the watershed project

July 14, 2022 Invoice #22-070G.02

Patty Park, Accounting Technician
Pacific States Marine Fisheries Commission
205 SE Spokane Street, Suite 100
Portland, OR 97202

Remit payment to:
The Watershed Project
1327 S. 46th Street, Building 155
Richmond, CA 94804

Project Name: Wildcat Creek Fish Passage Project – Phase 1
PSMFC Grant Number: 22-070G

Invoice period: 5/1/2022 – 6/30/2022

Task	Budget Total	Budget Remaining	Percent Complete	Charges to Date	Amount Due
Task 1 – Ecological Engineering Assessment	$30,000	$16.03	100%	$29,983.97	$22,061.66
Task 2 – Community Outreach	$15,000	$0	100%	$15,000	$7,010
TOTAL	**$45,000**	**$16.03**		**$44,983.97**	**$29,071.66**

Task 1 Staff Hours: See attached invoices from FlowWest
Task 2 Staff Hours:

Description	Staff Member	Rate	Hours	Amount
Attended project team meetings, coordinated with FlowWest, administered grant	Juliana Gonzalez	$115	8	$920
Attended project team meetings, met and coordinated with Tribal consultants, planned and facilitated presentation and site visit with Salesian students, attended Wildcat-San Pablo Watershed Council meeting and site visit	Anne Bremer	$95	25	$2,375
Met and coordinated with Tribal consultants, planned and facilitated presentation and site visit with Salesian students, attended Wildcat-San Pablo Watershed Council meeting and site visit	Naama Raz-Yaseef	$65	21	$1,365
Conducted program evaluations and refined curriculum for K-12 school programming	Dan Kirk	$65	10	$650
Planned and facilitated presentation and site visit with Salesian students	Eunice Quintanilla	$50	10	$500
Conducted program evaluations and refined curriculum for K-12 school programming	Audrey Matusich	$50	12	$600
Conducted program evaluations and refined curriculum for K-12 school programming	Maggie Chen	$50	12	$600
			TOTAL	**$7,010**

Task 2 – Description of work performed:
On May 6, we held our monthly meeting with the Confederated Villages of Lisjan. During this meeting, we introduced our new Community Engagement Manager, Naama Raz-Yaseef, to our Tribal partners, provided a more detailed overview of the Wildcat Creek fish passage project, and consulted on initial ideas for interpretive messaging and materials around that project. We decided that our next meeting, scheduled for June 3, would be an in-person site visit to North Richmond to tour the fish ladder. We reached out Ruth Orta, another local Tribal member, and Alex Tavizon, with the California Indian Environmental Alliance (CIEA) to invite them to the site visit with the Confederated Villages of Lisjan and discuss their involvement in the project. Ruth had a conflict and was unable to attend the site visit, but expressed her support of the project and desire for a future meeting. We will follow up with her at a later date and continue to work with Alex and CIEA to ensure she is compensated for her time and expertise.

The site visit on June 3 included Tribal members Deja Gould, Cheyenne Zepeda, and their children. As a comparison point, we started by visiting the City of San Pablo's Wildcat Creek restoration upstream of the fish ladder, behind the San Pablo library. We then visited the fish ladder and adjacent Wildcat Creek Trail. Deja and Cheyenne provided some helpful feedback on the types of amenities they would encourage along the trail and the native plants that would likely succeed as part of the restoration. We also discussed collaboration on outreach and educational materials, including potential translation of the children's book about the fish ladder into their native Chochenyo language.

In partnership with Trout Unlimited, we gave an in-class presentation to a class of students at Salesian College Preparatory on May 9. During the classroom presentation, TU and TWP representatives introduced the Wildcat Creek Fish Passage project, including information about the fish that will benefit from the project, the drawbacks of the current design, and the plans for community engagement to ensure the project provides multiple benefits to the creek and surrounding community. During the site visit to the fish ladder on June 9, students viewed a demonstration of how the fish ladder works, discussed their ideas for community benefits at the site, and conducted a trash cleanup. The students removed over 120 gallons of trash from the fish ladder.

On June 9, we attended the Wildcat-San Pablo Creeks Watershed Council meeting and provided updates on the Wildcat Creek fish passage project. The meeting was followed by the Council's annual spring site visits, which this year included a visit to the Wildcat Creek fish ladder. It was a great opportunity to discuss community priorities with agencies and other stakeholders and discuss the feasibility of ideas such as additional amenities along the Wildcat Creek Trail and expanding additional connections to the Trail.

Our education team compiled feedback and evaluations from the students and teachers that participated in our *Me & My Watershed: Creekside* program and began to refine the curriculum for next year accordingly.

TWP continued to meet regularly with project partners to coordinate and update each other on the timeline and scope of work.

Anne Bremer
Program Director, The Watershed Project

FROM

FlowWest
PO Box 29392
Oakland, CA 94604

INVOICE FOR

Juliana Gonzalez
1327 South 46th Street Bldg #155
Richmond, CA 94804
juliana@thewatershedproject.org
510-224-4085

cc:

Invoice No: 049-03-02
Invoice Date: June 08, 2022
Due Date: July 08, 2022

(Net 30)

049-03
Fish Passage Forum

Billing Period: 5/1/2022 to 5/31/2022

Fish Passage Forum
Wildcat Creek Fish Passage and Community Engagement Project, North Richmond Area
Project Work Summary
May 1 through May 31, 2022
During this period, work completed included:

- Task 1 – Ecological Engineering Assessment - FlowWest reviewed the model for baseline conditions in HEC-RAS to determine if different bed materials can be used at the site and if the fish passageway slope can be modified. The analysis related to alternative bed materials and slope analysis was honed in in scope for the alternatives development report technical memorandum.

Task Description	Budget Total	Budget Remaining	Percent Complete	Charges to Date	Previous Charges	Amount Due
1 - Ecological Engineering Assessment	$30,000.00	$10,427.78	65%	$19,572.22	$7,922.32	$11,649.90
	$30,000.00	**$10,427.78**	**65%**	**$19,572.22**	**$7,922.32**	**$11,649.90**

Total Amount Due **$11,649.90**

FlowWest
Invoice Time Entry Detail

Date	Invoice #
06/08/2022	049-03-02

Client	Project
049 The Watershed Project	Fish Passage Forum

1b - Bed Material Analysis

Date	Employee	Hours Logged	Billable Hours	Rate	Amount
5/2/2022	Aidan Kelleher	4.00	4.00	$144.70	$578.80
Download and process 2 high resolution orthomosaic from drone flight images. Low and high flight elevation images.					
5/2/2022	Bethany Hackenjos	0.75	0.75	$208.37	$156.28
Reviewing and organizing flow and model data from RDG					
5/3/2022	Cameron Tenner	1.00	1.00	$144.70	$144.70
meeting on model progress					
5/3/2022	Bethany Hackenjos	1.50	1.50	$208.37	$312.56
Baseline model					
5/4/2022	Bethany Hackenjos	1.25	1.25	$208.37	$260.46
weekly meeting and wildcat DEM					
5/5/2022	Bethany Hackenjos	0.50	0.50	$208.37	$104.19
wildcat DEM					
5/6/2022	Cameron Tenner	3.00	3.00	$144.70	$434.10
Creating metadata, updating terrain in RAS model, working on modeling TM					
5/6/2022	Anthony Falzone	2.00	2.00	$260.47	$520.94
alternatives modification meeting					
5/10/2022	Cameron Tenner	1.00	1.00	$144.70	$144.70
weekly modeling meeting					
5/10/2022	Bethany Hackenjos	1.25	1.25	$208.37	$260.46
Model meeting and coordination					
5/12/2022	Cameron Tenner	2.00	2.00	$144.70	$289.40
Building weirs, troubleshooting					
5/13/2022	Cameron Tenner	1.00	1.00	$144.70	$144.70
Model update meeting					
5/13/2022	Bethany Hackenjos	1.00	1.00	$208.37	$208.37
Model review					
5/13/2022	Cameron Tenner	5.00	5.00	$144.70	$723.50

Building hydraulic structures					
5/16/2022	Cameron Tenner	2.00	2.00	$144.70	$289.40
running passage and storm flow simulations, improving model stability					
5/17/2022	Cameron Tenner	4.00	4.00	$144.70	$578.80
check-in meeting with Bethany, researching 2D bridge modeling, troubleshooting bridge results					
5/17/2022	Bethany Hackenjos	1.00	1.00	$208.37	$208.37
Model review					
5/18/2022	Cameron Tenner	0.50	0.50	$144.70	$72.35
Team check-in meeting					
5/19/2022	Cameron Tenner	1.00	1.00	$144.70	$144.70
Looking over model results, prepping Bethany's review					
5/19/2022	Cameron Tenner	1.50	1.50	$144.70	$217.05
Looking through documentation on prior model, freeboard requirements for our design, reviewing Bethany's notes on model					
5/19/2022	Bethany Hackenjos	3.00	3.00	$208.37	$625.11
Model review					
5/20/2022	Cameron Tenner	0.50	0.50	$144.70	$72.35
Searching for model calibration information in NHC report					
5/20/2022	Bethany Hackenjos	0.50	0.50	$208.37	$104.19
Model review					
5/20/2022	Cameron Tenner	6.00	6.00	$144.70	$868.20
Fine tuning model, working out upstream flooding kinks, calibration runs					
5/24/2022	Cameron Tenner	0.75	0.75	$144.70	$108.53
Prepping for meeting, modeling check-in meeting					
5/24/2022	Bethany Hackenjos	1.50	1.50	$208.37	$312.56
Model review and coordination meeting					
5/24/2022	Ari Frink	1.50	1.50	$208.37	$312.56
Crafting ADR sections on existing conditions, proposed design, and criteria for evaluation					
5/25/2022	Bethany Hackenjos	1.00	1.00	$208.37	$208.37
Review Scope and determine model plan					
5/25/2022	Ari Frink	1.25	1.25	$208.37	$260.46
Crafting ADR sections, modeling discussion in ADR					
5/26/2022	Cameron Tenner	1.50	1.50	$144.70	$217.05
Organizing modeling folder, adding descriptions and metadata to files, re-running storm, passage, and calibration flows with fixed upstream boundary condition					

5/26/2022	Bethany Hackenjos	1.00	1.00	$208.37	$208.37
survey data inquiry and coordination					
5/26/2022	Ari Frink	2.25	2.25	$208.37	$468.83
Crafting ADR sections, drafting background sections					
5/27/2022	Ari Frink	2.25	2.25	$208.37	$468.83
Crafting ADR sections, drafting background sections, modeling connect					
5/27/2022	Anthony Falzone	2.00	2.00	$260.47	$520.94
modeling and permitting meeting					
5/31/2022	Cameron Tenner	1.00	1.00	$144.70	$144.70
Organizing model folder, updating descriptions, prepping for review					
Phase Totals		**61.25**	**61.25**		**$10,694.86**
1c - Fish Passageway Slope Analysis					
Date	Employee	Hours Logged	Billable Hours	Rate	Amount
5/3/2022	Cristen Elejalde	1.00	1.00	$191.01	$191.01
Existing conditions topography guidance					
5/4/2022	Cristen Elejalde	1.50	1.50	$191.01	$286.52
Existing topo compilation guidance; Internal team coordination meeting					
5/31/2022	Jake Kramarz	2.50	2.50	$191.01	$477.53
working on longitudinal profile figures					
Phase Totals		**5.00**	**5.00**		**$955.05**
Invoice Totals		**66.25**	**66.25**		**$11,649.91**

FROM

FlowWest
PO Box 29392
Oakland, CA 94604

INVOICE FOR

Juliana Gonzalez
1327 South 46th Street Bldg #155
Richmond, CA 94804
juliana@thewatershedproject.org
510-224-4085

cc:

Invoice No: 049-03-03
Invoice Date: July 08, 2022
Due Date: August 07, 2022

(Net 30)

049-03
Fish Passage Forum

Billing Period: 6/1/2022 to 6/30/2022

Task Description	Budget Total	Budget Remaining	Percent Complete	Charges to Date	Previous Charges	Amount Due
1 - Ecological Engineering Assessment	$30,000.00	$16.03	100%	$29,983.97	$19,572.22	$10,411.75
	$30,000.00	**$16.03**	**100%**	**$29,983.97**	**$19,572.22**	**$10,411.75**

Total Amount Due **$10,411.75**

FlowWest
Invoice Time Entry Detail

Date	Invoice #
07/08/2022	049-03-03

Client	Project
049 The Watershed Project	Fish Passage Forum

1b - Bed Material Analysis

Date	Employee	Hours Logged	Billable Hours	Rate	Amount
6/1/2022	Cameron Tenner	2.00	2.00	$147.00	$294.00
Check-In Meeting with Bethany, constructing 100-year flow input hydrograph					
6/1/2022	Bethany Hackenjos	3.50	3.50	$173.25	$606.38
Model review					
6/2/2022	Cameron Tenner	3.00	3.00	$147.00	$441.00
Converting 100 yr flow hydrograph into DSS file, running diffusion wave and full momentum models, comparing results					
6/2/2022	Bethany Hackenjos	0.25	0.25	$173.25	$43.31
Model review and coordination					
6/3/2022	Cameron Tenner	3.00	3.00	$147.00	$441.00
Reading through SFEI report, searching for observed flows to model					
6/8/2022	Cameron Tenner	1.50	1.50	$147.00	$220.50
Reviewing model updates, updating model, rerunning simulations					
6/9/2022	Cameron Tenner	4.00	4.00	$147.00	$588.00
Studying new model run outputs, editing geometry to reduce instability, running new plans, analyzing outputs					
6/9/2022	Bethany Hackenjos	0.50	0.50	$208.37	$104.19
Model review					
6/9/2022	Ari Frink	0.25	0.25	$208.37	$52.09
work summary review					
6/10/2022	Cameron Tenner	1.00	1.00	$147.00	$147.00
Checking model results from most recent run					
6/10/2022	Cristen Elejalde	1.50	1.50	$191.01	$286.52
65% design surface recreation guidance					
6/14/2022	Bethany Hackenjos	5.00	5.00	$173.25	$866.25
Model updates and review					
6/15/2022	Bethany Hackenjos	2.50	2.50	$208.37	$520.93
Model updates and review					
6/16/2022	Bethany Hackenjos	1.50	1.50	$173.25	$259.88

Model review and updates					
6/16/2022	Cameron Tenner	3.00	3.00	$147.00	$441.00
Reviewing Bethany's edits and results, reviewing modeling tasks to be performed					
6/17/2022	Cameron Tenner	4.00	4.00	$147.00	$588.00
Running baseline 100yr flood model, building 65pct geometry					
6/17/2022	Bethany Hackenjos	0.50	0.50	$173.25	$86.63
model review and coordination					
6/21/2022	Cameron Tenner	4.50	4.50	$147.00	$661.50
65pct design geometry development (mesh, weirs, boulders, roughness)					
6/21/2022	Bethany Hackenjos	1.50	1.50	$173.25	$259.88
model review and coordination					
6/22/2022	Cameron Tenner	4.00	4.00	$147.00	$588.00
Building 65pct design geometry (weirs, manning's n), investigating project maintenance plan					
6/23/2022	Cameron Tenner	3.00	3.00	$147.00	$441.00
Finalizing 65pct design geometry, creating initial conditions file, creating and running new plans					
6/27/2022	Bethany Hackenjos	2.00	2.00	$208.37	$416.74
Model review					
6/29/2022	Cameron Tenner	3.00	3.00	$147.00	$441.00
Reviewing model results, meeting with Bethany, incorporating Bethany's comments, running low flow file, troubleshooting HEC-RAS errors					
6/29/2022	Bethany Hackenjos	0.50	0.50	$173.25	$86.63
Model guidance.					
Phase Totals		**55.50**	**55.50**		**$8,881.40**
1c - Fish Passageway Slope Analysis					
Date	Employee	Hours Logged	Billable Hours	Rate	Amount
6/1/2022	Anthony Falzone	3.00	3.00	$260.47	$781.41
engineering support analysis					
6/13/2022	Cameron Tenner	1.00	1.00	$147.00	$147.00
Reviewing model, taking inventory of needs and next steps					
6/14/2022	Ari Frink	0.25	0.25	$208.37	$52.09
slope analysis discussion					
6/15/2022	Ari Frink	0.50	0.50	$208.37	$104.19
slope analysis discussion					
6/17/2022	Ari Frink	0.75	0.75	$208.37	$156.28
Slope depth discussion					

6/30/2022	Cameron Tenner	2.00	2.00	$144.70	$289.40
Cleaning up model geometry, running initial conditions, starting run for new geometry					
Phase Totals		**7.50**	**7.50**		**$1,530.37**

Invoice Totals	**63.00**	**63.00**	**$10,411.76**