APPENDIX 1-A

Primary sources of information

INTRODUCTION

Both the San Luis Obispo County Flood Control and Water Conservation District (District) and the City of Arroyo Grande received planning grant funds toward stormwater resource planning efforts for all of the watersheds in San Luis Obispo County. A stormwater resource plan (SWRP) is required as a condition of receiving State bond grant funds for any stormwater and dry weather capture project (Water Code §10563). Task 3.1 of the SWRP is as follows: gather and review existing data appropriate to development of the FE-SWRP including maps, geographic information system (GIS) data, analytical tools, related plans, permits, and storm water management information. The results of Task 3.1 follow in this section.

A preliminary list of reports and data sets were compiled by the Consultant Team and circulated among the TAC for two weeks to review and elucidate reports and data sets not previously identified. Additions were requested from the TAC Leads as well as targeted stakeholders for each planning area. Responses were generated from TAC Leads and stakeholders with varying levels of input. During this solicitation process, sixteen additional reports, studies, and plans were recommended for inclusion in the Annotated List of Reviewed Data and Reports, and they have been added to the list presented at the end of this section.

GIS data necessary to complete the characterization of the San Luis Obispo County watersheds is complete. Given the prior projects already conducted on watersheds throughout the county, nearly all of these data had been previously compiled by the consultant team, County, and Regional Board. Those items that were judged to be of potential utility to this characterization have now been identified and acquired.

Some additional, more location-specific information on property ownership, storm drain systems, and infrastructure details may be necessary to support the evaluation of specific proposed projects or project locations. The sources of these data from the various jurisdictions within the county have now been identified. Actual acquisition of these data layers county-wide, however, is judged premature until potential project locations have been identified and the stage of SWRP preparation when evaluating their feasibility and potential benefits has been reached. As such, their absence in this compilation presently represents a "data gap," but its filling as/where needed is anticipated to be near-immediate and most efficiently executed when such need is identified.

Data related to identification of planned projects (i.e., potential projects that have already been identified by stakeholders or jurisdictions) has been solicited from all members of the Technical Advisory Committee and their associated jurisdictions. The following online questionnaire was widely distributed, with an anticipated return approximately coincident with this Task 3.1 assessment of data gaps:

1. Contact Information
2. Project Name (include project phase, if applicable)
3. Project Location (e.g., street address, nearest intersection, lat/long, APN)
4. Relevant watershed(s) or sub-watershed(s) based on SLO County Watershed Map and http://slowatershedproject.org
5. Brief Project Summary
6. Project Type
    - Regional Capital Improvement Project

- Parcel-Scale Low Impact Development (LID) Retrofit
- Parcel-Scale LID for New (Public-Agency) Construction
- Green Street
- Other (please specify)

7. Project Status
   - Conceptual Phase
   - Planning/Design Phase
   - Ready for Implementation
   - Other (please specify)
8. Project Information
   - Permitting Status
   - Estimated Project Cost
   - Funding Sources (incl. percentages)
   - Does the project benefit a disadvantaged community (DAC)?
   - Targeted Construction Start Date
9. Which **water quality** benefits will the project provide?
   - Increased filtration and/or treatment of runoff
   - Nonpoint source pollution control
   - Reestablished natural water drainage and treatment
   - Other (please specify)
10. Which **water supply** benefits will the project provide?
    - Water supply reliability
    - Conjunctive use
    - Water conservation
    - Other (please specify)
11. Which **flood management** benefits will the project provide?
    - Decreased flood risk by reducing runoff rate and/or volume
    - Reduced sanitary sewer overflows
    - Other (please specify)
12. Which **environmental** benefits will the project provide?
    - Environmental and habitat protection and improvement, including wetland enhancement/creation, riparian enhancement, and/or instream flow improvement
    - Increased urban green space
    - Reduced energy use, greenhouse gas emissions, or provides a carbon sink
    - Reestablishment of the natural hydrograph
    - Water temperature improvements
    - Other (please specify)
13. Which **community** benefits will the project provide?
    - Employment opportunities provided
    - Public Education
    - Community involvement
    - Enhanced and/or created recreational and public use areas
    - Other (please specify)

The planned compilation of this information into a project database is in progress. The team will also conduct additional stakeholder outreach to identify missing planned projects in the late

spring of 2018. The current schedule calls for analysis of planned projects beginning in early June 2018; the SWRP Team will analyze all the data that has been obtained as of that time.

TECHNICAL REPORTS

Technical reports listed below were identified through a combination of TAC recommendations, prior studies conducted by the consulting team and PMT participants, and general familiarity with the information necessary to support credible, comprehensive regional water resource characterization and descriptions of the natural settings and management structures relevant to stormwater resource planning.

REGIONAL/GENERAL

State Water Resources Control Board (December 15, 2015). *Storm Water Resource Plan Guidelines.*

> *The Guidelines provide details for what should be included and instructions for how to prepare a SWRP, which will be referenced throughout the SLO County SWRP preparation.*

Booth, D.B., C. Helmle, E.A. Gilliam, and S. Araya (2012). *Methods and Findings of the Joint Effort for Hydromodification Control in the Central Coast Region of California*. Prepared by Stillwater Sciences and TetraTech, Santa Barbara, California, for California State Central Coast Regional Water Quality Control Board, 50 pp. Retrieved from https://www.waterboards.ca.gov/centralcoast/water_issues/programs/stormwater/docs/lid/hydromod_lid_docs/attach_1b_attach_e_methods_and_findings.pdf

> *The purpose of this report is to document the entire Joint Effort methodology and findings, including the determination of Watershed Management Zones and the identification of associated hydromodification management strategies, as they applied in the Central Coast Region for post-construction stormwater management requirements.*

State of California Department of Water Resources. (October 2003, plus updates). *California's Groundwater, Bulletin 118*. Retrieved from http://slowatershedproject.org/resources/

> *The bulletin includes recommendations for California groundwater management planning and implementation, a timeline of recent actions related to groundwater management, and a regional inventory of California's groundwater resources. An interim update, published in 2016, identifies three SLO County basins (Paso Robles [3-4.06], Los Osos Valley [3-08], and Cuyama Valley [3-18]) in "significant overdraft" (https://www.water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/Statewide-Reports/Bulletin_118_Interim_Update_2016.pdf)*

Central Coast Ambient Monitoring Program (CCAMP). Retrieved from http://www.ccamp.org/

> *An interactive, map-based website that provides available physical, chemical, and biological ecological monitoring data throughout Region 3. Over 50 sites are represented within San Luis Obispo County, although not every site includes information for every data type.*

California Department of Transportation (CalTrans). *Water Quality Planning Tool*. Retrieved from http://svctenvims.dot.ca.gov/wqpt/wqpt.aspx

> *A useful interactive website that provides map-based information on 303(d) and TMDL-listed waterbodies, plus a variety of physical information and jurisdictional boundaries.*

CDM. (November 2011). *Climate Change Handbook for Regional Water Planning*. Retrieved from http://slowatershedproject.org/resources/

> *The handbook provides strategies to evaluate projects, resource management strategies, IRWM plan benefits, and plan implementation under climate change uncertainty.*

SLO COUNTY

County of San Luis Obispo, Flood Control and Water Conservation District. (September 2015). *San Luis Obispo Integrated Regional Water Management Plan.* Retrieved from https://www.slocountywater.org/site/Frequent%20Downloads/Integrated%20Regional%20Water%20Management%20Plan/IRWM%20Plan%20Update%202014/index.htm

> *The SLO County IRWMP includes an exhaustive compendium of water-resource information about the County, including much of the data for characterizing water resources that is required for the SWRP, plus a limited number of previously identified stormwater resource projects for inclusion in the SWRP.*

Resource Conservation District of San Luis Obispo County. (July 2014) San Luis Obispo County Watersheds Management Plan, Phase I – Vision, Framework & Methodology Development.

> *This report identifies relevant spatial scales for watershed analysis, data gaps, and an approach to filling those data gaps. It provides the rationale for development of a watersheds-based data repository (www.slowatershedproject.org) focused on improving natural resource management decisions via meaningful watershed characterization and improving spatial data accessibility.*

County Of San Luis Obispo Sustainable Groundwater Management Act (SGMA) website: https://www.slocountywater.org/site/Water%20Resources/SGMA/

> *Provides links to groundwater basin-specific reports, including the six high- and medium-priority basins identified by the California Department of Water Resources in 2014:*
>
> - *Paso Robles (High Priority)*
> - *Atascadero (High Priority)*
> - *Santa Maria (High Priority)*
> - *Los Osos (High Priority)*
> - *San Luis Obispo (Edna) Valley (Medium Priority)*
> - *Cuyama Valley (Medium Priority)*

Stillwater Sciences (2014). *San Luis Obispo County regional instream flow assessment*. Prepared by Stillwater Sciences, Morro Bay, California for Coastal San Luis Resource Conservation District, Morro Bay, California.

> *The purpose of this study is to provide a preliminary estimate of the magnitude and timing of instream flows that would support steelhead in creeks of San Luis Obispo County. The key objectives of the study are to further develop environmental water demand estimates to a County-wide assessment of instream flow requirements for steelhead based on existing instream flow assessments and prioritize streams for which detailed instream flow assessments would be most useful.*

SLO County Department of Planning and Building. (May 2010). *County of San Luis Obispo General Plan, Conservation and Open Space Element.* Retrieved from http://slowatershedproject.org/

> *The report contains goals, policies, and strategies to protect water resources, while discussing their relationship to existing plans and programs. The report goals align with the SLO County IRWM and the goals of the SWRP.*

Carollo. (May 2012). *San Luis Obispo County Master Water Report.* Retrieved from http://slowatershedproject.org/resources/

> *The SLO County Master Water Report includes valuable information on the water resource management in San Luis Obispo County, as well as available watershed data, water resource analysis, and water resource planning recommendations in connection to existing documents.*

Central Coast Regional Water Quality Control Board (June 2011 and September 2017). *Water Quality Control Plan for the Central Coast Basin.* Retrieved from http://slowatershedproject.org/resources/

> *The objective of this Water Quality Control Plan for the Central Coastal Basin, or Basin Plan, is to show how the quality of surface water and groundwater in the Central Coast Region should be managed to provide the highest water quality reasonably possible. It includes an implementation plan and monitoring guidelines to optimize water quality for various uses. The implementation plan includes programs, projects and other actions for incorporation into the SWRP.*

San Luis Obispo County Flood Control and Water Conservation District (December 2009). *Guide to Implementing Flood Control Projects.* Retrieved from http://slowatershedproject.org/resources/

> *The guide includes the process and constraints of general flood control project implementation, as well as specific regional analysis of significant issues and proposed solutions for projects in SLO County communities.*

Stillwater Sciences (January 2014). *San Luis Obispo County Regional Instream Flow Assessment.* Retrieved from http://www.coastalrcd.org/

> *The study further develops estimates of environmental water demand (EWD) based on recommendations of the SLO County Master Water Report. The analysis provides an estimate of*

the magnitude and timing of instream flows, and can inform aquatic resources that merit higher levels of protection.

ClimateWise (November 2010). *Integrated Climate Change Adaptation Planning in San Luis Obispo County.* Retrieved from http://slowatershedproject.org/

The report discusses strategies to increase climate change resiliency in SLO County, with particularly relevant sections on water resources and ecosystem services. These strategies inform which areas and resources that may require higher levels of protection or restoration.

LOCALITIES AND SUB-REGIONS WITHIN SLO COUNTY

2NDNATURE (2017). *Urban catchment delineation and pollutant loading for MS4s in SLO County.*

Hydrographic delineation of urban drainages, runoff and pollutant load estimation for urbanized areas within the County of San Luis Obispo, submitted June 20, 2017. Catchment delineation, modeling inputs, outputs, and documentation are viewable by County of San Luis Obispo at https://swtelr.2nform.com/

Central Coast Low Impact Development Initiative (2017). *Central Coast Green Infrastructure Project*.

Identification and concept design for 25 projects that address stormwater management and provide ancillary community benefits.

City of Arroyo Grande (2010). *Stormwater Management Plan*. Retrieved from http://www.arroyogrande.org/documentcenter/view/312

The plan describes the City's program necessary to comply with the city's General NPDES MS4 Phase II Permit. It provides a framework for identifying, assigning, and implementing control measures and BMPs intended to reduce the discharge of pollutants from the MS4 and protect downstream water quality. In addition, it functions as a planning and guidance document to be used by the City's regulatory body, all City departments, contractors, and the general public; define techniques and measurable goals for measuring BMP effectiveness; and sets a five-year schedule for Storm Water Management Program implementation to comply with the requirements of the General Permit.

Water Systems Consulting, Inc. (2017). *Amended Final Draft 2015 Urban Water Management Plan for the City of Arroyo Grande.* Retrieved from *http://www.arroyogrande.org/DocumentCenter/View/4038*

The purpose of this plan is for water suppliers to evaluate their long-term resource planning and establish management measures to ensure adequate water supplies are available to meet existing and future demands. The plan summarizes service-area statistics, water demand and water supply, groundwater conditions, and potential projects. It also describes the network of stormwater infiltration, detention and retention basins throughout its service area. This stormwater collection system captures or retards runoff mainly for flood control and pollution

prevention purposes, but it also recharges the groundwater basin with water that would otherwise ultimately runoff to the Pacific Ocean.

City of Arroyo Grande (2012). *City of Arroyo Grande Water System Master Plan.* Retrieved from *http://www.arroyogrande.org/DocumentCenter/View/1067*

The plan reviews the current land use zoning and population distribution within the City limits; identifies water use characteristics of the developed and undeveloped land areas for both existing and future build-out; evaluates the adequacy and reliability of existing water supplies; evaluates the existing water storage system in the City and recommend water storage improvements to meet ultimate build-out; identifies existing system deficiencies and recommends corrective improvements ; and prioritizes recommended improvements.

SLO County Drainage studies *(https://slocountywater.org/site/Drainage%20Studies/).*

This website is the portal for seven drainage and flood control studies conducted for Cambria, Cayucos, Los Osos, Nipomo, Oceano, San Miguel, and Santa Margarita.

Stillwater Sciences. (September 2015). *Percolation Zone Study of Pilot-Study Groundwater Basins in San Luis Obispo County, California*. Amended Final Technical Memorandum. Retrieved from https://www.slocountywater.org/site/Water%20Resources/SGMA/slovalley/

The study locates areas with relatively high intrinsic percolation potential to enhance local groundwater supplies, filling the data gaps of the SLO County IRWM Plan.

Stillwater Sciences (2017). *San Luis Obispo Creek Watershed Stormwater Resource Plan.*

The SWRP provides guidance on stormwater management to avoid negative impacts of urban runoff to receiving waters. The collaboration between Stillwater Sciences and 2N provides consistency for the County's SWRP.

Balance Hydrologics. (August 2008). *Hydrology and Geology Assessment of the Pismo Creek Watershed, Sant Luis Obispo County, California.* Retrieved from https://www.slocountywater.org/site/Water%20Resources/SGMA/slovalley/

This watershed-wide characterization of hydrologic and geomorphic processes in the Pismo Creek watershed provides historical context, identifies some key issues to be addressed in watershed planning documents, and provides recommendations for monitoring programs.

Stillwater Science (2017). *Long-Term management of vegetation and Debris in the Salinas River through Paso Robles*. Technical memo, June 2017.

The report lines out some information specific to Salinas River flow characteristics, hydrology, and sediment loading. It evaluates whether debris removal in the channel and floodplain of the Salinas River would lead to any long-term benefits, and it concludes that it probably would not.

RMC (2015). *Salt/Nutrient Management Plan for the Paso Robles Groundwater basin.* Retrieved from *http://www.prcity.com/government/departments/publicworks/wastewater/pdf/Salt-Nutrient-Management-Plan.pdf*

> *The report provides a discussion of recharge and groundwater vulnerability in the groundwater basin.*

AECOM (2014). *Recycled Water Master Plan.* Retrieved from *http://www.prcity.com/government/departments/publicworks/wastewater/pdf/RecycledWMP-60194173.pdf*

> *The report provides a discussion on groundwater replenishment from recycled wastewater from the City of Paso Robles.*

Greenspace – The Cambria Land Trust (2011). *Santa Rosa Creek watershed management plan*. Prepared by Greenspace – The Cambria Land Trust, Central Coast Salmon Enhancement, and Stillwater Sciences for the California Department of Fish and Game, under a grant for the Fisheries Restoration Grant Program (P0740401).

> *The objectives of the WMP are to assess existing conditions, prioritize limiting factors for steelhead, and identify and prioritize science- and consensus-based recommendations to address these limiting factors and improve physical functions and ecological conditions in the watershed.*

North Coast Engineering, Inc. (2014). *Templeton Drainage and Flood Control Study and Project 8* Addendum. Prepared for San Luis Obispo County Flood Control and Water Conservation District.

> *This study identifies deficient drainage areas, proposes projects with engineered solutions to these deficiencies, identifies the tangible benefits of each project, provides a cost estimate of proposed projects, and recommends a capital improvement program of priority projects. Potential projects to mitigate the existing high-priority flooding problems include vegetation removal, sediment removal, and increased detention.*

U.S. Geologic Survey (1998). *Hydrogeology, Water Quality, Water Budgets, and Simulated Responses to Hydrologic Changes in Santa Rosa and San Simeon creek Ground-Water Basins, San Luis Obispo County, California.* Prepared in cooperation with the San Luis Obispo Flood Control and Water Conservation District. Water Resources Investigations, Report 98-4061. Retrieved from *https://pubs.er.usgs.gov/publication/wri984061*

> *Digital ground-water-flow models were used to estimate several items in the ground-water budgets and to investigate the effects of pumpage and drought. Increases in the area and intensity of irrigation could increase agricultural water demand by 26 to 35 percent, an increase that would lower water levels by as much as 10 feet and possibly cause subsidence in the lower Santa Rosa Basin. An additional municipal well in the lower Santa Rosa Basin could withdraw 100 acre-feet per year without causing seawater intrusion, but subsidence might occur. Decreases in agricultural pumping after a winter without streamflow could prevent seawater intrusion while allowing municipal pumping to continue at normal rates.*

RELEVANT WATER CODE SECTIONS 10560 et seq.

1. Water Code Section 10562(b)(1): Be developed on a watershed basis
2. Water Code Section 10562(b)(2): Identify and Prioritize stormwater and dry weather runoff projects
3. Water Code Section 10562(b)(3): Provide for multiple benefit project designs
4. Water Code Section 10562(b)(4): Provide for community participation
5. Water Code Section 10562(b)(5): Consistent with existing TMDL Plans and NPDES permits
6. Water Code Section 10562(b)(6): Be consistent with all applicable waste discharge permits
7. Water Code Section 10562(b)(7): Be submitted and incorporated into applicable IRWM
8. Water Code Section 10562(b)(8): Prioritize use of public lands and easements
9. Water Code Section 10562(d)(1): Identify beneficial use of runoff for groundwater recharge
10. Water Code Section 10562(d)(2): Identify opportunities for source control and infiltration
11. Water Code Section 10562(d)(3): Identify projects to mimic natural drainage and infiltration
12. Water Code Section 10562(d)(4): Identify projects to enhance habitat
13. Water Code Section 10562(d)(5): Identify opportunities to utilize public land and easements
14. Water Code Section 10562(d)(6): Identify effective design criteria
15. Water Code Section 10562(d)(7): Identify activities that general pollution
16. Water Code Section 10562(d)(8): Decision support tools for multiple benefits
17. Water Code Section 10562(d)(9): Ordinances and other mechanisms for effective implementation
18. Water Code Section 10562(3): Utilize measureable factors to prioritize projects.

ANNOTATED LIST OF REVIEWED DATA

Benefit Type	Data Set	Data Description	Data Unit (if applicable)	Spatial Resolution (where available)	Data Source	URL
Water Supply	Residential water use	The EPA EnviroAtlas Residential Water Use per 12-digit HUC dataset was clipped to California sub-watersheds (NRCS). Original Metadata: This EnviroAtlas national map estimates the total water used each day in millions of gallons for domestic or residential purposes for each subwatershed (12-digit HUC) in the contiguous United States. For this map, domestic or residential water demand includes all indoor and outdoor uses, such as for drinking, bathing, cleaning, landscaping, and pools for primary residences. It includes the demand on both public water distribution systems and self-supplied water from either ground water or surface water sources. It does not include second homes and vacation rentals. For this map, the United States Geological Survey (USGS) 2005 Water Use data was used to calculate the number of gallons used per person per day in each county in the contiguous United States. Within each state, these values were used to calculate a median per capita use for each state, to account for variation between counties. These median values were then applied to a distributed population map, known as dasymetric population data. This technique estimates the number of people in any given area and their estimated domestic water usage. The water use values were then summarized by 12-digit HUC, using the boundaries from the 2011 Watershed Boundary Dataset (WBD). The national per capita estimate is based on the USGS 2005 Water Use data and the 2010 US Census population estimation.	MG/year	NHD HUC 12 (40,000-250,000 acres)	EPA EnviroAtlas Water Usage data, per 12-digit HUC, California created by the Conservation Biology institute using USGS water usage data	https://www.epa.gov/enviroatlas

	Agricultural water use	This map was created using USGS 2005 Water Use data to estimate the daily agricultural irrigation per acre for each county in the contiguous U.S. Where available, irrigation for golf courses was excluded from the calculation. Some county results with zero reported use per acre may in fact have irrigated land, a result of complexities in reporting water use data. To ensure capture of this other irrigated land, counties with zero reported use per acre were assigned the generalized state-level median or mean, whichever was closest to the state-level majority. To distribute withdrawals for agricultural irrigation within the county, the final irrigation assignments were then converted and applied to more specific 30-meter locations using remotely sensed data on irrigation, land cover, and crop type. Irrigated locations were identified by applying algorithms, along with climate and agricultural data, to satellite imagery. For the purposes of EnviroAtlas, the potentially irrigated crop locations were further refined by crop type using the 2010 USDA Cropland Data and the 2006 MRLC National Land Cover Data. Finally, to represent these results in EnviroAtlas, the applied water use values were then summarized by 12-digit HUC.	MG/year	NHD HUC12 (40,000-250,000 acres)	EPA EnviroAtlas Water Usage data, per 12-digit HUC, California created vby the Conservation Biology institute using USGS water usage data	https://www.epa.gov/enviroatlas
	Industrial water use	This map was created by combining water use estimation data from the United States Geological Survey (USGS) and the location of industrial facilities from Dun and Bradstreet. The 2005 USGS estimated water use tables summarize the daily water withdrawals for industrial use by county throughout the US. The withdrawals for industrial use were then evenly distributed among the industrial facilities within the county. Where there was no county level water use data available for facilities, estimated water use was determined using an inverse distance-weighted grid derived from points with water use. For the purposes of EnviroAtlas, the estimated water use for each facility was summarized by subwatershed (12-digit HUC).	MG/year	NHD HUC12 (40,000-250,000 acres)	EPA EnviroAtlas Water Usage data, per 12-digit HUC, California created vby the Conservation Biology institute using USGS water usage data	https://www.epa.gov/enviroatlas
	Subsidence	Raster dataset depicting groundwater subsidence between March 2015 - September 2016,	ft/yr	90 m pixel	Raster dataset created by NASA delivered to DWR in October 2016.	http://www.water.ca.gov/waterconditions/docs/2017/JPL%20subsidence%20report%20final%20for%20public%20dec%202016.pdf
	Groundwater dependence index	"We developed an index of groundwater dependency by analyzing geospatial data for three ecosystem types that depend on groundwater: (1) springs and seeps; (2) wetlands and associated vegetation alliances; and (3) stream discharge from groundwater sources (baseflow index). Each variable was summarized at the scale of a small watershed (Hydrologic Unit Code-12; mean size = 9,570 ha; n = 4,621), and then stratified and summarized to 10 regions of relative homogeneity in terms of hydrologic, ecologic and climatic conditions. We found that groundwater dependent ecosystems are widely, although unevenly, distributed across California."	index score	NHD HUC12 (40,000-250,000 acres)	Howard, J. & Merrifield, M. 2010. Mapping Groundwater Dependent Ecosystems in California. PLoS One, 5, e11249. http://dx.plos.org/10.1371/journal.pone.0011249.	https://databasin.org/datasets/2c9f406a0a9f43fc81795a5c31e30b3e

	Base-flow index (BFI) raster	The base-flow index raster dataset was interpolated from a point dataset of USGS streamgage BFI values (Wolock, 2003). The streamgage BFI values were computed for each of the USGS streamgages in the historical database (more than 19,000 stations) using a Fortran program written by Tony Wahl (Bureau of Reclamation, U.S. Department of the Interior) and Ken Wahl (USGS) (http://www.usbr.gov/pmts/hydraulics_lab/twahl/bfi/) (Wahl and Wahl, 1988; 1995). A subset of the stream gage BFI values was selected before the interpolation process. The criteria for including a streamgage in the interpolation were (1) a period of record of at least 10 years of daily streamflow data, and (2) a maximum drainage basin area of 1,000 square miles (2,590 square kilometers). The first criterion selects stream gages with a reasonably long period of record, thereby averaging year-to-year variability in BFI values. The second criterion minimizes the effects of routing within the stream network on BFI values. Applying these selection criteria resulted in a point dataset of 8,249 streamgage BFI values. The mean period of record in the dataset was 33 years, and the mean drainage basin area was 204 square miles (528 square kilometers). The point dataset of streamgage BFI values was interpolated to a raster dataset using the ARCINFO inverse distance weighting interpolation method.	index score (0-90)	1 km pixel	Wolock, David. 2003. Base-flow index grid for the conterminous United States. Raster digital data. U.S. Geological Survey Open-File Report.	https://water.usgs.gov/GIS/metadata/usgswrd/XML/bfi48grd.xml#stdorder
	CA Groundwater Bulletin 118	Bulletin 118 is California's official compendium on the occurrence and nature of groundwater statewide. Bulletin 118 defines the boundaries and describes the hydrologic characteristics of California's groundwater basins. Bulletin 118 also provides information on groundwater management and recommendations for the future.			CA Department of Water Resources	http://www.water.ca.gov/groundwater/bulletin118/gwbasins.cfm
	Depth to water table	"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.	cm of water	Unspecified; likely 10s-100s of acres	USDA Soil Data Viewer for ArcMap	https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/geo/?cid=nrcseprd337066
	Soil available water capacity	Available water supply (AWS) is the total volume of water (in centimeters) that should be available to plants when the soil, inclusive of rock fragments, is at field capacity. It is commonly estimated as the amount of water held between field capacity and the wilting point, with corrections for salinity, rock fragments, and rooting depth. AWS is reported as a single value (in centimeters) of water for the specified depth of the soil. AWS is calculated as the available water capacity times the thickness of each soil horizon to a specified depth.	cm of water	Unspecified; likely 10s-100s of acres	USDA Soil Data Viewer for ArcMap	https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/geo/?cid=nrcseprd337066

Water Quality	Impervious area (TELR model input)	NLCD 2011 Percent Impervious Area Dataset	acres	30 m pixel	Xian, G., Homer, C., Dewitz, J., Fry, J., Hossain, N., and Wickham, J., 2011. The change of impervious surface area between 2001 and 2006 in the conterminous United States. Photogram metric Engineering and Remote Sensing, Vol. 77(8): 758-762.	http://landcover.usgs.gov/uslandcover.php
	Hydrologic soil group (TELR model input)	SSURGO and STATSGO soils dataset	acres	30 m pixel	SSURGO and STATSGO soil layers that depict soil drainage.	https://swtelr.2nform.com
	Estimated runoff (TELR model output)	runoff baseline estimates using swTELR	ac-ft/ac/yr	100 ac	TELR (2nd Nature)	https://swtelr.2nform.com
	Estimated pollutant loading (TELR model ouput)	TSS baseline load estimates using swTELR	ton/ac/yr	100 ac	TELR (2nd Nature)	https://swtelr.2nform.com
	Structural stormwater BMPs (TELR input)	Extracted points from BMP RAM. Available for Paso Robles, Atascadero, Pismo, City of SLO, Morro Bay, Arroyo Grande, County of SLO	count		BMP RAM (2nd Nature)	https://bmpram.2nform.com
	Impaired waterbodies	303(d) listed impaired water bodies within SLO County	miles/ acre	stream segment	USEPA	https://ofmpub.epa.gov/waters10/attains_nation_cy.control#imp_water_by_state https://www.epa.gov/waterdata/waters-geospatial-data-downloads#303dListedImpairedWaters

	Soil erodibility	Derived from 1:250,000-scale USGS HUC 8 boundaries, this dataset represents the soil erodibility for the western USA. A weighted average was created for each HUC 8 watershed using approximate EMAP physical habitat substrate criteria. The values are based on the Universal Soil Loss Equation: A =R x K x LS x C x P, where A = potential long term average annual soil loss in tons per acre per year, R = rainfall and runoff factor by geographic location, K = soil erodibility factor, LS = slope length-gradient factor, crop/vegetation and management factor, and P = support practice factor. This dataset contains attribute fields with values for each factor.	ton/mi^2/yr	HUC 8 (1,000-3,300 sq mi in SLO County)	Soil Erodibility Index derived from the Revised Universal Soil Loss Equation. Weighted average gross soil erosion derived from USGS HUC 8 boundaries. Based on the revised universal soil loss equation (RUSLE).	https://databasin.org/datasets/7432f101133a463a8d477ca18a856b74
Environ-mental	Critical species habitat for steelhead	Endangered Species Act Critical Habitat GIS shapefiles from NOAA Fisheries.	locations	stream segment	NOAA	http://www.westcoast.fisheries.noaa.gov/maps_data/endangered_species_act_critical_habitat.html
	California Rapid Assessment Method (CRAM) survey results	CRAM assessment details (index, metric and attribute scores) visit dates, area boundaries, etc.	acres		San Francisco Estuary Institute	https://www.ecoatlas.org/regions/ecoregion/statewide?cram=1
	California Stream Condition Index	CSCI index scores for all CCAMP sites in SLO County.	index score	CCAMP stations	Downloaded this and all CCAMP data from CEDEN	http://ceden.waterboards.ca.gov/AdvancedQueryTool
Flood Control	Potential flooded area	FEMA's National Flood Hazard Layer. Downloaded from FEMA's ArcGIS Portal, November 2017.			FEMA	https://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=cbe088e7c8704464aa0fc34eb99e7f30
Community	California Disadvantaged Communities (Block Groups)	This layer depicts data from the US Census ACS 2010-2014 showing census block groups identified as as disadvantaged communities (less than 80% of the State's median household income) or severely disadvantaged communities (less than 60% of the State's median household income).	locations		CA Department of Water Resources	https://gis.water.ca.gov/app/dacs/
Regional Hydro-Geographic Description	CalWater Planning Watersheds	Planning Watersheds in San Luis Obispo County. Also known as SLO County Subwatersheds.		30 m pixel	CA Department of Natural Resources	https://catalog.data.gov/dataset/calwater-2-233fac
	Watershed Planning Areas (as identified by the TAC for this SWRP) (WPA's)	Boundaries of nine management areas for San Luis Obispo County.		30 m pixel	SLO Watershed Project, and this Stormwater Resource Plan	http://slowatershedproject.org/resources/

	Watershed Management Zones	This layer shows Watershed Management Zones (WMZ) for the Central Coast Joint Effort for Hydromodification Control project area. This dataset is the result of the combination of 3 layers: Receiving Water Types, Physical Landscape Zones (PLZ), and Groundwater basin. The key attribute of WMZ is 'WMZ_VALUE', represented by a number and an associated category of watershed management zone, with specific stormwater management strategies to be applied to each zone (avoid OVERLAND FLOW; protect GROUNDWATER RECHARGE; protect INTERFLOW; protect EVAPOTRANSPIRATION; protect CHEMICAL AND BIOLOGICAL TRANSFORMATIONS; protect DELIVERY OF SEDIMENT; protect DELIVERY OF ORGANICS; protect GROUNDWATER RECHARGE where underlain by mapped groundwater basin.		30 m pixel	Central Coast Regional Water Quality Control Waterboard	https://www.waterboards.ca.gov/centralcoast/water_issues/programs/stormwater/docs/lid/lid_hydromod_charette_index.shtml
	National Hydrography Dataset	The National Hydrography Dataset (NHD), a component of The National Map, represents the water drainage network of the United States with features such as rivers, streams, canals, lakes, ponds, coastline, dams, and streamgages. The NHD is the surface water component on the US Topo map product produced by the USGS. These data, in digital vector geographic information system (GIS) format, are designed to be used in general mapping and in the analysis of surface water systems.		30 m pixel	USGS	https://nhd.usgs.gov/NHD_High_Resolution.html
	Digital elevation model	30-meter resolution DEM of SLO County. Used for slope, aspect, elevation, and other spatial analysis.		30 m pixel	SLO Data Finder (CalPoly)	http://lib.calpoly.edu/gis/
	Slope	Slope raster layer derived from 30-meter resolution DEM.		30 m pixel	SLO Data Finder (CalPoly)	http://lib.calpoly.edu/gis/
	Land use (TELR model input)	NLCD 2011 Landcover Dataset.		30 m pixel	Land coverage from the National Land Cover Database 2011 derived from Landsat Satellite imagery. (Homer, et al., 2011)	http://landcover.usgs.gov/uslandcover.php
	California geologic units and features	Geologic units and structural features in California, including lithology and age.		1:750,000 (original map scale)	USGS Mineral Resources	https://mrdata.usgs.gov/geology/state/state.php?state=CA
	Coastal wetland locations	This dataset distinguishes coastal wetlands from inland wetlands while retaining the attributes from the original National Wetlands Inventory (NWI) data.			Pacific Institute	www.DataBasin.org