.gov](mailto:Spencer.Joplin@waterboards.ca.gov)

Dear Mr. Joplin:

Enclosed is Item 4.1 Annotated List of Data and Reports and GIS database for the Stanislaus Multi-Agency Regional Storm Water Resource Plan (SWRP). This document includes a list of existing data appropriate to the development of the SWRP, including related plans, permits, and storm water information. Relevance of each data source to plan preparation is noted. A database of geographic information system (GIS) files is also being submitted on the included USB flash drive; the contents of the geodatabase are summarized in the data collection document.

Please contact me or Hawkeye Sheene with Woodard and Curran at (415) 321-3427 or email ([hsheene@woodardcurran.com](mailto:hsheene@woodardcurran.com)) if you have any questions.

Thank you,

Frederic Clark

Deputy Director, Stanislaus County Public Works

Table 1. Documents Collected

Title	Year Published	Relevance to SWRP
East Stanislaus Integrated Regional Water Management Plan	2013	Water quality Compliance, Organization, Coordination, Collaboration, Identification and Prioritization of Projects, Education, Outreach, Public Participation
Westside San Joaquin Integrated Regional Water Management Plan	2014	Water quality Compliance, Organization, Coordination, Collaboration, Identification and Prioritization of Projects, Education, Outreach, Public Participation
Mid San Joaquin Regional Flood Management Program	2014	Watershed Identification, Identification and Prioritization of Projects
Stanislaus County Post-Construction Standards Plan	2015	Watershed Identification
Oakdale Stormwater Master Plan*	2015	Watershed Identification, Quantitative Methods, Identification and Prioritization of Projects
Turlock Groundwater Basin Groundwater Management Plan	2008	Watershed Identification, Quantitative Methods
Eastside Water District – Geologic, Hydrologic, and Hydrogeologic Characterizations for Potential Managed Aquifer Recharge of Diffused Stormwater*	2014	Watershed Identification, Identification and Prioritization of Projects, Water Quality Compliance
2011 Revised Guidance Manual for Development Stormwater Quality Control Measures (City of Modesto Stormwater Management Program)	2011	Identification and Prioritization of Projects, Water Quality Compliance
Empire Community Storm Drainage Report Low Impact Development & Greening Study*	2014	Watershed Identification, Project Prioritization
Central California ID Water Management Plan	2014	Watershed Identification, Coordination, Collaboration, Quantitative Methods
Modesto ID AWMP	2015	Watershed Identification, Coordination, Collaboration, Quantitative Methods
Oakdale ID AWMP	2016	Watershed Identification, Coordination, Collaboration, Quantitative Methods
Patterson ID Water Management Plan/AWMP	2016	Watershed Identification, Coordination, Collaboration, Quantitative Methods
Turlock ID AWMP	2015	Watershed Identification, Coordination, Collaboration, Quantitative Methods
West Stanislaus ID Water Management Plan	2014	Watershed Identification, Coordination, Collaboration, Quantitative Methods

Title	Year Published	Relevance to SWRP
State and Federally Listed Endangered & Threatened Animals of California	2017	Watershed Identification
Merced River Alliance Project Biological Monitoring and Assessment	2008	Watershed Identification
Hughson Climate Action Plan	2013	Identification and Prioritization of Projects
California Adaptation Planning Guide: Planning for Adaptive Communities	2012	Identification and Prioritization of Projects
AB 32 Scoping Plan, First Update	2014	Identification and Prioritization of Projects
California Climate Science and Data for Water Resources Management	2015	Identification and Prioritization of Projects
Climate Ready Water Utilities Adaptation Strategies Guide for Water Utilities	2015	Identification and Prioritization of Projects
California Department of Finance population projections	2017	Watershed Identification
Safeguarding California: Reducing Climate Risk	2014	Identification and Prioritization of Projects
Stanislaus County Agricultural Report	2015	Watershed Identification
2016 Workplan: National Water Program Response to Climate Change	2016	Identification and Prioritization of Projects
National Water Program 2012 Strategy: Response to Climate Change	2012	Identification and Prioritization of Projects
Indicators of Climate Change in California	2013	Identification and Prioritization of Projects
Progress on Incorporating Climate Change into Management of California's Water Resources	2006	Identification and Prioritization of Projects
Stanislaus County Disadvantaged Unincorporated Communities Report	2015	Education, Outreach, Public Participation
Flood Insurance Study: San Joaquin County, California and Incorporated Areas (Vol 1 of 4)	2009	Watershed Identification, Quantitative Methods, Identification and Prioritization of Projects
Flood Insurance Study: Stanislaus County, California and Incorporated Areas	2008	Watershed Identification, Quantitative Methods, Identification and Prioritization of Projects
Stanislaus County General Plan	2016	Identification and Prioritization of Projects
Stanislaus County General Plan Update EIR	2016	Watershed Identification, Water Quality Compliance
City of Turlock General Plan	2012	Identification and Prioritization of Projects

*Stanislaus Multi-Agency Storm Water Resource Plan  
Grant Agreement No. D1612618*

*Task 4.1 Annotated List of Data and Reports*

Title	Year Published	Relevance to SWRP
City of Hughson General Plan	2005	Identification and Prioritization of Projects
City of Modesto General Plan	2008	Identification and Prioritization of Projects
Integrated Regional Groundwater Management Plan for the Modesto Subbasin	2005	Watershed Identification, Water Quality Compliance, Organization, Coordination, Collaboration, Identification and Prioritization of Projects, Education, Outreach, and Public Participation
Groundwater Bulletin 118, San Joaquin Valley Groundwater Basin, Turlock Subbasin	2006	Watershed Identification, Water Quality Compliance, Quantitative Methods
Turlock Groundwater Basin Groundwater Management Plan	2008	Watershed Identification, Water Quality Compliance, Quantitative Methods
Hydrogeological Characterization of the Eastern Turlock Subbasin	2016	Watershed Identification, Water Quality Compliance, Quantitative Methods
Hughson Wastewater Treatment Plant EIR	2007	Water Quality Compliance, Watershed Identification
City of Hughson Storm Drainage System Master Plan	2007	Watershed Identification, Water Quality Compliance, Identification and Prioritization of Projects, Quantitative Methods
City of Hughson Water System Master Plan	2007	Watershed Identification, Water Quality Compliance, Identification and Prioritization of Projects, Quantitative Methods
City of Hughson Sewer System Master Plan	2007	Watershed Identification, Water Quality Compliance, Identification and Prioritization of Projects, Quantitative Methods
City of Hughson Wastewater Treatment Plant Master Plan	2007	Watershed Identification, Water Quality Compliance, Identification and Prioritization of Projects, Quantitative Methods
City of Hughson Storm Water Management Program Report of Waste Discharge	2004	Watershed Identification, Water Quality Compliance
City of Modesto Water System Engineer's Report	2010	Watershed Identification, Quantitative Methods
City of Modesto Water System Engineer's Report PEIR	2009	Watershed Identification, Water Quality Compliance
City of Modesto Comprehensive Annual Financial Report	2011	Coordination
City of Modesto Wastewater Collection System Master Plan	2007	Watershed Identification, Water Quality Compliance, Identification and Prioritization of Projects, Quantitative Methods
City of Modesto 2008 Storm Drainage Master Plan	2008	Watershed Identification, Water Quality Compliance, Identification and Prioritization of Projects, Quantitative Methods
City of Modesto Wastewater Treatment Master Plan Supplement	2008	Watershed Identification, Water Quality Compliance, Identification and Prioritization of Projects, Quantitative Methods

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City of Modesto Stormwater Management Plan	2009	Watershed Identification
City of Modesto Wastewater Master Plan Update Draft EIR	2006	Watershed Identification, Water Quality Compliance
Municipal Service Reviews (all Stanislaus County)	2012	Watershed Identification
Bureau of Indian Affairs Tribal Leaders Directory	2012	Education, Outreach, and Public Participation
Bureau of Indian Affairs Tribes Served – Pacific Region	2013	Education, Outreach, and Public Participation
North Valley Regional Recycled Water Draft EIR	2015	Watershed Identification, Identification and Prioritization of Projects, Water Quality Compliance
North Valley Regional Recycled Water Feasibility Study	2013	Watershed Identification, Identification and Prioritization of Projects, Water Quality Compliance
Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (4 <sup>th</sup> Edition)	1998	Water Quality Compliance
San Joaquin River Management Plan	1995	Watershed Identification
City of Ceres 2015 Urban Water Management Plan	2016	Watershed Identification, Organization, Coordination, Collaboration, Quantitative Methods
City of Modesto 2015 Urban Water Management Plan	2016	Watershed Identification, Organization, Coordination, Collaboration, Quantitative Methods
City of Patterson 2015 Urban Water Management Plan	2016	Watershed Identification, Organization, Coordination, Collaboration, Quantitative Methods
City of Riverbank 2015 Urban Water Management Plan	2016	Watershed Identification, Organization, Coordination, Collaboration, Quantitative Methods
City of Turlock 2015 Urban Water Management Plan	2016	Watershed Identification, Organization, Coordination, Collaboration, Quantitative Methods
City of Ceres Water Master Plan	2011	Watershed Identification, Organization, Coordination, Collaboration, Quantitative Methods, Identification and Prioritization of Projects
City of Oakdale Water Master Plan	2015	Watershed Identification, Organization, Coordination, Collaboration, Quantitative Methods, Identification and Prioritization of Projects
City of Waterford Water Master Plan	2016	Watershed Identification, Organization, Coordination, Collaboration, Quantitative Methods, Identification and Prioritization of Projects
Groundwater Quality Data in the Western San Joaquin Valley Study Unit, 2010	2010	Water Quality Compliance, Quantitative Methods

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Storm Water Management Program for Stanislaus County	2004	Watershed Identification, Water Quality Compliance
2012 California Integrated Report Clean Water Act Sections 303(d) and 305(b)	2014	Water Quality Compliance, Quantitative Methods
City of Oakdale Storm Drain Master Plan	2015	Watershed Identification, Organization, Coordination, Collaboration, Quantitative Methods, Identification and Prioritization of Projects
Central Valley RWQCB MS4 General Permit	2016	Water Quality Compliance
Lower Stanislaus LID Alternative Compliance Plan, City of Riverbank	2015	Watershed Identification, Water Quality Compliance
San Joaquin River Hydrologic Region Regional Report	2013	Watershed Identification, Water Quality Compliance
Middle San Joaquin Watershed Preliminary Watershed Management Plan	2006	Watershed Identification, Identification and Prioritization of Projects
Central Valley RWQCB, San Joaquin River Dissolved Oxygen Control Program Fact Sheet	2014	Water Quality Compliance, Identification and Prioritization of Projects
Central Valley RWQCB, Sacramento-San Joaquin Delta Methylmercury TMDL Fact Sheet	2014	Water Quality Compliance, Identification and Prioritization of Projects
Central Valley RWQCB, Diazinon and Chlorpyrifos in the Sacramento-San Joaquin Delta TMDL Fact Sheet	2015	Water Quality Compliance, Identification and Prioritization of Projects
Central Valley RWQCB, Salt and Boron TMDL for the Lower San Joaquin River Fact Sheet	2015	Water Quality Compliance, Identification and Prioritization of Projects
Central Valley RWQCB, Methylmercury and Mercury in the Sacramento-San Joaquin Delta TMDL Fact Sheet	2014	Water Quality Compliance, Identification and Prioritization of Projects
Central Valley RWQCB, San Joaquin River Organophosphorous (OP) Pesticide TMDL Fact Sheet	2013	Water Quality Compliance, Identification and Prioritization of Projects
Central Valley RWQCB, San Joaquin River Selenium TMDL Fact Sheet	2009	Water Quality Compliance, Identification and Prioritization of Projects
Soil Survey of Stanislaus County, California, Northern Part	2007	Watershed Identification, Identification and Prioritization of Projects
Modesto LGA Project Groundwater Characterization and Recharge Study	2016	Watershed Identification, Identification and Prioritization of Projects
Recharge Characterization for Stanislaus and Tuolumne Rivers Groundwater Basin Association	2007	Watershed Identification, Identification and Prioritization of Projects
Delta Regional Monitoring Program Monitoring Design Summary	2015	Water Quality Compliance

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SWRCB WQO No. 2013-0001-DWQ NPDES General Permit No. CAS000004 (Phase II Small MS4 General Permit)	2013	Water Quality Compliance
County Outfall maps (PDF format)	2017	Water Quality Compliance, Watershed Identification
Cannery Segregation Line (CSL) Cross-Connection Investigation	2004	Water Quality Compliance, Watershed Identification
Ground-Water Conditions and Storage Capacity in the San Joaquin Valley California	1959	Watershed Identification
Late Cenozoic Stratigraphic Units Northeastern San Joaquin Valley, California	1977	Watershed Identification
Pesticides in Storm Runoff from Agricultural and Urban Areas in the Tuolumne River Basin in the Vicinity of Modesto, California	1998	Watershed Identification, Water Quality Compliance, Organization, Coordination, Collaboration, Quantitative Methods, Identification and Prioritization of Projects
Tuolumne River, California, Expedited Reconnaissance Study, Section 905(b) (WRDA 86) Analysis	1998	Watershed Identification
Organic Carbon Trends, Loads, and Yields to the Sacramento San-Joaquin Delta, California, Water Years 1980 to 2000, Second Edition	2003	Watershed Identification, Water Quality Compliance
Diazinon and Chlorpyrifos Loads in Precipitation and Urban and Agricultural Storm Runoff during January and February 2001 in the San Joaquin River Basin, California	2003	Watershed Identification, Water Quality Compliance
Assessing the Susceptibility to Contamination of Two Aquifer Systems Used for Public Water Supply in the Modesto and Fresno Metropolitan Areas, California, 2001 and 2002	2004	Watershed Identification, Water Quality Compliance, Identification and Prioritization of Projects
Hydrogeologic Characterization of the Modesto Area, San Joaquin Valley, California	2004	Watershed Identification
Redevelopment Agency Project Storm Drain Capacity Study, Preliminary Draft	2005	Watershed Identification, Identification and Prioritization of Projects
Water Stress and a Changing San Joaquin Valley	2007	Watershed Identification, Identification and Prioritization of Projects
Simulation of Multiscale Ground-Water Flow in Part of the Northeastern San Joaquin Valley, California	2007	Watershed Identification
Simulations of Ground-Water Flow and Particle Pathline Analysis in the Zone of Contribution of a Public-Supply Well in Modesto, Eastern San Joaquin Valley, California	2008	Watershed Identification, Water Quality Compliance, Identification and Prioritization of Projects

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Title	Year Published	Relevance to SWRP
Hydrogeology, Water Chemistry, and Factors Affecting the Transport of Contaminants in the Zone of Contribution of a Public-Supply Well in Modesto, Eastern San Joaquin Valley, California	2008	Watershed Identification, Water Quality Compliance, Identification and Prioritization of Projects
Simulated response of water quality in public supply wells to land use change	2008	Watershed Identification, Water Quality Compliance, Identification and Prioritization of Projects
Source and transport controls on the movement of nitrate to public supply wells in selected principal aquifers of the United States	2008	Watershed Identification, Water Quality Compliance, Identification and Prioritization of Projects
Assessing the Vulnerability of Public-Supply Wells to contamination: Central Valley Aquifer System near Modesto, California	2009	Water Quality Compliance, Identification and Prioritization of Projects
Effects of Groundwater Development on Uranium: Central Valley, California, USA	2009	Water Quality Compliance, Identification and Prioritization of Projects
Effects of human-induced alteration of groundwater flow on concentrations of naturally-occurring trace elements at water-supply wells	2011	Water Quality Compliance, Identification and Prioritization of Projects
Groundwater Quality in the Central Eastside San Joaquin Valley, California	2011	Water Quality Compliance, Identification and Prioritization of Projects
Methods, Quality Assurance, and Data for Assessing Atmospheric Deposition of Pesticides in the Central Valley of California	2013	Quantitative Methods
Effects of Seasonal Operation on the Quality of Water Produced by Public-Supply Wells	2014	Water Quality Compliance, Identification and Prioritization of Projects
Simulation of the Effects of Seasonally Varying Pumping on Intra-borehole Flow and the Vulnerability of Public-Supply Wells to Contamination	2014	Water Quality Compliance, Identification and Prioritization of Projects
City of Modesto Municipal Stormwater Program Annual Progress Report, 2014-2015	2015	Watershed Identification, Water Quality Compliance, Identification and Prioritization of Projects
Hydrologic Model of the Modesto Region, California, 1960–2004	2015	Watershed Identification
City of Modesto Municipal Stormwater Program Annual Progress Report, 2015-2016	2016	Watershed Identification, Water Quality Compliance, Identification and Prioritization of Projects
Groundwater Characterization and Recharge Study	2016	Watershed Identification, Water Quality Compliance, Identification and Prioritization of Projects
City of Modesto Area 2 Storm Drain to Sanitary Sewer Cross Connections Removal Final Preliminary Design Report	2010	Watershed Identification, Water Quality Compliance, Identification and Prioritization of Projects
Antidegradation Analysis for Proposed Wastewater Quality Control Facility Discharge Modification	2007	Watershed Identification, Water Quality Compliance, Identification and Prioritization of Projects



Title	Year Published	Relevance to SWRP
City of Modesto Rockwell Assessment: Summary Report	2012	Water Quality Compliance, Identification and Prioritization of Projects
City of Modesto Northeast Area Updated Offsite Watershed Storm Drainage Evaluation	2005	Water Quality Compliance, Identification and Prioritization of Projects
City of Modesto Storm Drain Cross Connection Report	2007	Water Quality Compliance, Identification and Prioritization of Projects

\* Report is considered cost share for the SWRP.

Table 2. Geographic Information Data

Data	Type	Relevance to SWRP	Source
City Boundaries	GIS file	Watershed Identification	State of California
CA Watersheds	GIS file	Watershed Identification	California Interagency Watershed Map (Calwater 2.2.1)
CA Groundwater Basins 2017	GIS file	Watershed Identification	Department of Water Resources
Hydrography information	GIS file	Watershed Identification	USGS National Hydrography Dataset
DAC locations	GIS file	Education, Outreach, and Public Participation	Department of Water Resources
USGS Surface Water Gauge Locations Stations	GIS file	Watershed Identification	USGS
Land Use	GIS file	Watershed Identification	Department of Water Resources
CA Surface Water	GIS file	Watershed Identification	USGS
CA Rivers and Streams	GIS file	Watershed Identification	USGS
CA Lakes	GIS file	Watershed Identification	USGS
CA Canals	GIS file	Watershed Identification	USGS
Soil information	GIS file	Watershed Identification	NRCS, USDA
Local infrastructure and other data	GIS file	Watershed Identification	City of Modesto
Local infrastructure and other data	GIS file	Watershed Identification	City of Turlock
Service Area Boundaries	GIS file	Watershed Identification	City of Modesto, Stanislaus County
Parcels	GIS file	Watershed Identification	Stanislaus County

Data	Type	Relevance to SWRP	Source
Open Space, Parks, and Reserves	GIS file	Watershed Identification	California Protected Areas Database
Resource Conservation Districts	GIS file	Watershed Identification	California Association of Resource Conservation Districts
Critical Habitat	GIS file	Watershed Identification	USFWS
Wetlands	GIS file	Watershed Identification	City of Modesto
Service areas of individual water agencies, including those not involved in the Plan	GIS file	Watershed Identification	Water Atlas Stanislaus County, Urban Water Management Plans, Agricultural Water Management Plans
County priority outfalls	Maps	Watershed Identification, Project Prioritization	Stanislaus County
Service areas of individual wastewater agencies, including those not involved in the Plan	Maps	Watershed Identification	Stanislaus County LAFCO Municipal Service Reviews

Table 3. Data Needs

Info Needed or Report Title	Type of Data	Relevance to SWRP	Source (Anticipated)
Groundwater monitoring wells locations and reports, if available	Shapefile if available (PDF maps and reports have been collected).	Watershed Identification, Project Prioritization	Individual agencies
Service areas of individual water agencies, including those not involved in the Plan.	Shapefile if available (PDF maps have been collected).	Watershed Identification	Individual agencies
Service areas of individual wastewater agencies, including those not involved in the Plan.	Shapefile if available (PDF maps have been collected).	Watershed Identification	County
Major existing storm water outfalls.	Shapefile preferred (PDF maps and reports have been collected).	Watershed Identification	Applicable agencies
Major existing structural controls of storm and non-storm water (including storm water pump stations, low-flow diversions, urban runoff treatment facilities, low impact developments, detention basins used for storm water treatment, and other catch basin inserts/screens) that discharge to receiving waters.	Shapefile if available (PDF maps and reports have been collected).	Watershed Identification	Applicable agencies
Opportunity sites and/or drainage areas, and the corresponding volume of storm water and dry weather runoff that can be captured at the sites or within the drainage areas.	Shapefile if available (some PDF maps and reports have been collected).	Watershed Identification	Applicable agencies