This form establishes Stormwater Quality Management Plan (SWQMP) requirements for Development Projects per Sections 67.809 and 67.811 of the County of San Diego Watershed Protection Ordinance (WPO). See *Storm Water Intake Form Instructions* for additional guidance and explanation of terms.

Part 1. Project Information			
Project Name:	Sandia Creek Road Bridge Crossing S	Santa Margarita River	
Record ID (Permit) No(s):	PDS2020-LDGRMJ-30309 / PDS2020	-LDPIIP-60093	
Assessor's Parcel No(s):	102-250-2400		
Street Address (or Intersection):	Project Located in the Vicinity of Fal	llbrook	
City, State, Zip:	Fallbrook, CA 92028		
Part 2. Applicant / Project Proponent Information			
Name:	Sandra Jacobson, Ph.D	Jacobson, Ph.D	
Company:	California Trout		
Street Address:	5425 Oberlin Drive, Suite 209		
City, State, Zip:	San Diego, California 92121		
Phone Number	(858) 414-1518		
Email:	sjacobson@caltrout.org		
Part 3. Required Information for All Development Projects			
(pre-development) impervious surfaces (ft	2. Created or replaced 2) impervious surfaces (ft²)	3. Total disturbed area (acres or ft²)	
38,528	49,559	101,493	
B Check here and provide to the California Constr 2009-0009-DWQ)¹	WDID # (if issued)		

For County Use Only	Reviewed By:	Review Date:
☐ Standard SWQMP	□ PDP SWQMP	☐ Green Streets PDP Exemption SWQMP

Template Date: January 30, 2019

¹ Available at: https://www.waterboards.ca.gov/water issues/programs/stormwater/construction.html

Part 4. Priority Classification & SWQMP Form Selection		
(A) If your project is the following (select one)	B You must complete	
☐ Standard Project	→ Standard SWQMP Form	
\square a. Project is East of the Pacific/Salton Sea Divide		
\square b. None of the PDP criteria below applies		
☐ Priority Development Project (PDP)	→ PDP SWQMP Form	
\square 1. Project is part of an existing PDP, <u>OR</u>		
\square 2. Project does any of the following:		
\square a. Creates or replaces a total of 10,000 ft 2 or more of impervious surface		
□ b. Creates or replaces a combined total of 5,000 ft² or more of impervious surface within one or more of the following uses: (1) parking lots; (2) streets, roads, highways, freeways, and/or driveways; (3) restaurants; and (4) hillsides		
□ c. Creates or replaces a combined total of 5,000 ft² or more of impervious surface within one or more of the following uses: (1) automotive repair shops; and (2) retail gasoline outlets		
☐ d. Discharges directly to an Environmentally Sensitive Area (ESA) AND creates or replaces 2,500 ft² or more of impervious surface		
\square e. Disturbs one or more acres of land (43,560 ft ²) and is expected to generate pollutants post-construction		
☐ f. Is a <u>redevelopment</u> project that creates or replaces 5,000 ft² or more of impervious surface on a site already having at least 10,000 ft² of impervious surface		
☐ Green Streets PDP Exemption ²	→ Green Streets PDP Exemption SWQMP Form	
Part 5. Applicant Signature		
I have reviewed the information in this form, and it is true and correct to the best of my knowledge.		
Applicant / Project Proponent Signature:	Date: 12/16/2021	

- *Upon completion submit this form to the County.*
- *If requested*, attach supporting documentation to justify selections made or exemptions claimed.
- If this is a PDP that is part of a larger existing PDP, you will be required to attach a copy of the existing SWQMP to the newer SWQMP submittal.

² *Green Streets PDP Exemption Projects* are those claiming exemption from PDP classification per WPO Section 67.811(b)(2) because they consist exclusively of *either* 1) development of new sidewalks, bike lanes, and/or trails; *or* 2) improvements to existing roads, sidewalks, bike lanes, and/or trails.



County of San Diego Green Streets PDP Exempt Stormwater Quality Management Plan (SWQMP)

This form must accompany applications for Green Streets PDP-exempt projects such as a) development of new sidewalks, bike lanes, and/or trails, or b) improvements to existing roads, sidewalks, bike lanes, and/or trails as described in Section 1.4.3 of the County BMP Design Manual.

Project Identification		
Project Information Project Name Project Street Address Project City, State, Zip Assessor's Parcel Number Project/Oracle Number	Sandia Creek Drive Bridge Crossing Santa Margarita River Project Located in the Vicinity of Fallbrook, 1.2 miles northeasterly of Deluz Road Fallbrook, CA APN: 102-250-2400 PDS2020-LDGRMJ-30309 PDS2020-LDPIIP-60093	
Applicant Information Applicant Name Applicant Phone Number Applicant Email Address Company Name Company Address	Sandra Jacobson, Ph.D (858) 414-1518 sjacobson@caltrout.org California Trout 5425 Oberlin Drive, Suite 209 San Diego, California 92121	
Engineer's Certification Engineer's Signature PE Number State of Licensure I hereby declare that I am the Engineer in Responsible Charge of design of stormwater BMPs for this project. (This item is only required at final submittal).	Todd A. Graham Reg. No. C71834 California	
Preparation Date:	11/19/2021	

Template Date: 4/11/19

County of San Diego Green Streets PDP Exempt SWQMP

Project Description

Describe project intent, existing/proposed drainage patterns, net increase in impervious area, and green street performance strategies.

If the project consists entirely of "routine maintenance" activities as outlined in Table 1-2 of the County BMPDM (i.e. road resurfacing, utility trenching, etc), clearly state so and provide a thorough description of these activities. Routine maintenance projects are not required to complete the rest of this SWQMP form.

The project consists of the replacement bridge located near the Santa Margarita River Hiking Trail, located in the County of San Diego, California.

The existing fish passage and approach road are located just north of Fallbrook near the intersection of Sandia Creek Road and De Luz road. Stormwater runoff generally sheet flows overland on either side of the road (Refer to Exhibit A1 for a graphical depiction of the existing drainage patterns and drainage areas). The existing fish passage is not only an impediment for steelhead, but also a hazardous pedestrian and vehicular crossing during significant rain events. The proposed fish passage barrier removal and crossing replacement project will provide multiple benefits;

- 1. Provide juvenile and adult steelhead access to 12 miles of upstream habitat, including high quality habitat in the upper watershed near Temecula.
- 2. Provide improved habitat through riparian restoration at the project site. This will provide cover and resting areas for steelhead migrating upstream to spawning and rearing sites that are undergoing restoration in preparation for their passage.
- Bridge modification of the existing fish passage can reduce adverse impacts of periodic overtopping of the existing culvert crossing during storms that block access to the homes of local residents.

The proposed bridge will be a three-span bridge that will join the existing Sandia Creek Road to the south and Rock Mountain Drive to the north and it will replace the existing fish passage (bridge). It is anticipated that the proposed bridge will be approximately 574' long and 40' wide. Runoff will flow from the centerline of the bridge in opposing directions to the bridge decks where it will travel north and south towards Sandia Creek Road and Rock Mountain Drive. Proposed development will maintain existing drainage patterns, as much as feasible, and runoff from the road will continue to be split to sheet flow overland on both sides of the road. Since this project consists of a replacement bridge resulting in realignment of the existing road as opposed to proposing an entirely new road, this project qualifies as a Green Streets project.

Runoff from drainage management areas (DMAs) 1, 2, 3, 9, and 12 will be directed to the vegetated swale (BMP-1). See Attachment 2B, Exhibit A2 for all drainage patterns, flow directions, and point of discharge. DMA 1, 2, and 12 mimics the existing drainage pattern flowing into the proposed location of the vegetated swale. Runoff from DMA 3 flows to the bridge deck and is directed south towards Sandia Creek Road where it also discharges into the proposed vegetated swale. DMA 9 consists of new landscape area that will flow into the proposed vegetated swale. The swale was selected for several reasons: Landscape maintenance is inherent with private property ownership; small volume of required treatment rates; medium removal efficiencies for secondary pollutants of concern associated with the propose project; etc. Additionally, the San Diego County BMP Design Manual identifies Vegetated Swales as a BMP for consideration. Swales incorporated into the project will be constructed using the design criteria and guidelines listed in the Handbook's standard drawing, FT-1.

The sizing requirements included in Appendix K of the San Diego County BMP Design Manual (Guidance on Green Infrastructure) were followed. The total net increase area for this project was calculated to be 11,082 sq-ft which is the minimum required treatment area per Appendix K, Green streets performance standard. The actual impervious area draining into vegetated swale was calculated to be 21,248 sq-ft. Therefore, the greater of both (21,248 sq-ft) was used to calculate the required water quality flow rate of the proposed flow-thru treatment BMP (0.082 cfs). Since the provided treatment is greater than the net increase in impervious area (required treatment), the BMP design complies with Green Streets Performance Standard. The proposed vegetated swale will provide a flow-thru treatment of 0.946 cfs which also exceeds the required treatment volume (see calculations included in Attachment 2).

Template Date: 4/11/19 Page | 2

County of San Diego Green Streets PDP Exempt SWQMP

Page | 3

County of San Diego Green Streets PDP Exempt SWQMP

Best Management Practices	
Minimize Impervious Area Project considered use of pervious pavements and constructs all impervious features to the minimum widths necessary.	☐ Yes ☐ No ☑ Not Applicable
Conserve Natural Areas Project preserves soils, vegetation, waterbodies, existing trees, open space, drainage patterns, and drainage features to the maximum extent practicable.	☑ Yes☐ No☐ Not Applicable
Construction BMPs Project implements all relevant construction BMPs as depicted in Attachment 1.	☑ Yes☐ No☐ Not Applicable
Storm Drain Stenciling Project stencils all new storm drain inlets as depicted in Attachment 1.	☐ Yes ☐ No ☑ Not Applicable
Landscaping Project uses only native and/or drought tolerant species in the landscape palette as depicted in Attachment 1.	☑ Yes☐ No☐ Not Applicable
Trash Storage Project designs all trash storage areas to prevent wind and water-based dispersal of trash as depicted in Attachment 1.	☐ Yes ☐ No ☑ Not Applicable
Green Streets BMPs Project implements Green Streets BMPs as depicted in Attachment 2.	☑ Yes☐ No☐ Not Applicable
Additional Information Provide a brief explanation for all "No" answers above.	

Template Date: 4/11/19 Page | 4

ATTACHMENT 1A PLANS

Seattle, Washington 98101 (206) 382-0600 Fax (206) 382-0500

INDEX OF SHEETS



CHECKED: TG DATE: 2021-10-08 DRAWING NO.

SHEET NO.

01 of **54**

TITLE SHEET

PROJECT STANDARD PLANS

CALTRANS STANDARD PLANS (CSP), 2018

ROAD WORK:

A3A, A3B, A3C ABBREVIATIONS

A10A, A10B, A10C, A10D, A10E LEGEND - LINES AND SYMBOLS

A20A, A20B PAVEMENT MARKERS & TRAFFIC LINES - TYPICAL DETAILS A20D PAVEMENT MARKERS & TRAFFIC LINES — TYPICAL DETAILS

A24A PAVEMENT MARKINGS - ARROWS

A24E PAVEMENT MARKINGS, WORDS, LIMIT AND YIELD LINES

A73B MARKERS

A73C DELINEATORS, CHANNELIZERS AND BARRICADES A77Q1 TYPE 12A MBGF STRUCTURAL APPROACH A77Q4 TYPE 12AA MBGF STRUCTURAL DEPARTURE

MIDWEST GUARDRAIL SYSTEM WOOD POST AND WOOD BLOCK DETAILS A77N1

A78A THRIE BEAM BARRIER STANDARD BARRIER RAILING SECTION (WOOD POST WITH WOOD BLOCK)

MIDWEST GUARDRAIL SYSTEM STANDARD HARDWARE

A78C1 THRIE BEAM BARRIER STANDARD HARDWARE DETAILS A78C2 THRIE BEAM BARRIER POST AND BLOCK DETAILS

A78E3 DOUBLE THRIE BEAM BARRIER - CRASH CUSHION END TREATMENT

BRIDGE:

A77M1

B9-1 STRUCTURE APPROACH SLAB TYPE N (30)

PERMANENT WATER POLLUTION CONTROL BMP'S

1. SITE DESIGN BMP'S VEGETATED SWALE

LEGEND

SYMBOL	DESCRIPTION	RSD
— – —	CENTERLINE	
	SAWCUT LINE	
259.0	PROPOSED ELEV.	
	3" ASPHALT CONCRETE TYPE B	
	PLANE AC PAVEMENT	
	EXIST. RIGHT-OF-WAY	
	EXIST. AC DIKE	
(259.0)	EXISTING GROUND SPOT ELEV.	

TYPICAL CONSTRUCTION NOTES

CONSTRUCTION NOTES ARE TO RETAIN THE SAME NOTE NUMBER FOR THE SAME CONSTRUCTION NOTE THROUGHOUT THE ENTIRE SET OF PLANS.

SURVEY CONTROL

BENCHMARK

SAN DIEGO SURVEY CONTROL # SMR 1 ELEV = 343.433'DATUM: NAVD 88 3-1/4" BRASS DISK WITH A DRILL HOLE AND EPOXY, MARKED "SAN DIEGO COUNTY SURVEYOR, SURVEY CONTROL, 2014, SMR1" ON THE SOUTHERLY SIDE OF ARIZONA CROSSING ON THE EASTERLY SIDE OF SANDIA CREEK ROAD, IN THE NORTHBOUND LANE, APPROXIMATELY 42.5 FEET SOUTHWESTERLY FROM ABUTMENT OF ARIZONA CROSSING. MONUMENT IS APPROXIMATELY 460 FEET SOUTHWESTERLY OF ROCK MOUNTAIN DRIVE.

REMARKS

THESE PLANS ARE BASED ON US CUSTOMARY (ENGLISH) UNITS. ALL DISTANCES ARE EXPRESSED IN FEET (FT) AND INCHES (IN) UNLESS OTHERWISE NOTED

HORIZONTAL CONTROL

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE NAD 83, ZONE 6, GRID BEARING BETWEEN STATION "SDGPS-02" AND STATION "103WCCS1", (BOTH HAVING A CALIFORNIA COORDINATE VALUE OF FIRST ORDER ACCURACY OR BETTER) AS SAID STATIONS ARE PUBLISHED IN THE SAN DIEGO COUNTY HORIZONTAL CONTROL BOOK, BEING NORTH 61°14'15.2" WEST.

TO BE MODIFIED BY SURVEYOR

 $\lambda = 0^{\circ}23'12.48''$ COMBINATION FACTOR = 0.99991830GROUND DISTANCE = GRID DISTANCE / COMBINATION FACTOR CONVERSION FACTOR: 1 US SURVEY FOOT = 1200/3937 METERS

CONTRUCTION PHASING

CONSTRUCTION PHASING SHALL OCCUR AS FOLLOWS:

- NEW BRIDGE SHALL BE CONSTRUCTED PRIOR TO DEMOLITION OF EXISTING BRIDGE.
- MAINTAIN ACCESS TO EXISTING BRIDGE DURING CONSTRUCTION.
- MAINTAIN ACCESS TO HIKING TRAIL PARKING AREA AT ALL TIMES.

NOTES

- 1. ALL CONSTRUCTION ACTIVITIES SHALL OCCUR OUTSIDE BREEDING SEASON FOR POTENTIALLY-OCCURRING THREATENED/ENDANGERED SPECIES, SUCH AS VIREO, FLYCATCHERS, ARROYO TOAD, AND ARROYO CHUB. PROPER PERMITS SHALL BE OBTAINED FROM THE CALIFORNIA DEPARTMENT OF FISH & WILDLIFE, THE COUNTY OF SAN DIEGO, THE REGIONAL WATER QUALITY CONTROL BOARD, AND THE ARMY CORPS OF ENGINEERS.
- 2. IN THE EVENT EXISTING CONDITIONS DIFFER FROM WHAT IS SHOWN ON THE PROJECT DOCUMENTS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.

Seattle, Washington 98101 (206) 382-0600 Fax (206) 382-0500

NO.	DATE	BY	REVISION

SANDIA CREEK ROAD BRIDGE REPLACEMENT

GENERAL NOTES AND REFERENCES

DRAWN:	DYU	PROJECT NO.: 2000118
DESIGN:	RO	SCALE: AS SHOWN
CHECKED:	TG	DATE: 2021-10-08
DRAWING N	10.	C2

SHEET NO.

02 of **54**