

From: Geoff Hales geoff@mcbainassociates.com 

Subject: RE: Estacada Lake Project

Date: March 17, 2022 at 3:41 PM

To: Tim Greseth tim@myowf.org, Dave Cummings cummings.d@comcast.net

Cc: Garth Wyatt Garth.Wyatt@pgn.com, Mike Herrick mike@aquatic-con.com, brad staples bradstaplesfishing@gmail.com

GH

Hi Tim and Dave,

I've reviewed the site and confirmed some details with Mike and Garth. The location at the head of Estacada Lake is a gravel bar located approximately 1,700 feet downstream of the Faraday Powerhouse. At low water, the exposed bar area is approximately 500 feet long and roughly 1.3 acres in area. For comparison, I took a look at the previous projects we built upstream in North Fork Reservoir. By quick calculation and some area scaling, we can design a series of small structures (n=10) like we did in 2020 at the upstream end of the reservoir, or a smaller number of larger structures (n=5) like we did in 2016 farther down in the reservoir. Regardless of which style we decide is best for this new location, I estimate about 150 logs would be required for either option. I've shared this with Mike to help with materials cost estimates.

Below are the steps we followed for our previous project. I've estimated rough costs for this new project based on our previous project billing, with adjustments for differences in site size (this new site is roughly 30% smaller than our last project), efficiency that we can carry forward from our last project (e.g., I assume much of the application material will be the same), and changes in our billing rates from 2020.

Step 1: Assist OWF with preparing and submitting an application to the Clackamas River Fish Habitat Enhancement Mitigation Funding Committee. Tasks would include:

- Site data collection and review (e.g., bathymetry surveys)
- Initial hydraulic modeling for existing conditions
- Develop conceptual design drawings
- Preliminary permitting review*
- Prepare Clackamas Fund application (would be signed and submitted by OWF)
- Prepare and present proposal to the Clackamas Fund committee

Step 1 budget estimate: \$30,000

Step 2 (if funding is awarded): Prepare designs and construction inspections. Tasks would include:

- Final existing conditions and design conditions hydraulic modeling
- Prepare draft and final design
- Prepare basis of design report
- Permitting*
- Provide construction inspections
- Document as-built conditions
- Project management

Step 2 budget estimate: \$75,000

*Permitting for this project is assumed to be a greater effort compared with the previous upper NFR project (Wyden Amendment and ARBO likely do not apply because the site is located entirely on PGE property and not immediately adjacent to public lands). Multiple individual state and federal agency permits / consultations could be required.

Thanks, and let me know if you have questions or would like to discuss. The above estimates should be pretty close, but I would need to prepare a more detailed budget if you'd like to move forward on this.



Geoff Hales, PG

Senior Geologist

Applied River Sciences

707-273-1051 (desk) 707-845-4887 (cell)

From: Tim Greseth <tim@myowf.org>
Sent: Thursday, March 10, 2022 1:50 PM
To: Geoff Hales <geoff@mcbainassociates.com>
Cc: Dave Cummings <cummings.d@comcast.net>; Garth & Allison Wyatt <Garth.Wyatt@pgn.com>; Mike Herrick <mike@aquatic-con.com>; brad staples <bradstaplesfishing@gmail.com>
Subject: Re: Estacada Lake Project

jumping in, hi Geoff!

Yes, that'd include preparation of the funding application. We can help with that, but the bulk of the narrative is likely best in your words.

Thanks,

Tim

On Thu, Mar 10, 2022 at 1:09 PM Geoff Hales <geoff@mcbainassociates.com> wrote:

Hi Dave,

Good to hear from you, thanks for reaching out. I'll have a look and run some numbers, will circle back once I've got something prepared.

For the scope of work, would this also include preparing the funding application (assuming OWF would pursue Clackamas Mitigation Funding), in addition to developing designs and helping oversee construction?

Best,
Geoff



Geoff Hales, PG

Senior Geologist
Applied River Sciences
707-273-1051 (desk) 707-845-4887 (cell)

From: Dave Cummings <cummings.d@comcast.net>
Sent: Thursday, March 10, 2022 11:51 AM
To: Geoff Hales <geoff@mcbainassociates.com>
Cc: 'Garth & Allison Wyatt' <Garth.Wyatt@pgn.com>; 'Tim Greseth' <tim@myowf.org>; 'Mike Herrick' <mike@aquatic-con.com>; 'brad staples' <bradstaplesfishing@gmail.com>
Subject: Estacada Lake Project

Geoff:

I asked Mike Herrick if he could put together a rough estimate of the construction cost for the proposed project at the head of Estacada Lake. Could you take a quick look at the site and estimate how many structures would fit in the proposed area? Also, could you give me a budgetary estimate for McBain and Associates costs to perform the same scope of work as the OWF North Fork Reservoir project.

Once we have a budget figure put together I will schedule a virtual meeting where we can discuss the

feasibility of this project and decide if we should pursue funding.

Thanks,
Dave Cummings
OWF Project Committee Chairman