

From: Cowin, Mark@DWR <Mark.Cowin@water.ca.gov>
Sent: Wednesday, May 4, 2016 3:10 PM
To: Chuck Gardner <cgardner@hgcpm.com>
Cc: Nemeth, Karla@CNRA <karla.nemeth@resources.ca.gov>
Subject: Re: Econ Analysis
Attach: image001.jpg

I say go for it. This was just a second priority to the last deliverable to my recollection.

Mark

On May 4, 2016, at 2:16 PM, Chuck Gardner <cgardner@hgcpm.com> wrote:

Hi Team,

Wanted to check in with both of you on this topic. I spoke with Sunding today. He is under the impression that the economic analysis is on hold. He says there are 2 additional tweaks he could make if we wanted them included: 1) add analysis for the adaptive range and 2) add a more robust analysis of transfers.

For clarity – do we want David to make these additional changes or do we want to put his effort on hold.

Thanks,

cg

Charles R. Gardner Jr.
(916) 708-8767

<image001.jpg>

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From: Chuck Gardner </O=FIRST ORGANIZATION/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=CHUCK GARDNER>
Sent: Wednesday, June 22, 2016 10:38 AM
To: 'Darby, Nicole@DWR' <Nicole.Darby@water.ca.gov>; 'Stein, Russell@DWR' <Russell.Stein@water.ca.gov>
Cc: Claudia Rodriguez <crodriguez@hgcpm.com>
Subject: RE: February Invoice Issue

Nicole – Claudia will arrange a time for us to talk. Thanks for your attention to this matter.
cg

Charles R. Gardner Jr.
(916) 708-8767



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From: Darby, Nicole@DWR [mailto:Nicole.Darby@water.ca.gov]
Sent: Wednesday, June 22, 2016 8:28 AM
To: Stein, Russell@DWR <Russell.Stein@water.ca.gov>; Chuck Gardner <cgardner@hgcpm.com>
Subject: February Invoice Issue

Hi Chuck and Russ

Kathy mentioned to me a few options regarding payment. This invoice contains work that continues to have discussion at the business committee.

My plan is to short pay the amount. I think this would fall under invoice dispute and I would need to do some footwork.

Kathy mentioned that DWR is going to pay for this but a source has not been identified. As a result, one option could be to short paying this invoice since a source is not identified.

Since I understand that DWR will pay for this work a more efficient way may be to pay in full and then back out the charges. This also circumvents a possible dispute process. have a task order that has not been executed that supports this work.

The work that is disputed is the fisheries work. However there is terrestrial, ISP support, and program management that I do not believe are controversial. The terrestrial has an NTP becsusr ICF was issuing stop work notices to their staff.

Would DWR pay for the entire amount or fisheries work only? Can I pay in full and then reallocate?

I am unsure how best to proceed but since ICF has not been paid since January I consider this to be front burner.

Perhaps I can chat later today about this. I can schedule through Claudia but wanted to put this on your radar. I may be missing a piece of information but not sure.

Thanks
Nicole

Sent from my iPhone using [Mail+ for Outlook](#)

From: Chuck Gardner </O=FIRST ORGANIZATION/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=CHUCK GARDNER>
Sent: Friday, April 22, 2016 5:39 PM
To: 'Darby, Nicole@DWR' <Nicole.Darby@water.ca.gov>
Subject: RE: additional economics tasks

Agree. Let's get it moving.

Thanks,
cg

Charles R. Gardner Jr.
(916) 708-8767



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From: Darby, Nicole@DWR [mailto:Nicole.Darby@water.ca.gov]
Sent: Friday, April 22, 2016 11:51 AM
To: Stein, Russell@DWR <Russell.Stein@water.ca.gov>
Cc: Chuck Gardner <cgardner@hgcpm.com>
Subject: FW: additional economics tasks

Hi Russ,

David Sunding is requesting a Notice to Proceed to conduct work that has been requested by Mark Cowin and Karla Nemeth. It appears that work on the first task is already completed and he is requesting an NTP to move forward with the additional tasks. There is an email chain below and I have summarized some of the points here. The funding that is being requested in 'new' and does not fall within the cost to complete or within the scope of existing work in his task order.

The three tasks are below:

- 1) Compute additional water trading benefits to agricultural contractors south of Delta,
- 2) Develop the "exit ramp" alternative whereby districts that elect not to pay for the WaterFix exit the SWP at the end of the current contract. Include analysis of which districts would likely pick up their shares, and
- 3) Conceptual analysis of cost allocation alternatives, including capacity auctions.

The timeframe for all three tasks are:

- 1) is completed (done) and 2) could be completed within 2 weeks at the outside, and
- 2) could be completed within 4 weeks.

The estimated budget is below and they are drafting a detailed one now. The estimated total is \$22,550. I suggest the following Notice to Proceed:

A Notice to Proceed for this work is approved due to the urgency and timeframe in which it is needed. This Notice to Proceed approval begin on Friday, April 22, 2016 and will end on Friday, May 20, 2016. It will not exceed \$10,000. A Project Change Authorization request will be submitted for review which will include the work required and a detailed budget.

I have included Chuck on this message so that he is aware that this is moving forward.

Thanks,

Nicole

From: Britney, Erika [<mailto:Erika.Britney@icfi.com>]
Sent: Friday, April 22, 2016 11:03 AM
To: Darby, Nicole@DWR <Nicole.Darby@water.ca.gov>
Cc: Sibilla, Jennifer <Jennifer.Sibilla@icfi.com>; Laratta, Dione <Dione.Laratta@icfi.com>
Subject: FW: additional economics tasks

Nicole,

FYI...

We are working on a PCA and will try to get input from CH2M (scroll down to see communications with Chuck). The first task Dave is referring to is for \$6K and they have completed that work because it was time critical. Work on the other tasks will not proceed without NTP. We will put these estimates into a PCA along with an additional task for outreach support.

Produce Report with Aggregated Results

	Hours	Rate	Amount
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RA	16	\$250	\$4,000
			\$5,900

Complete Adaptive Range Analysis

	Hours	Rate	Amount
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Exit Ramp Alternative

	Hours	Rate	Amount
Sunding	8	\$475	\$3,800
RA	24	\$250	\$6,000
			\$9,800

From: David L Sunding [<mailto:sunding@berkeley.edu>]
Sent: Friday, April 22, 2016 10:46 AM
To: Britney, Erika <Erika.Britney@icfi.com>
Cc: Laratta, Dione <Dione.Laratta@icfi.com>
Subject: Re: additional economics tasks

All of this will require a new budget because it's all beyond what we originally envisioned for the economic report. I don't have a written NTP but Mark and Karla told me to do this, so I did. It needed to be done prior to a conference next week.

Thanks

On Fri, Apr 22, 2016 at 8:32 AM, Britney, Erika <Erika.Britney@icfi.com> wrote:

Thanks. Yes please send me a budget request for outreach support. Make an assumption regarding number of meetings. Also, if CH2/Chandra will be required for any of these meeting, please indicate that as well.

Is all of this going to need to be "new budget" or were you able to complete the first task with left-over budget? I need to know how much new budget I will need to ask for.

Finally, if the first task will require "new budget", please provide whatever you have in terms of an NTP from Chuck.

Thanks.

From: David L Sunding [mailto:sunding@berkeley.edu]

Sent: Thursday, April 21, 2016 8:13 PM

To: Britney, Erika <Erika.Britney@icfi.com>

Subject: Fwd: additional economics tasks

Hi Erika-

See the correspondence below. The first three items on the attached spreadsheet are what Chuck and I are talking about. Please let me know if you have any questions. I finished the first task and will finish the other two as soon as we get authorization to proceed.

I'm starting to get a lot of requests from DWR for outreach. Should I also send a budget request for that? I think we may have discussed this, but I probably forgot what we decided.

Thanks,

Dave

----- Forwarded message -----

From: **David L Sunding** <sunding@berkeley.edu>

Date: Fri, Apr 8, 2016 at 2:20 PM

Subject: Re: additional economics tasks

To: Chuck Gardner <cgardner@hgcpm.com>

Here is a review set of tasks based on the call

Let me know if any of this should be done through SWC

Dave

On Fri, Apr 8, 2016 at 12:41 PM, David L Sunding <sunding@berkeley.edu> wrote:

1) and 2) could be completed within 2 weeks at the outside. 2) could be completed within 4 weeks.

On Fri, Apr 8, 2016 at 12:15 PM, Chuck Gardner <cgardner@hgcpm.com> wrote:

This looks good. Can you add the amount of time to conduct these additional tasks?

Thanks,

cg

Charles R. Gardner Jr.

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From: David L Sunding [mailto:sunding@berkeley.edu]

Sent: Friday, April 8, 2016 8:34 AM

To: Chuck Gardner <cgardner@hgcpm.com>

Subject: additional economics tasks

Attached is a budget for three additional tasks:

- 1) compute additional water trading benefits to agricultural contractors south of Delta.
- 2) Develop the "exit ramp" alternative whereby districts that elect not to pay for the WaterFix exit the SWP at the end of the current contract. Include analysis of which districts would likely pick up their shares.
- 3) Conceptual analysis of cost allocation alternatives, including capacity auctions.

Please give me a call if you'd like to discuss. I'm around all morning.

Talk to you today at 1.

Dave

--

David Sunding, Ph.D.
Thomas J. Graff Professor
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University of California
Berkeley, CA 94720

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Mobile: [415-299-2653](tel:4152992653)

email: sunding@berkeley.edu

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From: Chuck Gardner </O=FIRST ORGANIZATION/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=CHUCK GARDNER>
Sent: Tuesday, April 26, 2016 3:53 PM
To: 'Ravazzini, Taryn@DWR' <Taryn.Ravazzini@water.ca.gov>
Subject: RE: Construction inquiry

As a rule of thumb, due to escalation, the cost of the project goes up approximately \$500M per year. Waiting for voter approval in 2018 would likely mean that we wouldn't begin design in Q4 2016 as anticipated. If the vote took place in November in 2018, we would be looking at a 2 year delay for project completion and \$1B increase in construction costs.

This does not include the cost of lost water. In a water year like this one, if the CWF had been operational, DWR could have exported another 800,000 AF of water. According to David Sunding the annual economic value of 100,000 AF of water is \$1.4B. That would have added another \$11.B of opportunity cost. This does not include any value assigned to the CWF for environmental benefits.

The cost of delay is significant from a construction perspective and staggering from an opportunity cost perspective. Please let me know if you'd like to discuss further.

Thanks,
cg

Charles R. Gardner Jr.
(916) 708-8767



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From: Ravazzini, Taryn@DWR [mailto:Taryn.Ravazzini@water.ca.gov]
Sent: Tuesday, April 26, 2016 2:50 PM
To: Chuck Gardner <cgardner@hqcpm.com>
Subject: Construction inquiry

Chuck,
I'm not sure if you're aware, but there's a bill in the Assembly to put CWF to public vote before any construction begins.
http://leginfo.ca.gov/pub/15-16/bill/asm/ab_1701-1750/ab_1713_bill_20160126_introduced.pdf

Currently, the bill is in the Appropriations Committee, on their Suspense File. We anticipate being asked for our cost impacts of this bill by Appropriations Cmte soon. Cost impacts likely would be due to the cost of construction delay, unless there's something else we're not considering. Would it be feasible to get an estimate? I'm happy to discuss in person this week.

Placement on the Suspense File has listed it as a cost of \$220k, which is standard cost for state initiatives. However, since a vote wouldn't go to voters until sometime in 2018, there is likely greater cost impact(s) than reflected in that amount.

Thanks in advance,
Taryn

From: Chuck Gardner </O=FIRST ORGANIZATION/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=CHUCK GARDNER>
Sent: Wednesday, May 4, 2016 2:17 PM
To: 'Mark W. Cowin (mcowin@water.ca.gov)'; 'Nemeth, Karla@CNRA' <karla.nemeth@resources.ca.gov>
Subject: Econ Analysis

Hi Team,

Wanted to check in with both of you on this topic. I spoke with Sunding today. He is under the impression that the economic analysis is on hold. He says there are 2 additional tweaks he could make if we wanted them included: 1) add analysis for the adaptive range and 2) add a more robust analysis of transfers.

For clarity – do we want David to make these additional changes or do we want to put his effort on hold.

Thanks,

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From: Chuck Gardner </O=FIRST ORGANIZATION/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=CHUCK GARDNER>
Sent: Wednesday, May 4, 2016 4:05 PM
To: 'Cowin, Mark@DWR' <Mark.Cowin@water.ca.gov>
Cc: 'Nemeth, Karla@CNRA' <karla.nemeth@resources.ca.gov>
Subject: RE: Econ Analysis

Will do.
cg

Charles R. Gardner Jr.
(916) 708-8767



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cg

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From: Chuck Gardner </O=FIRST ORGANIZATION/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=CHUCK GARDNER>
Sent: Tuesday, May 24, 2016 9:32 AM
To: Stein, Russell@DWR <Russell.Stein@water.ca.gov>
Cc: Messer, Cindy@DWR <Cindy.Messer@water.ca.gov>
Subject: Re: additional economics tasks
Attach: image001.jpg

Russ and Cindy,
FYI This scope of work for Sunding was authorized by Mark Cowin about 2 weeks ago. Please let me know if you have any other questions.
Thanks,
cg

Sent from my iPhone

On May 24, 2016, at 11:48 AM, Stein, Russell@DWR <Russell.Stein@water.ca.gov> wrote:

Hi Cindy,

Just an FYI for California WaterFix project management. It appears Sunding is conducting additional economic evaluation and an increase in cost to complete is needed. I'm not sure if this was discussed with Executive or Resources Agency. I need to complete the loop and make sure you and or Resources Agency wants this work completed and are okay with the authorization to issue the NTP.

Let me know soon (maybe today) so I can authorize.

Thanks, Russ

From: Darby, Nicole@DWR
Sent: Monday, May 23, 2016 6:22 PM
To: Stein, Russell@DWR
Subject: FW: additional economics tasks

Russ,

ICF will require another NTP for the Economic Analysis work as described below. They have drafted a PCA and an amendment to the task order but it has not yet been delivered to us. Once it has, it will require approx. 15 days to process. Regardless, they will need an NTP to continue to work.

Nicole

I suggest the following language:

A Notice to Proceed (NTP) for this work supporting the Economic Analysis (Task Order 11) is approved due to the urgency and timeframe in which it is needed as associated documents are being reviewed and prepared. This work is described as being: producing a report with aggregated results, complete adaptive range analysis, exit ramp alternative, meeting attendance at the request of DWR, and project management. This second NTP commences on Monday, May 23, 2016 and will end on June 30, 2016. This

NTP is issued for an additional \$25,000. The total of this NTP is \$35,000.

From: Darby, Nicole@DWR
Sent: Monday, April 25, 2016 4:10 PM
To: Britney, Erika <Erika.Britney@icfi.com>
Cc: Gardner, Chuck@HGCPM <cgardner@hgcpm.com>; Stein, Russell@DWR <Russell.Stein@water.ca.gov>; Sherry, Kathy@HGCPM <ksherry@hgcpm.com>; Tonja Stradley <tstradley@hgcpm.com>
Subject: FW: additional economics tasks

Hi Erika,

An NTP for the most current work on the Economic Analysis has been approved by Russ. Let's schedule a quick call to discuss the next steps.

Thanks,
Nicole

From: Stein, Russell@DWR
Sent: Monday, April 25, 2016 3:53 PM
To: Darby, Nicole@DWR <Nicole.Darby@water.ca.gov>
Cc: Gardner, Chuck@HGCPM <cgardner@hgcpm.com>
Subject: RE: additional economics tasks

Hi Nicole. I talked w Mark and we should approve and get this work going. Thanks, Russ

A Notice to Proceed for this work is approved due to the urgency and timeframe in which it is needed. This Notice to Proceed approval begin on Friday, April 22, 2016 and will end on Friday, May 20, 2016. It will not exceed \$10,000. A Project Change Authorization request will be submitted for review which will include the work required and a detailed budget.

From: Britney, Erika [<mailto:Erika.Britney@icfi.com>]
Sent: Friday, April 22, 2016 11:03 AM
To: Darby, Nicole@DWR <Nicole.Darby@water.ca.gov>
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To: Chuck Gardner <cgardner@hgcpm.com>

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Mobile: [415-299-2653](tel:415-299-2653)

email: sunding@berkeley.edu

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From: Chuck Gardner </O=FIRST ORGANIZATION/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=CHUCK GARDNER>
Sent: Tuesday, May 24, 2016 10:27 AM
To: Messer, Cindy@DWR <Cindy.Messer@water.ca.gov>
Cc: Stein, Russell@DWR <Russell.Stein@water.ca.gov>; Darby, Nicole@DWR <Nicole.Darby@water.ca.gov>
Subject: Re: additional economics tasks

Thanks Russ.

Sent from my iPhone

On May 24, 2016, at 1:15 PM, Messer, Cindy@DWR <Cindy.Messer@water.ca.gov> wrote:

Thanks!

From: Stein, Russell@DWR
Sent: Tuesday, May 24, 2016 10:05 AM
To: Messer, Cindy@DWR; Gardner, Chuck@HGCPM
Cc: Darby, Nicole@DWR
Subject: RE: additional economics tasks

Thanks Cindy and Chuck. I'll give Nicole the approval to move forward with the NTP. Russ

From: Messer, Cindy@DWR
Sent: Tuesday, May 24, 2016 9:49 AM
To: Gardner, Chuck@HGCPM; Stein, Russell@DWR
Subject: RE: additional economics tasks

Thanks Chuck – we did not discuss this at last week's Core Team meeting so this info helps.

Do you need anything specific from me at this point Russ? I'm around until 1:30 today and then offsite for a meeting.

Thanks
Cindy

From: Chuck Gardner [<mailto:cgardner@hgcpm.com>]
Sent: Tuesday, May 24, 2016 9:32 AM
To: Stein, Russell@DWR
Cc: Messer, Cindy@DWR
Subject: Re: additional economics tasks

Russ and Cindy,
FYI This scope of work for Sunding was authorized by Mark Cowin about 2 weeks ago. Please let me know if you have any other questions.
Thanks,
cg

Sent from my iPhone

On May 24, 2016, at 11:48 AM, Stein, Russell@DWR <Russell.Stein@water.ca.gov> wrote:

Hi Cindy,

Just an FYI for California WaterFix project management. It appears Sunding is conducting additional economic evaluation and an increase in cost to complete is needed. I'm not sure if this was discussed with Executive or Resources Agency. I need to complete the loop and make sure you and or Resources Agency wants this work completed and are okay with the authorization to issue the NTP.

Let me know soon (maybe today) so I can authorize.

Thanks, Russ

From: Darby, Nicole@DWR
Sent: Monday, May 23, 2016 6:22 PM
To: Stein, Russell@DWR
Subject: FW: additional economics tasks

Russ,

ICF will require another NTP for the Economic Analysis work as described below. They have drafted a PCA and an amendment to the task order but it has not yet been delivered to us. Once it has, it will require approx. 15 days to process. Regardless, they will need an NTP to continue to work.

Nicole

I suggest the following language:

A Notice to Proceed (NTP) for this work supporting the Economic Analysis (Task Order 11) is approved due to the urgency and timeframe in which it is needed as associated documents are being reviewed and prepared. This work is described as being: producing a report with aggregated results, complete adaptive range analysis, exit ramp alternative, meeting attendance at the request of DWR, and project management. This second NTP commences on Monday, May 23, 2016 and will end on June 30, 2016. This NTP is issued for an additional \$25,000. The total of this NTP is \$35,000.

From: Darby, Nicole@DWR
Sent: Monday, April 25, 2016 4:10 PM
To: Britney, Erika <Erika.Britney@icfi.com>
Cc: Gardner, Chuck@HGCPM <cgardner@hgcpm.com>; Stein, Russell@DWR <Russell.Stein@water.ca.gov>; Sherry, Kathy@HGCPM <ksherry@hgcpm.com>; Tonja Stradley <tstradley@hgcpm.com>
Subject: FW: additional economics tasks

Hi Erika,

An NTP for the most current work on the Economic Analysis has been approved by Russ. Let's schedule a quick call to discuss the next steps.

Thanks,

Nicole

From: Stein, Russell@DWR
Sent: Monday, April 25, 2016 3:53 PM
To: Darby, Nicole@DWR <Nicole.Darby@water.ca.gov>
Cc: Gardner, Chuck@HGCPM <cgardner@hgcpm.com>
Subject: RE: additional economics tasks

Hi Nicole. I talked w Mark and we should approve and get this work going. Thanks, Russ

A Notice to Proceed for this work is approved due to the urgency and timeframe in which it is needed. This Notice to Proceed approval begin on Friday, April 22, 2016 and will end on Friday, May 20, 2016. It will not exceed \$10,000. A Project Change Authorization request will be submitted for review which will include the work required and a detailed budget.

From: Britney, Erika [<mailto:Erika.Britney@icfi.com>]
Sent: Friday, April 22, 2016 11:03 AM
To: Darby, Nicole@DWR <Nicole.Darby@water.ca.gov>
Cc: Sibilla, Jennifer <Jennifer.Sibilla@icfi.com>; Laratta, Dione <Dione.Laratta@icfi.com>
Subject: FW: additional economics tasks

Nicole,

FYI...

We are working on a PCA and will try to get input from CH2M (scroll down to see communications with Chuck). The first task Dave is referring to is for \$6K and they have completed that work because it was time critical. Work on the other tasks will not proceed without NTP. We will put these estimates into a PCA along with an additional task for outreach support.

Produce Report with Aggregated Results

	Hours	Rate	Amount
Sunding	4	\$475	\$1,900
RA	16	\$250	\$4,000
			\$5,900

Complete Adaptive Range Analysis

	Hours	Rate	Amount
Sunding	6	\$475	\$2,850
RA	16	\$250	\$4,000
			\$6,850

Exit Ramp Alternative

	Hours	Rate	Amount
Sunding	8	\$475	\$3,800
RA	24	\$250	\$6,000
			\$9,800

From: David L Sunding [<mailto:sunding@berkeley.edu>]

Sent: Friday, April 22, 2016 10:46 AM
To: Britney, Erika <Erika.Britney@icfi.com>
Cc: Laratta, Dione <Dione.Laratta@icfi.com>
Subject: Re: additional economics tasks

All of this will require a new budget because it's all beyond what we originally envisioned for the economic report. I don't have a written NTP but Mark and Karla told me to do this, so I did. It needed to be done prior to a conference next week.

Thanks

On Fri, Apr 22, 2016 at 8:32 AM, Britney, Erika <Erika.Britney@icfi.com> wrote:

Thanks. Yes please send me a budget request for outreach support. Make an assumption regarding number of meetings. Also, if CH2/Chandra will be required for any of these meeting, please indicate that as well.

Is all of this going to need to be "new budget" or were you able to complete the first task with left-over budget? I need to know how much new budget I will need to ask for.

Finally, if the first task will require "new budget", please provide whatever you have in terms of an NTP from Chuck.

Thanks.

From: David L Sunding [mailto:sunding@berkeley.edu]
Sent: Thursday, April 21, 2016 8:13 PM
To: Britney, Erika <Erika.Britney@icfi.com>
Subject: Fwd: additional economics tasks

Hi Erika-

See the correspondence below. The first three items on the attached spreadsheet are what Chuck and I are talking about. Please let me know if you have any questions. I finished the first task and will finish the other two as soon as we get authorization to proceed.

I'm starting to get a lot of requests from DWR for outreach. Should I also send a budget request for that? I think we may have discussed this, but I probably forgot what we decided.

Thanks,

Dave

----- Forwarded message -----

From: David L Sunding <sunding@berkeley.edu>
Date: Fri, Apr 8, 2016 at 2:20 PM
Subject: Re: additional economics tasks
To: Chuck Gardner <cgardner@hgcpm.com>

Here is a review set of tasks based on the call

Let me know if any of this should be done through SWC

Dave

On Fri, Apr 8, 2016 at 12:41 PM, David L Sunding <sunding@berkeley.edu> wrote:

1) and 2) could be completed within 2 weeks at the outside. 2) could be completed within 4 weeks.

On Fri, Apr 8, 2016 at 12:15 PM, Chuck Gardner <cgardner@hgcpm.com> wrote:

This looks good. Can you add the amount of time to conduct these additional tasks?

Thanks,

cg

Charles R. Gardner Jr.

[\(916\) 708-8767](tel:9167088767)

<image001.jpg>

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From: David L Sunding [mailto:sunding@berkeley.edu]

Sent: Friday, April 8, 2016 8:34 AM

To: Chuck Gardner <cgardner@hgcpm.com>

Subject: additional economics tasks

Attached is a budget for three additional tasks:

1) compute additional water trading benefits to agricultural contractors south of Delta.

2) Develop the "exit ramp" alternative whereby districts that elect not to pay for the WaterFix exit the SWP at the end of the current contract. Include analysis of which districts would likely pick up their shares.

3) Conceptual analysis of cost allocation alternatives, including capacity auctions.

Please give me a call if you'd like to discuss. I'm around all morning.

Talk to you today at 1.

Dave

--

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From: Chuck Gardner </O=FIRST ORGANIZATION/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=CHUCK GARDNER>
Sent: Friday, June 10, 2016 4:06 PM
To: Ken Bogdan (Kenneth.Bogdan@water.ca.gov)
Subject: Cost Allocation

Ken,
SWP/CVP cost allocation has been making good progress. Several weeks ago we convened a workgroup consisting of Roger Patterson, Tom Birmingham, Jim Fiedler, Terry Erlewine, Michelle Banonis, Brian Thomas, Brent Walthall and Joan Maher. The group has developed a concept based on anticipated deliveries followed by a true-up based on actual deliveries. Our goal is to have a recommendation to Mark and the GM's by next Friday. The main issue needing resolution is the true up period, which we are discussing early next week. I'll keep you posted.

Thanks,
cg

Charles R. Gardner Jr.
(916) 708-8767



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From: Chuck Gardner </O=FIRST ORGANIZATION/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=CHUCK GARDNER>
Sent: Tuesday, June 14, 2016 9:07 AM
To: 'Pirabarooban, Shanmugam@DWR' <Shanmugam.Pirabarooban@water.ca.gov>
Subject: RE: b1 analysis

Thanks. I'll put a call into him to see what he means.

cg

Charles R. Gardner Jr.
(916) 708-8767



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From: Pirabarooban, Shanmugam@DWR [mailto:Shanmugam.Pirabarooban@water.ca.gov]
Sent: Tuesday, June 14, 2016 8:16 AM
To: Chuck Gardner <cgardner@hgcpm.com>
Subject: RE: b1 analysis

We have cost estimates for CWF, West, East, and Separate Corridor options. CWF estimates are in 2014 dollars and the other estimates are in 2010 dollars. I am sure Dr. Sunding would have already used these estimates for his previous BDCP work and the current economic analysis. I am not sure what he meant by alternatives in his email.

Thanks.

Praba

From: Chuck Gardner [mailto:cgardner@hgcpm.com]
Sent: Monday, June 13, 2016 5:26 PM
To: Pirabarooban, Shanmugam@DWR
Subject: FW: b1 analysis

Do we have anything that fits his request?

cg

Charles R. Gardner Jr.
(916) 708-8767



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From: Sunding, David [<mailto:David.Sunding@brattle.com>]
Sent: Monday, June 13, 2016 1:19 PM
To: Chuck Gardner <cgardner@hgcpm.com>
Subject: b1 analysis

I'm finishing the cost practicability analysis this week, and before I do I wanted to check to see if you had any information on the construction cost of the alternatives. I can estimate (roughly) based on the various components, but that method may not be too accurate. If you have something better I would love to use it.

Thanks

Dave

David Sunding
Principal, The Brattle Group
Professor, UC Berkeley

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