Pursuant to Governor Newsom's Executive Order N-29-20, members of the Resources & Infrastructure Standing Committee and staff will participate in this meeting via a teleconference. Members of the public can submit written comments to the Board Secretary at boardcomment@cambriacsd.org.

RESOURCES & INFRASTRUCTURE COMMITTEE

REGULAR MEETING
Monday, July 12, 2021 - 2:00 PM

AGENDA

Please click the link below to join the webinar:
https://zoom.us/j/95758017966?pwd=dDlQaHhHT1FJTTRBTE9CbERvdmpmZz09
Passcode: 327747
Or iPhone one-tap:
US: +16699006833,,95758017966# or +12532158782,,95758017966#
Or Telephone:
Dial(for higher quality, dial a number based on your current location):
US: +1 669 900 6833 or +1 253 215 8782 or +1 346 248 7799 or +1 301 715 8592 or +1 312 626 6799 or +1 929 205 6099
Webinar ID: 957 5801 7966
International numbers available: https://zoom.us/u/acOBVUrWH7

Copies of the staff reports or other documentation relating to each item of business referred to on the agenda are on file in the Office of the Board Secretary, available for public inspection during District business hours. The agenda and agenda packets are also available on the CCSD website at www.cambriacsd.org. Please call 805-927-6223 if you need any assistance. If requested, the agenda and supporting documents shall be made available in alternative formats to persons with a disability. The Committee Chairperson will answer any questions regarding the agenda.

A. CALL TO ORDER

B. ESTABLISH QUORUM

C. CHAIRMAN'S REPORT

D. AD HOC COMMITTEE REPORTS

1. PUBLIC COMMENT

Members of the public may now address the Committee on any item of interest within the jurisdiction of the Committee but not on its agenda

today. Future agenda items can be suggested at this time. In compliance with the Brown Act, the Committee cannot discuss or act on items not on the agenda. Each speaker has up to three minutes.

2. CONSENT AGENDA

A. Consideration to Approve the May 4, 2021 Special Meeting Minutes and May 10, 2021 Regular Meeting Minutes

3. REGULAR BUSINESS

A. Discussion and Consideration of Revisions to the Ad Hoc Committee Report on Water Supply Alternatives to be forwarded to the Board

B. Review and Update R & I Ad-Hoc Committee Assignments

C. Discussion and Consideration of Proposal and Cost Estimate for the Instream Flow Study Task 1 and Optional Task 5, and Approve Recommendation to Refer Project and Necessary Budget Adjustment to the Finance Committee

4. FUTURE AGENDA ITEMS

5. ADJOURN

NOTICE OF SPECIAL MEETING
CAMBRIA COMMUNITY SERVICES DISTRICT
RESOURCES & INFRASTRUCTURE COMMITTEE
Tuesday, May 4, 2021 2:00 PM

1. CALL TO ORDER

Chairperson Dean called the meeting to order at 2:05 p.m.

2. ESTABLISH QUORUM

A quorum was established.

Committee members present via Zoom: Karen Dean, David Pierson, James Webb, Brad Fowles, and Michael Thomas. (Steve Siebhuhr arrived late).

Staff present: John Weigold, Ossana Terterian, Pamela Duffield & Ray Dienzo.

3. CHAIRMAN'S REPORT

Chairman Dean reported that the Stuart Street water project was selected by the state for funding.

4. PUBLIC COMMENT ON AGENDA ITEMS

No public comment prior to presentation. Public was started at 2:04 after the presentation.

5. REGULAR BUSINESS

A. Discuss and Consider the Supply/Demand Model Assumptions and the Six Stages of Drought for the Urban Water Management Plan (UWMP) and Receive Progress of the Remainder of the UWMP

B. Receive an Update from the Utilities Manager on the Progress of the SST Contract and Funding

An Ad HOC Committee was set up to help Ray Dienzo define the stages of drought. Karen Dean, Michael Thomas & David Pierson.

6. FUTURE AGENDA ITEMS

Chairman Dean asked for any future agenda items.

7. ADJOURN

Chairman Dean adjourned the meeting at 2;40 p.m.

RESOURCES & INFRASTRUCTURE COMMITTEE

REGULAR MEETING

Monday, May 10, 2021 - 2:00 PM

MINUTES

A. CALL TO ORDER

Chairperson Dean called the meeting to order at 2:02 p.m.

B. ESTABLISH QUORUM

A quorum was established.

Committee members present via Zoom: Karen Dean, David Pierson, James Webb, Brad Fowles, Steve Siebuhr, and Michael Thomas.

Staff present: John Weigold, Ossana Terterian, Pamela Duffield & Ray Dienzo.

C. CHAIRMAN'S REPORT

Chairman Dean reported she will be meeting with Ray Dienzo about the UWMP

1. PUBLIC COMMENT

Crosby Swartz spoke.

2. CONSENT AGENDA

A. Consideration to Approve the April 19, 2021 Regular Meeting Minutes

Committee member: David Pierson motioned to approve the minutes.

Committee member: James Webb seconded the motion.

The motion was approved 5-ayes (Pierson, Webb, Fowles, Siebuhr, Thomas), 0-Nays, 0-Abstain

3. REGULAR BUSINESS

A. Discuss and Consider the Updated CIP List

Motion to; Forward the CIP list back to the Finance Committee;
David Pierson motioned.
Jim Webb Second,
4 yes & one abstain

Receive Update on CDP Process

4. FUTURE AGENDA ITEMS

Chairman Dean asked for any future agenda items.

Future agenda item by David Pearson to meet with finance committee on the CIP. David Pierson proposed to skip the June Meeting. This was approved.

5. ADJOURN

Chairman Dean adjourned the meeting at 3:03 p.m.

RESOURCES & INFRASTRUCTURE STANDING COMMITTEE
AD HOC COMMITTEES

WATER DEMAND MANAGEMENT AND OFFSET MEASURES

Committee Members: Brad Fowles and Karen Dean

Assignment: Evaluate the effectiveness of CCSD's water demand management and offset measures.

Date Formation Approved: March 19, 2019 – R & I Committee Meeting

Date Committee Closed: This ad hoc was tabled after final draft report was submitted October 11, 2019, pending the completion of updates to the retrofit program data.

REVIEW THE CURRENT UWMP

Committee Members: Karen Dean, Steve Siebuhr, and David Pierson

Assignment: Review the current Urban Water Management Plan (UWMP) and recommend areas for updating the plan.

Date Formation Approved: October 22, 2019 – R & I Committee Meeting

This ad hoc committee assignment is expanded to include work on Water Shortage Contingency Plan and Six Stages if Drought for current UWMP.

WATER CONSERVATION AND GRAY WATER USE

Committee Members: Karen Dean, Brad Fowles, and James Webb

Assignment: Investigate potential conservation and retrofit measures, as well as gray water use.

Date Formation Approved: November 19, 2019 – R & I Committee Meeting

The scope of this ad hoc is expanded to include the Objective "Identify public water conservation measures and best practices and bring recommendations to the Board for sharing with the public", this objective is for the Board goal "Achieve a Balanced Policy for Growth and Resources".

PRODUCE INFORMATIONAL VIDEOS ON WATER METER READING & OTHER TOPICS

Committee Member: Brad Fowles

Assignment: To produce informational videos on water meter reading and other topics

Date Formation Approved: February 10, 2020 – R & I Committee Meeting

This Ad hoc is on hold during COVID-19 pandemic

RESEARCH OFFSITE WATER STORAGE POSSIBILITIES

Committee Members: David Pierson, James Webb and Michael Thomas

Assignment: To research offsite water storage possibilities.

Date Formation Approved: March 9, 2020 – R & I Committee Meeting

The scope of this ad hoc is expanded to include the Objective "Identify additional sources of water and share the results with the board", this objective is for the Board goal "Achieve a Balanced Policy for Growth and Resources ".

JOINT RESOURCES & INFRASTRUCTURE/FINANCE AD HOC COMMITTEE

Committee Members: David Pierson and Karen Dean (Ex-Officio)

Assignment: Assist Staff in prioritizing projects both SST and otherwise (i.e. water meters). Grouping projects synergistically. Seeking financing for SST and other projects as prioritized though grants and loans. Report back to committees on best methods to proceed on projects and their financing with monthly updates.

Date Formation Approved: June 23, 2020 – R & I Committee Meeting

DISTRICT'S ASSET MANAGEMENT PROGRAM

Committee Members: Brad Fowles and Steve Siebuhr

Assignment: To create an inventory of District assets

Date Formation Approved: October 13, 2020 – R & I Committee Meeting

On hold until asset data is updated into Tyler Incode.

CAMBRIA COMMUNITY SERVICES DISTRICT

TO: Resources & Infrastructure Committee AGENDA NO. **3.C.**

FROM: John F. Weigold IV, General Manager
Ray Dienzo, Utilities Department Manager/District Engineer

Meeting Date: July 12, 2021	Subject:	Discussion and Consideration of Proposal and Cost Estimate for the Instream Flow Study Task 1 and Optional Task 5, and Approve Recommendation to Refer Project and Necessary Budget Adjustment to the Finance Committee

RECOMMENDATION:
Staff recommends the Resources & Infrastructure (R&I) Committee discuss and consider proposal and cost estimate for the Instream Flow Study (IFS) Task 1 and Optional Task 5, and approve staff's recommendation to refer the project and necessary budget adjustment to the Finance Committee

DISCUSSION:
The Board approved the request for proposal (RFP) for this IFS on April 15, 2021. The RFP was advertised, and we received one qualified proposal from Stillwater Sciences. Staff proposes authorization of $103,250 in expenditures to Stillwater Sciences to perform the IFS Task 1 and Optional Task 5.

Task 1 is a larger scale, long-term study of the Lower San Simeon Creek watershed, which will provide a collaborative work plan to guide the collection and analysis of high-quality science that is robust, credible, transparent, and relevant, as per the CDFW's Instream Flow Program. Stillwater Sciences provided the District with a solid proposal and work plan that will address the requested elements:

- Development of an Instream Flow Study Plan for the San Simeon Creek that meets the standards of the CDFW to identify instream flow criteria.
- Mobilization of a Technical Advisory Committee (TAC) which will ideally consist of qualified staff from California State Parks, California Coastal Commission, CDFW, County of San Luis Obispo, and the Upper Salinas Las Tablas Resource Conservation District.
- Assistance and guidance to District staff in researching and making application to applicable grant and financing opportunities to supplement project budget.
- Preparation of a technical report summarizing the results of the Instream Flow Study (IFS) that will include a monitoring plan for long-term sustainable environmental stewardship.

The tasks under Optional Task 5 were included to address questions and studies that may arise out of our coordination with the resource agencies that are not included in the project scope. This would cover extra coordination, additional data collection, and analysis that need to be addressed without the added contract delays. Although these assessments or studies have yet to be identified, they could include (but are not limited to):

- Fish passage assessments, especially impact of proposed operation flows and water depths during outmigration of smolt,
- Lagoon water level or water quality data collection and/or analysis, especially the relationship between proposed pumping, surface water flows, and resultant water level or water quality in San Simeon lagoon, and/or
- Special status species assessments for other target species, such as tidewater goby or California red-legged frog.

The results of the IFS will provide the District and its partner resource agencies the information necessary to manage instream flows so as to maintain healthy conditions for coastal resources dependent on the watershed. The proposal (Attachment 1) discusses the work plan and schedule. The target start date is August 2021 and projected completion is October 2022.

The Fiscal Year 2021/22 budget authorized $75,000 for the Instream Flow Study. Staff recommends approving the Task 1 and Optional Task 5 Proposal from Stillwater Sciences, refer this project and the necessary budget adjustment of $28,250 to the Finance Committee.

Attachments:
1- Proposal Instream Flow Study Plan by Stillwater Sciences
2- Instream Flow Study Fee Estimates and Rates by Stillwater Sciences

PROPOSAL

Instream Flow Study Plan

Prepared for

Cambria Community Services District
Ray Dienzo, Utilities Department Manager/District Engineer
5500 Heath Lane
Cambria, CA 93428

June 1, 2021

Stillwater Sciences
www.stillwatersci.com

Stillwater Sciences

895 Napa Avenue, Suite B-3, Morro Bay, CA 93442
phone 805.570.7499

June 1, 2021

Ray Dienzo
Utilities Department Manager/District Engineer
Cambria Community Services District
5500 Heath Lane
Cambria, CA 93428

Re: Lower San Simeon Creek Watershed – Instream Flow Study Plan
Proposal

Dear Mr. Dienzo,

The development of an instream flow study plan to inform the operations of the Sustainable Water Facility (SWF) necessitates a team that has a strong background in (a) instream flow study development and implementation; (b) groundwater and hydrologic assessments; (c) special status species life history needs and aquatic ecology; and (d) experience with Coastal Development Permits (CDPs). Given our history on this project and our extensive experience with instream flow studies, we believe that Stillwater Sciences' team is uniquely qualified to efficiently conduct and complete the technical analyses and assessments that will meet the data needs of the permitting agencies for the SWF. We are pleased to present the enclosed proposal (in addition to Stillwater Sciences' SOQ, provided under separate cover). Specifically, the advantages of our team include:

Extensive and broad expertise in developing and conducting instream flow studies to be able to apply lessons learned from other California watersheds. Stillwater Sciences (Stillwater) has conducted over a dozen instream flow studies in California in similar-sized watersheds to San Simeon Creek where ecological needs of steelhead and other species were weighed against water demands to develop balanced seasonal stream flow requirements. We have developed instream flow recommendations to support permitting needs for a diverse set of projects ranging from large hydroelectric dams operated by utility and irrigation districts to small water storage projects for non-profit groups. Our proposed team has repeatedly been acknowledged for their robust data collection efforts and targeted analyses that help build trust and credibility with stakeholders and lead to science-based and practical solutions.

Regional ecological experience and extensive San Simeon Creek background understanding to keep costs down and data collection focused. Stillwater Sciences has extensive local experience assessing flows to support ecological needs of steelhead in the Santa Maria River, Pismo Creek, San Luis Obispo Creek, and San Gregorio Creek. Our local fisheries staff have a thorough understanding of steelhead and tidewater goby ecology, life history, and habitat needs that allows us to identify conditions required to support essential habitat functions and determine the seasonal timing (e.g., summer rearing habitat needs, migration flows, adult spawning, etc.) when those needs are most critical. This type of life-stage-specific approach is critical to ensuring flows are released when most important for the target species. We understand the opportunities and constraints of the instream flow study on San Simeon Creek, having previously assessed instream flows in San Simeon Creek and having prepared the Santa Rosa Creek Watershed Management Plan. Furthermore, we have partnered with Gus Yates from Todd Groundwater Inc., who has detailed knowledge of the San Simeon Creek hydrologic system and groundwater aquifer systems, which allows us to integrate a

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seasoned group of experts on San Simeon Creek that can apply our existing knowledge to meet the aggressive timeline outlined in the RFP. Stillwater's key team members are locally based in Morro Bay, which allows us to quickly mobilize to survey critical stream flows that often only occur during short-term rain-driven events.

Established trust and respect from central coast stakeholders to meet aggressive schedule and mobilize TAC. Our work on the central coast over the past two decades has allowed us to develop close relationships with several state and local resource agencies, municipalities, and local water agencies, including California State Parks, Upper Salinas-Las Tablas Resource Conservation District, Cambria Greenspace, and Creek Lands Conservancy. We have built our reputation on using the best science to inform natural resource management. The trust that we have built with local resource agency representatives will allow us to effectively and efficiently support the CCSD and navigate the necessary next steps to support future pumping from the San Simeon Creek aquifer, including mobilizing a Technical Advisory Committee to support the Instream Flow Plan development.

The combined advantage of these qualifications gives our team the ability to effectively engage with resource agencies and apply lessons learned to develop innovative approaches for assessing instream flow conditions that specifically address project needs. Our team can provide the expertise required to address the complex needs of the instream flow study, which will inform project operations for the Sustainable Water Facility. We are passionate and enthusiastic for the opportunity to work with the CCSD to support the project goals and permitting needs.

Sincerely,

Ethan Bell
Senior Fisheries Biologist
Proposed Contract Manager
Designated contact person for
remainder of selection process
ethan@stillwatersci.com

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Sapna Khandwala
President and CEO
Authorized Officer
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Project Understanding and Approach

The Cambria Community Services District (CCSD) constructed the Sustainable Water Facility (SWF) in 2014 under an Emergency Coastal Development Permit (E-CDP) to ensure the CCSD could maintain water supply for the community. As a condition of the E-CDP, the CCSD is required to obtain a follow-up regular Coastal Development Permit (CDP). It is anticipated that the CDP obtained for the SWF will establish several conditions for the continued use of the facility, including water resource extractions and conditions associated with the Adaptive Management Program, among other conditions.

Operation of the SWF allows the CCSD to meet the water needs of approximately 3,782 residential and 228 non-residential customers. All of Cambria's potable water is supplied from three ground water aquifer wells located along lower San Simeon Creek and two groundwater wells located along lower Santa Rosa Creek. The aquifers associated with these wells have limited storage capacity but generally recharge quickly during each rainy season. Current annual production of these five wells is below the CCSD's licensed amount to extract water.

The CCSD has been in the process of obtaining a CDP for the continued operation of the SWF and has prepared environmental documents to assess project effects on environmental resources in San Simeon Creek. Modifications to the SWF proposed as mitigation measures include: (a) repurposing existing evaporation ponds to a potable water supply storage basin, which could then be used as a water supply source during the dry season; and (b) extending the lagoon water supply pipeline to a new discharge point further south and onto the San Simeon Creek bank to more efficiently deliver surface water into San Simeon Creek to maintain water levels at San Simeon Creek Lagoon. While project operation and proposed mitigation measures are anticipated to benefit environmental resources in San Simeon Creek, more detailed analysis has been requested by resource agencies involved in the permitting processes. Of specific concern is the lack of a comprehensive instream flow study. Additionally, concern about the effects of stream flow on federally listed steelhead and designated critical habitat for steelhead has been identified as a data need for project effects analysis.

Based on our project understanding, we anticipate that the key issue to address in the instream flow study is rearing habitat for steelhead in lower San Simeon Creek during the low flow season (summer and fall). There are many approaches to assess instream flows. We believe that assessing minimum flow requirements for steelhead would be best achieved with a Habitat Criteria Mapping method. However, in the regulatory process that CCSD is navigating, we recommend using a method that will produce results that will be undeniably accepted and supported by the State (Coastal Commission and CDFW), and the Instream Flow Incremental Methodology (IFIM; as described below) meets this standard.

Project Approach

With nearly two decades of experience working in central coast watersheds and nearly 10 years of experience in San Simeon and Santa Rosa Creek, Stillwater brings a solid understanding of the needs for evaluating the potential effects of the SWF on natural resources. We combine our regional knowledge with our extensive experience working closely with resource agencies and diverse stakeholders to assess instream flows in numerous watersheds throughout California. Additionally, Stillwater Sciences has local fisheries biologists with expertise in steelhead and tidewater goby ecology who understand the timing of critical life history needs for these federally listed species. Finally, to increase the overall expertise of our multidisciplinary team, we have partnered with Gus Yates, who has thoroughly studied groundwater conditions in and around San Simeon Creek for over two decades.

Our team combines a thorough understanding of the variability in hydrology and geology that shape the ecology of San Simeon Creek. Our local staff with fisheries expertise have extensive knowledge of steelhead and tidewater goby ecology, life history, and habitat needs, allowing us to identify essential habitat functions and determine the seasonal timing (e.g., summer rearing habitat needs, migration flows, adult spawning, etc.) when those needs are most critical, and the conditions required to support those essential habitat functions. Our familiarity with existing instream flow study procedures and local expert staff allows our team to respond quickly to project needs and assess habitat conditions during key flow events that, while sometimes short in duration, are likely to provide key insight required for obtaining robust data to fully assess instream flows as they relate to ecological needs in San Simeon Creek.

Work Plan Overview

Project coordination and communication

Common elements of our team's approach for all tasks will be to utilize the extensive information available for the San Simeon Creek watershed and from experts recruited for the Technical Advisory Committee (TAC). Our team's subject matter experts have worked closely with several local stakeholders and regional experts on instream flow and groundwater-surface water interconnections. We will establish an appropriate TAC early on in this project to help efficiently facilitate meetings with resource agencies. Outreach with the TAC and resource agencies early in the study planning phase ensures that the project properly addresses the key questions and concerns surrounding the continued operation of the SWF. Leading this project from our nearby office will facilitate clear and efficient project coordination and TAC leadership.

Review and analyze existing data

We are familiar with the extensive data that has already been collected and summarized in several reports prepared to support permitting the SWF. All available data will be used to the extent possible to inform study plan development. Furthermore, Stillwater has already compiled

several aquatic habitat assessment documents for San Simeon Creek from our previous work developing a watershed management plan for the creek[1].

Building upon existing work, we will process stream flow gage data in a manner that allows for clear understanding of watershed conditions such as the frequency and duration of stream flow levels during key periods. We will review additional background reports to understand the relationship between groundwater and surface water interactions in lower San Simeon Creek and will identify critical data gaps, if any are present.

The information obtained from this review and analysis will help identify appropriate study reaches for the instream flow study and critical species and life stages to include in the instream flow study. Stream flow analysis will be used to identify calibration flows for the instream flow study (e.g., what are the stream flows we should be assessing during the instream flow study). These flows will be based on unimpaired hydrology and impaired hydrology for San Simeon Creek. Groundwater modeling review will inform how groundwater extraction and recharge under the proposed project may influence stream flow conditions during critical times for key aquatic resources.

Study plan development and implementation

Multiple agencies have cited the lack of a comprehensive instream flow study on San Simeon Creek as a key information gap in assessing project operations on critical resources that may be affected by the proposed project. Our team will work closely with resource agencies and the TAC to develop an instream flow study that specifically addresses this key data gap. We understand the importance of providing resource agencies with well-defined operational constraints of the project to identify clear goals in the study plan. We anticipate that agencies will require an instream flow study using the CDFW Instream Flow Department's standardized approach (IFIM) to assess flow conditions in lower San Simeon Creek. Although we have used various methods for assessing instream flow conditions throughout California, the State (CDFW) has always pushed for use of the IFIM on central California coastal streams, which is consistent with the Coastal Commission written comments on this project.

A successful IFIM study will include appropriate calibration flows, understanding of local ecology, and life history needs of species assessed under the study. Our understanding of flows in San Simeon Creek and ecological needs that are being assessed will be applied during our discussion with resource agencies to ensure the most relevant and appropriate methods and criteria are included in the study. We will work closely with the TAC and resource agencies to identify appropriate study reaches, transect locations, calibration flows, species and life stages to assess, and habitat suitability criteria for use in the IFIM study. We anticipate the focal species that will be considered for inclusion in the IFIM study will include all life stages of steelhead that occur in freshwater. While tidewater goby and California red-legged frog also occur in the

[1] Stillwater Sciences began work on the San Simeon Creek watershed management plan in 2014 under a California Department of Fish and Wildlife grant, but funding was cut before the project was completed.

watershed, the IFIM is not generally used to assess habitat conditions for these species and may only provide minimal information on their habitat conditions.

Instream flow study report

Results from the IFIM study will be used to provide robust estimates of life-stage-specific (e.g., fry, juvenile, spawning, etc.) habitat areas available within lower San Simeon Creek under a range of modeled flow conditions. Furthermore, the results from the instream flow study will be supplemented with existing data regarding watershed hydrology, groundwater dynamics, and water balance in San Simeon Creek to inform permitting conditions (groundwater pumping rates and timing as well as groundwater recharge and stream discharge flows and lagoon surface water maintenance flows). Result of the instream flow study will inform permitting conditions and mitigation measures for operation of the SWF. The report will also include a long-term monitoring plan (e.g., surface flow monitoring, lagoon water quality, etc.) that will evaluate the status of habitat conditions within the study area and compare them to background conditions.

Challenges and Potential Solutions

Our team's extensive experience studying the ecology, hydrology, and geomorphology of San Simeon Creek, as well as conducting instream flow studies in regional streams for regulatory compliance on other water resource projects, provides us with a unique understanding of both the scientific and regulatory challenges that this project may face. A key approach that serves us across challenges is stakeholder outreach and providing opportunities for stakeholders to voice their concerns, exchange information, and have questions answered. We believe that a collaborative decision-making process that is led by rigorous science provides the opportunity to establish consensus on key resource management issues and avoid positional bargaining or speculation about project impacts and outcomes. Our focus is on discussing solutions to address concerns, as well as providing clarifications and explanations to interpret the scientific results. We have been commended for our open and intelligent communication style and will bring this approach to this project. We anticipate challenges for this project could include:

CHALLENGE #1

Keeping the instream flow study focused on what is needed to permit SWF operations.

The State regulators often focus on identifying the flows that provide *maximum* usable habitat for steelhead. In streams such as San Simeon Creek, there is no mechanism to increase surface flows beyond intrinsically low levels. Therefore, it is critical to work closely with resource agencies and the TAC to focus the evaluation on *minimum* flow requirements to support steelhead, consistent with permitting requirements. Stillwater will help frame the issues in the context of the project's operational constraints *and* opportunities to help the TAC and resource agencies work towards a practical solution that can achieve multiple benefits.

CHALLENGE #2

Normal year hydrograph typically has little to no flow in lower San Simeon Creek by late summer and current drought conditions are likely to further limit available stream flows.

Surface flows in lower San Simeon Creek typically cease flowing during the late summer when groundwater levels have decreased and water demand is high. This disconnection of the channel results in very constrained rearing habitat for steelhead under natural conditions. In order to provide practical and actionable results of the instream flow study, we will evaluate the rearing requirements for steelhead in the context of the natural life history and rearing distribution of steelhead in the watershed. Furthermore, the low flow conditions may lead to shorter duration of suitable calibration flows needed for the IFIM model, requiring studies to be conducted on short notice in order to capitalize on limited flow events that may be restricted to brief rainfall events in the basin. The IFIM requires surveys during specific target stream flow conditions, which makes Stillwater's local staff with expertise in instream flow studies a critical component to optimize performance and precision of the IFIM model by their ability to mobilize quickly and survey conditions during short duration storm-driven stream flow events.

CHALLENGE #3

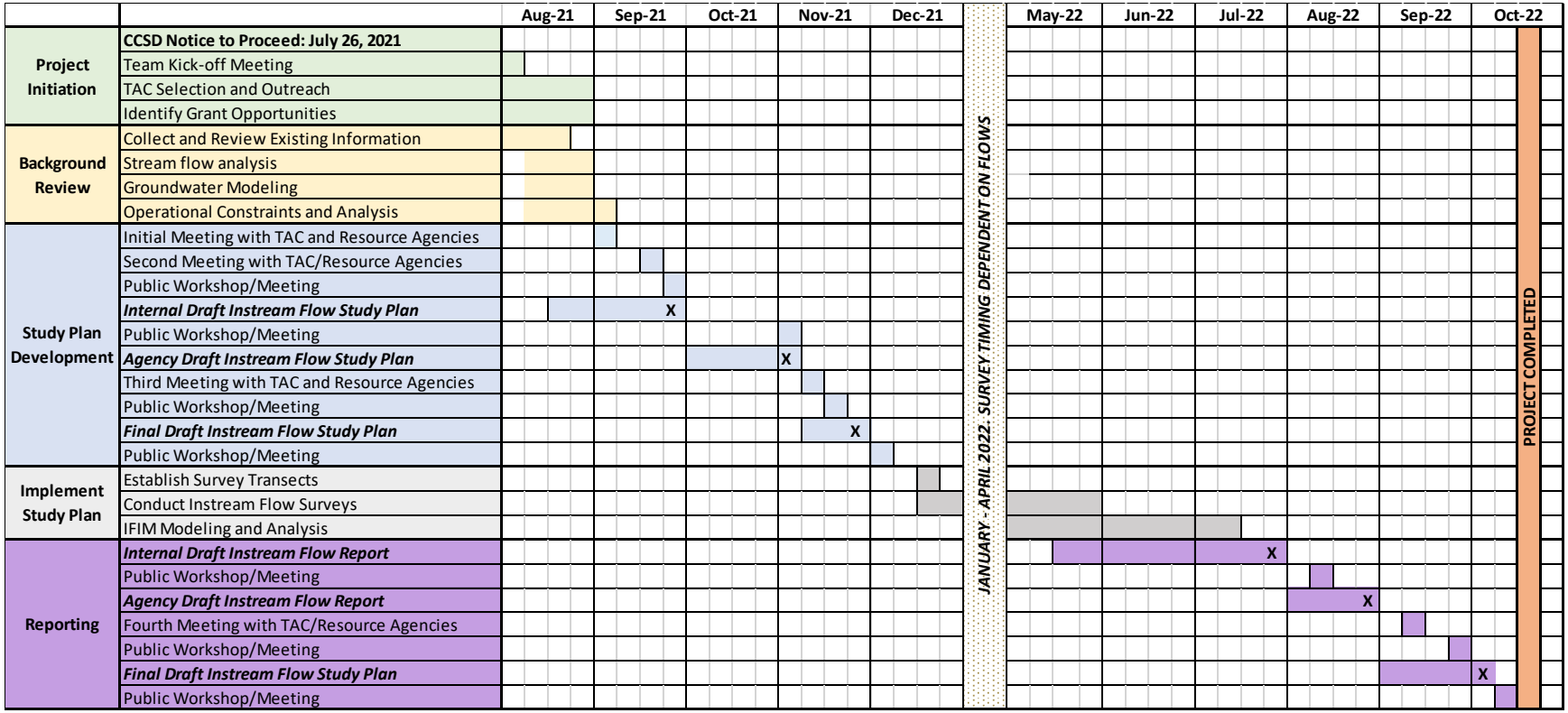
To fully support a robust native steelhead fishery, passage in lower San Simeon Creek may also need to be addressed.

The Coastal Commission has raised the issue of fish passage in their written comments on the draft Subsequent Environmental Impact Report for the SWF. However, we anticipate that with additional understanding of the watershed and CCSD operations it will become clear that the proposed project will not substantially affect flows during the adult steelhead migratory period. We anticipate that fish passage analysis, if any is required, will be focused on smolt outmigration (e.g., late spring). The prior work our team has conducted in San Simeon Creek and habitat data collected for the instream flow study will allow us to quickly respond to any requests to provide an assessment of fish passage conditions; however, we do not expect project operations to be limiting fish passage conditions for steelhead at this time.

Additional Information

Stillwater previously assessed flow conditions in San Simeon Creek in the 2014 as part of the San Luis Obispo County Regional Instream Flow Assessment; however, the method used only provides an estimate of the minimum flows required to maintain ecological functions (referred to as the environmental water demand). While this experience gives our team specific insight into flow conditions and biological needs within the watershed, our previous assessment was not designed for establishing instream flow requirements or for assessing project effects on aquatic resources. Since no comprehensive instream flow studies have been conducted in San Simeon Creek, our experience assessing flows and environmental demand gives Stillwater a strong understanding of the challenges and suitable approaches to develop a comprehensive instream flow study plan.

General Project Schedule



X Indicates proposed deliverable due date

Proposal on Scope of Services

Task 1. Project coordination and communication

Task 1.1. Kickoff meeting

Stillwater's Project Manager Ken Jarrett will work with the District to coordinate a project kickoff meeting with District staff. Ken and the Contract Manager Ethan Bell will attend the kickoff meeting, which will serve to clarify project goals and objectives, discuss our suggested approach and project schedule, and ensure our team has the most suitable technical advisors identified for the TAC. Ideally the TAC will consist of qualified staff from California State Parks, California Coastal Commission, CDFW, County of San Luis Obispo, and the Upper Salinas Las Tablas Resource Conservation District; however, coordination with other groups may be useful, including Creek Lands Conservancy, and the National Marine Fisheries Service. Potential grant funding options will also be discussed with the District near the onset of project initiation and at the kickoff meeting.

Task 1.2. Grant support

Due to the interest of resource agencies in doing an instream flow study in San Simeon Creek (e.g., National Marine Fisheries Service California Central Coast Steelhead Recovery Plan [(NMFS 2013]), grant funding may be available to assess flows over a larger study area; however, grant funding may push back the project start date depending on the grant funding periods. If a suitable grant is identified for this study, Stillwater will provide technical support to develop resource sections of grant applications.

Task 1.3. TAC Set-Up

Following the kickoff meeting, Ken will engage with potential TAC members and inform them of our study and its relationship with the SWF. Stillwater will prepare a detailed schedule for distribution to the District and the TAC. Additional time to meet with the TAC is included under Task 3 Study Plan Development.

Task 1.4 General Project Coordination

Ken will coordinate with the District, TAC, and technical team members as necessary, provide informal check-ins via phone and email, and deliver monthly progress reports.

Assumptions:

- Assumes one kick-off meeting will be attended by the Contract Manager, Ethan Bell, and Project Manager, Ken Jarrett.
- Grant support includes time to review and discuss grant options and up to 26 hours to prepare technical writeup for approach sections of grant applications.
- TAC outreach will be initiated under Task 1 but TAC meetings are included under Task 3 Development of the IFSP.
- Project duration of August 2021 to October 2022 (15 months).

Task 1 Deliverables:

- Detailed schedule of the project, including milestones and project completion date.
- Technical sections to support grant applications.

Task 2 – Review of Documents and Data; Analysis and Evaluation

2.1 Collect and review existing information

Existing information review will be used to 1) inform the instream flow study plan development and 2) identify project operations and constraints to develop recommendations and potential project mitigation measures. Stillwater will lead the collection and review of existing information with support from our subject matter experts on instream flow, ecology, groundwater, and surface hydrology. We will begin by reviewing the existing Environmental Impact Reports, which summarize many key existing information sources relevant to the project, and then we will focus on key resource documents to pull out focused resource information. Of primary interest will be any previous biological, physical, and water quality studies, as well as hydrology and groundwater modeling. In addition, we will review the Adaptive Management Plan and project water rights permits. Information reviewed under this task will be used to prepare for meetings and discussions with staff of the California Coastal Commission and California State Parks relating to the scope, approach, and outcomes of the Instream Flow Study, as discussed under Task 3 Development of the IFSP.

2.2 Streamflow analysis

Stillwater will conduct streamflow analysis from existing hydrology data on San Simeon Creek. Results from this analysis will be used to calculate mean monthly flows to determine appropriate calibration flows to include in the IFIM model. Additional analysis may be required to augment existing information related to historical water production estimates, net production from the San Simeon Creek watershed, and the connection between groundwater recharge on surface flows in San Simeon Creek.

2.3 Groundwater modeling

Extensive groundwater modeling has been conducted in San Simeon Creek. Since groundwater has a large influence on surface flows in San Simeon Creek, we will refine any existing modeling to support the instream flow study. Specifically, we anticipate additional groundwater modeling will be used to characterize the surface water-groundwater interconnection during the study period. Additional modeling (see Optional Task 5 below) may be conducted to assess lagoon conditions based on groundwater extraction and recharge rates.

2.4 Operational constraints and analysis

Review of the existing data and our additional analysis of stream flow and groundwater will be used to clearly summarize operational constraints for the SWF. In addition, we will review proposed pumping and recharge/release of SWF product water. This information will allow us to estimate the maximum amount of influence the project can have on instream flows due to groundwater pumping and groundwater recharge and evaluate how the seasonal timing of those project operations alter the project influence on instream flows. Understanding these project

constraints will allow our team to assess and discuss a) proposed operational scenarios for the SWF, b) provisions of the CCSD's water rights licenses and Coastal Development Permits, and c) issues in the Adaptive Management Program.

Assumptions:

- Historical surface water data and groundwater data (going back to 2000) are available in a usable format for analysis.

Task 2 Deliverables:

- None

Task 3 — Develop Instream Flow Study Plan

3.1 Resource agency and TAC Meetings

Stillwater will engage TAC and resource agencies early in the development of the Instream Flow Study Plan (IFSP). We will schedule the first meeting to occur immediately after completing review and analysis of existing information. The first meeting will focus on existing information and project background big picture issues, including the study goals and objectives, with the following meetings becoming more detail oriented. These meetings will focus on study specifics such as defining the study reach, identifying suitable species habitat criteria for use in the IFIM, and determining the number of survey transects.

3.2 Public Meetings

Stillwater will prepare and deliver presentations on the draft components of the IFSP to the CCSD Board of Directors and/or other committees as key sections of the plan are developed, such as study area and study timeline. In conjunction with CCSD staff, Stillwater will present the draft IFSP to the CCSD Board of Directors at up to two (2) public meetings (included in the seven total meetings anticipated). Stillwater will assist with developing meeting agendas and presentation materials and provide technical expertise to respond to questions posed at the CCSD Board of Directors meetings and other public meetings.

3.3 Draft and Final IFSP

Stillwater will prepare a draft and final IFSP based on review of existing information and discussion with the TAC and resource agencies. Based on our knowledge of conditions in San Simeon Creek, we anticipate a single study reach spanning from approximately the upstream end of the lagoon and extending to just upstream of the CCSD groundwater extraction wells. Calibration flows targeted for the IFIM should cover a range of somewhat stable seasonal flows in San Simeon Creek, including roughly 0.5 cubic feet per second (cfs), 3 cfs, and 8 cfs. Flows higher than roughly 10 cfs are likely rain-driven events that are not likely to be affected by project pumping operations or influenced by groundwater recharge. The IFSP will be developed to provide a thorough assessment of the relationship between instream flow and suitable habitat available for federally listed steelhead life stages that occur in San Simeon Creek.

Assumptions:

- Up to four meetings with TAC and resource agencies

- Up to seven public meetings
- Two review drafts of the IFSP and one final draft IFSP will be prepared; comments for each draft will be provided in a single, track-changed document.
- The IFSP will focus on steelhead only.

Task 3 Deliverables:

- One administrative draft, one agency draft, and one final draft of the Instream Flow Study Plan.

Task 4. Conduct Instream Flow Study

4.1 Implement IFSP

Stillwater will implement the finalized IFSP. The first step of study plan implementation will be to conduct stream habitat mapping of the study reach to determine frequency of habitat types (e.g., riffle, run, pool habitat) for use in survey transect selection and modeling purposes. A minimum of three survey transects per habitat type is required for the IFIM, and in cases where there is an unequal distribution of habitat types or where unique habitat features occur, additional transects are required to allow for reasonable representation of study reach condition. Therefore, we assume up to a total eight survey transects will be required for the IFSP. Field surveys will be conducted when calibration flows are achieved within the study reach.

4.2 Data Analysis and Modeling

Analytical tasks will include a description of existing aquatic habitat in the study reach based on data collected during the habitat mapping effort (described under Task 4.1). The Physical Habitat Simulation (PHABSIM) component of IFIM will be used to link the hydraulic model with species habitat suitability criteria to compute an index of habitat suitability for steelhead over a range of flows. Information from the habitat mapping data collected under Task 4.1 will also be used to determine transect weighting for modeling purposes. The Physical Habitat Simulation (PHABSIM) component of IFIM will be used to link the hydraulic model with species habitat suitability criteria to compute an index of habitat suitability for steelhead over a range of flows. Hydraulic models (PHABSIM) will be calibrated to established protocols. The PHABSIM modeling results and associated transect weighting will be combined with approved habitat suitability criteria to generate Weighted Usable Area (WUA) curves for the species and life stages of interest. A set of time series tables and graphs will be generated on a monthly time step (by water year type) to depict WUA habitat values on a monthly basis under various low-to-moderate flow regimes (no attempt will be made to estimate WUA under very high flow conditions). Results from the IFIM will only provide minimal insight into the relationship between stream flow and habitat for California red-legged frog, which generally prefer off-channel habitat. Results from the IFIM will not provide extensive information on the connection between streamflow and tidewater goby habitat availability.

4.3 Draft and Final Technical Report

Stillwater will prepare two draft and one final report of the instream flow study. The instream flow study report will include the following:

1) A thorough assessment of the relationship between instream flow and suitable habitat available for federally listed steelhead life stages that occur in San Simeon Creek.
2) A summary of operational constraints based on watershed hydrology and groundwater conditions.
3) A discussion of proposed operational scenarios for the SWF and their effects on stream flow in San Simeon Creek.
4) Recommendations for the Adaptive Management Program
5) A long-term monitoring plan that will evaluate the status of habitat conditions within the study area and compare them to background conditions.

Assumptions:

- For budgeting purposes, this task assumes the Instream Flow Study will include one study reach with up to eight survey transects, targeting three calibration flows.
- Assumes adequate flows will occur to complete the survey between Winter 2021 and Spring of 2022.
- Two review drafts of the Study Report and one final Study Report will be prepared; comments for each draft will be provided in a single, track-changed document.

Task 4 Deliverables:

- One administrative draft, one agency draft, and one final draft of the Instream Flow Study Report.

Task 5 (Optional) – Additional Information and Analysis Requests

While the request for qualifications and proposals specified the need for conducting an instream flow study, we understand that additional questions and concerns may arise during discussions with resource agencies during project planning meetings. To quickly respond to those requests, we have included in our scope an optional task to account for additional requests from resource agencies that are not included in the project scope. This task will cover extra coordination with the CCSD and additional data collection and analysis as needed without added paperwork or contracting delays. Although these assessments or studies have yet to be identified, they could include (but are not limited to):

- Fish passage assessments, especially impact of proposed pumping on surface water flows and water depths during outmigration of smolt,
- Lagoon water level or water quality data collection and/or analysis, especially the relationship between proposed pumping, surface water flows, and resultant water level or water quality in San Simeon lagoon, and/or
- Special status species assessments for other target species, such as tidewater goby or California red-legged frog.

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Cambria Community Services District
Instream Flow Study Fee Estimates and Rates

Table 1. Pricing Summary by Task

Task	Cost
1. Project Coordination and Communication	**$7,250**
1.1 Kickoff Meeting	
1.2 Grant Support	
1.3 TAC Set-up	
1.4 General Project Coordination	
2. Review of Documents and Data, Analysis & Evaluation	**$9,500**
2.1 Collect and Review Existing Information	
2.2 Streamflow Analysis	
2.3 Groundwater Modeling	
2.4 Operational Constraints and Analysis	
3. Develop Instream Flow Study Plan	**$22,500**
3.1 Resource Agency and TAC Meetings	
3.2 Public Meetings	
3.3 Draft and Final IFSP	
4. Conduct Instream Flow Study	**$52,000**
4.1 Implement IFSP	
4.2 Data Analysis and Modeling	
4.3 Draft and Final Technical Report	
Tasks 1 through 4 Total Costs	**$91,250**
Optional Tasks	**Cost**
5. Additional Information and Analysis Requests	$12,000
Tasks 1 through 5 Total Costs	**$103,250**
Cost per each Additional Meeting Not Included in Scope	**$850**

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Stillwater Sciences

Stillwater Sciences Billing Rates	
Billing Classification	**Hourly Rate**
S/A 1	66
S/A 2	78
S/A 3	86
S/E 4	95
S/E 5	101
S/E 6	109
S/E 7	115
S/E 8	121
S/E 9	129
S/E 10	136
S/E 11	147
S/E 12	154
S/E 13	164
S/E 14	173
S/E 15	186
S/E 16	205
S/E 17	210
S/E 18	228
S/E 19	242
S/E 20	260

S/A = Scientist/Administrator; S/E = Scientist/Engineer

Rates listed above are for calendar year 2021. These are applied for labor-hour level-of-effort contracts with reimbursement for expenses (including travel expenses and subcontractors) at cost plus 10%. Hourly rates will be adjusted on January 1st of each year.

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