From:	Alicia Forsythe [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=A6CDF06A7E904B65BAA21702A82AD329-AFORSYTHE]
Sent:	10/3/2022 2:57:44 PM
To:	Micko, Steve [Steve.Micko@jacobs.com]; Angela Bezzone [bezzone@mbkengineers.com]
CC:	Leaf, Rob [Rob.Leaf@jacobs.com]; Thayer, Reed [Reed.Thayer@jacobs.com]
Subject:	RE: Sites Without Exchanges Trend Reporting Spreadsheet

Thanks Steve! This is super helpful!

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Micko, Steve <Steve.Micko@jacobs.com>
Sent: Thursday, September 29, 2022 9:45 AM
To: Angela Bezzone <bezzone@mbkengineers.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Cc: Leaf, Rob <Rob.Leaf@jacobs.com>; Thayer, Reed <Reed.Thayer@jacobs.com>
Subject: RE: Sites Without Exchanges Trend Reporting Spreadsheet

Hi Ali,

Fills, releases, and deliveries under 3A and 3A without exchanges are provided in the table below.
Below the table, I added some notes to explain what we observed during the Proforma analysis and what we're seeing now.

Please let me know if you have any questions.

Best,
Steve

	Sites Fill	Sites Releases	Sites Project Deliveries

	Long-Term Average	Dry and Critically Dry Years	Long-Term Average	Dry and Critically Dry Years	Long-Term Average	Dry and Critically Dry Years
	TAF	TAF	TAF	TAF	TAF	TAF
2035 CT ALT 3A 041122	302	118	283	381	178	283
2035 CT ALT 3A 041122 with no exchanges	292	114	271	384	175	281

- No Oroville Exchange in Proforma (Alt 1B in RDEIR/SDEIS)
- ○ Context:
- ▪ Alt 1B relative to Alt 3A:
- Less restrictive diversion criteria
- Larger South of Delta storage partner account in Sites
- Smaller Federal account in Sites
- Proforma only considered removal of Oroville exchange
- Simulated at historical climate
- ○ Results:
- ▪ Long-term and dry/critically dry average releases decreased by 5 TAF and 14 TAF, respectively
- ▪ Long-term and dry/critically dry average deliveries decreased by 5 TAF and 10 TAF, respectively
- Current sensitivity analysis
- ○ Expectations:
- ▪ Reduced releases and deliveries due to conveyance capacity limitations
- ▪ Given relative difference to RDEIR/SDEIS, reduction in releases and deliveries should be smaller than what was observed in Proforma
- ○ Results:
- ▪ Long-term and dry/critically dry average releases decrease by 12 TAF and increases by 3 TAF, respectively
- Long-term and dry/critically dry average release to South of Delta storage partner decrease
- Fed account activity increases in D&C years, augmenting total Sites releases
- ▪ Long-term and dry/critically dry average deliveries decrease by 3 TAF and 3 TAF, respectively
- Releases are focused to months with less Delta salinity cost, minimizing reduction to estimated deliveries

From: Micko, Steve
Sent: Wednesday, September 28, 2022 5:20 PM
To: Angela Bezzone <bezzone@mbkengineers.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Cc: Leaf, Rob <Rob.Leaf@jacobs.com>; Thayer, Reed <Reed.Thayer@jacobs.com>
Subject: RE: Sites Without Exchanges Trend Reporting Spreadsheet

Hi Ali and Angela,

The effect of Sites-Oroville exchange on Feather River flows is demonstrated in the tables below.

In the first table, I've provided summary statistics (avg, min, max by wyt) of flow above Feather River Flow Requirements (or total Feather River flow minus Feather River Min. Flow Requirement) in June and July of exchange years.
In next table, I've listed all years with an exchange operation and provided flow above Feather River Flow Requirements in NAA and ALT 3A.

Finally, I grabbed a slide from the WSIP cumulative flow study presentation.
Note that the pulse flow projects will likely cause a reduction releases from Oroville in Jul – Sep.
Coincidentally, Sites-Oroville exchanges would reduce releases from Oroville in July (to back-up exchange water for release in Aug – Nov)... Leading to CDFW's question.
That being said, in all but one year of the CalSim model, there's ample water in the Feather River in July for a Sites-Oroville exchange and a pulse flow project action (per last table in this email).

Best,
Steve

Volume above Feather River Flow Requirements in June and July Exchange Years[1] (TAF)

Water Year Type	NAA 041122 2035CT			ALT3A 041122 2035CT		
	Average	Max	Min	Average	Max	Min
Below Normal	654	794	139	603	752	79
Dry	564	887	256	514	825	177
Critically Dry	288	583	44	232	472	0

[1]Considers the minimum volume of water above the Feather River below Thermalito and Feather River at Mouth flow requirements

List of Exchange Years and Flow above Feather River Flow Requirements in June and July

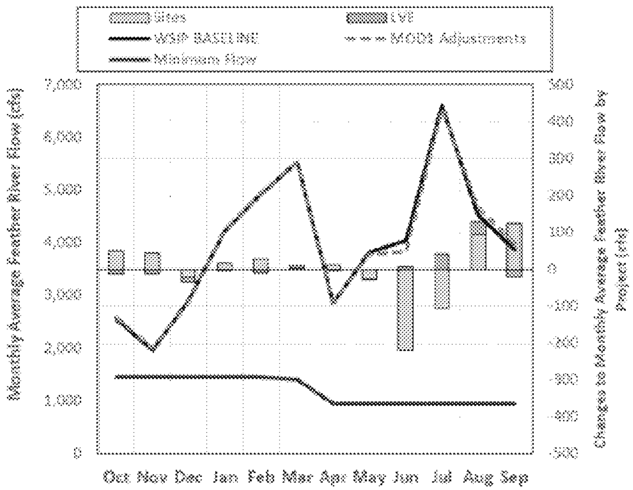
Year	Water year type	Oroville Exchange Volume (TAF)	Flow above Min. Flow Req., Thermalito (TAF)			Flow above Min. Flow Req., Mouth (TAF)		
			NAA	ALT 3A	Difference	NAA	ALT 3A	Difference
1924	5	60	382	322	-60	313	253	-60
1925	4	23	380	355	-25	422	397	-25
1926	4	20	659	630	-30	636	607	-30
1929	5	48	277	226	-50	277	224	-53
1930	4	20	843	825	-18	939	919	-20
1935	3	67	700	623	-77	866	788	-78
1936	3	22	724	702	-22	781	759	-22
1937	3	64	139	79	-60	258	197	-61

1939	4	22	451	425	-27	432	404	-29
1944	4	40	782	751	-31	797	766	-31
1945	3	59	718	655	-63	727	664	-63
1946	3	70	715	645	-70	697	626	-71
1947	4	42	394	354	-40	378	338	-40
1949	4	15	673	575	-98	653	555	-98
1950	3	23	658	678	20	745	764	19
1955	4	64	474	401	-72	399	326	-73
1957	3	55	674	617	-58	703	645	-58
1959	3	23	730	679	-51	706	654	-53
1960	4	136	816	678	-139	807	669	-138
1961	4	61	485	482	-3	451	449	-2
1962	3	51	842	801	-41	794	752	-42
1964	4	46	668	627	-41	714	671	-42
1966	3	57	723	644	-80	759	679	-80
1968	3	39	643	602	-41	664	623	-42
1972	3	36	591	550	-42	697	654	-43
1976	5	87	589	481	-108	583	472	-111
1977	5	41	220	175	-45	44	0	-44
1979	3	70	729	661	-68	794	725	-69
1981	4	74	887	802	-85	906	821	-85
1985	4	29	548	522	-26	633	607	-26
1987	4	60	377	314	-63	325	261	-64
1989	4	29	758	729	-29	735	705	-30
1991	5	13	299	285	-15	425	411	-14
1994	5	53	276	225	-51	211	161	-50
2001	4	62	285	209	-76	256	177	-79
2002	4	47	401	362	-40	495	451	-45

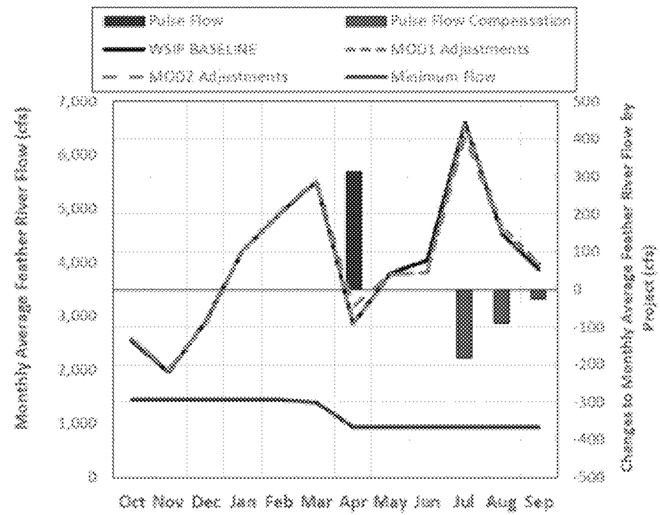
Cumulative Effects on Feather River

- **MOD1 (flow below Thermalito):**
  - Reductions primarily due to Sites
- **MOD2 (flow below Thermalito):**
  - Increase in April due to pulse flow
  - Decreases in Jul – Sep for pulse flow compensation

MOD1 Mean Monthly and Changes in Feather River Flows



MOD2 Mean Monthly and Changes in Feather River Flows



List of Years with Exchanges in July, Flow Above Min. Flow Requirements in Feather River

Year	Water year type	Oroville Exchange Volume (TAF)	Flow above Min. Flow Req., Thermalito (TAF)			Flow above Min. Flow Req., Mouth (TAF)		
			NAA	ALT 3A	Difference	NAA	ALT 3A	Difference
1926	4	7	483	466	-17	607	461	-17
1930	4	11	533	527	-7	919	543	-8
1935	3	38	461	426	-35	788	487	-36

1936	3	12	498	486	-13	759	503	-13
1937	3	37	86	53	-33	197	109	-34
1945	3	34	511	479	-33	664	500	-34
1946	3	40	553	513	-40	626	534	-41
1950	3	13	470	512	42	764	489	41
1957	3	31	510	478	-32	645	502	-33
1960	4	71	549	478	-71	669	527	-71
1962	3	29	545	519	-26	752	505	-27
1966	3	33	553	521	-33	679	554	-33
1968	3	22	553	531	-22	623	552	-23
1972	3	18	506	487	-18	654	555	-18
1976	5	50	395	341	-54	472	404	-54
1979	3	40	488	447	-41	725	520	-42
1981	4	30	522	482	-40	821	516	-41
1989	4	17	535	518	-16	705	506	-16
1994	5	13	146	134	-12	161	106	-12

From: Micko, Steve
Sent: Wednesday, September 28, 2022 8:23 AM
To: Angela Bezzone <bezzone@mbkengineers.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Cc: Leaf, Rob <Rob.Leaf@jacobs.com>; Thayer, Reed <Reed.Thayer@jacobs.com>
Subject: RE: Sites Without Exchanges Trend Reporting Spreadsheet

Absolutely!

From: Angela Bezzone <bezzone@mbkengineers.com>
Sent: Wednesday, September 28, 2022 7:55 AM
To: Micko, Steve <Steve.Micko@jacobs.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Cc: Leaf, Rob <Rob.Leaf@jacobs.com>; Thayer, Reed <Reed.Thayer@jacobs.com>
Subject: [EXTERNAL] RE: Sites Without Exchanges Trend Reporting Spreadsheet

Thanks, Steve! Would you mind taking some time (maybe just 5-10 minutes) to go through the trend spreadsheet during our call at 9:30? I've looked at one of these before, but it would be helpful for me to see a few of the things you focus on when reviewing the info in this format?

Talk to you soon,

Angela

From: Micko, Steve <Steve.Micko@jacobs.com>
Sent: Tuesday, September 27, 2022 4:05 PM
To: Alicia Forsythe <aforsythe@sitesproject.org>; Angela Bezzone <bezzone@mbkengineers.com>
Cc: Leaf, Rob <Rob.Leaf@jacobs.com>; Thayer, Reed <Reed.Thayer@jacobs.com>
Subject: Sites Without Exchanges Trend Reporting Spreadsheet

CAUTION - EXTERNAL SENDER: This email originated from outside of the organization. Only open links from **TRUSTED** sources.

Hi Ali and Angela,

The attached trend reporting spreadsheet contains the following modeled results:

- NAA 041122 2035CT
- ALT 3A 041122 2035CT
- ALT 3A 041122 2035CT without Shasta, nor Oroville Exchanges sensitivity analysis

We found, as expected, that no exchanges results in reduced releases from Sites reservoir.

Please let me know if you have any questions.

Best,
Steve

Steve Micko, PE (he/him) | Jacobs | Project Manager and Water Group Leader
O:916.286.0358 | M:408.834.6614 | Steve.Micko@jacobs.com
2485 Natomas Park Drive Suite 600 | Sacramento, CA 95833

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From:	Alicia Forsythe[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=A6CDF06A7E904B65BAA21702A82AD329-AFORSYTHE]
Sent:	Mon 10/3/2022 3:12:31 PM (UTC-07:00)
To:	Jerry Brown[jbrown@sitesproject.org]
Cc:	Angela Bezzone[bezzone@mbkengineers.com]
Subject:	Sites Project - Sensitivity Analysis of Project Without Exchanges

Jerry – Based on a question from CDFW, we had Jacobs complete a CALSIM Sensitivity Analysis of the Project without exchanges in both Shasta Lake and Lake Oroville. The high level fills, releases, and deliveries results are summarized below. The analysis used Alt 3A with the revised diversion criteria (10,700 cfs at Wilkins Slough Oct to June), Reclamation at 25% investment, and 2035 CT climate.

I thought I would share these high level results as we have talked before about the extent to which we are reliant on DWR and Reclamation for releases and thus, viability of the Project.

In general, fills, releases, and deliveries drop slightly without exchanges. These results tell me that exchanges help us move water more efficiently and effectively and thus, help us drop the cost of the Project slightly. But not really that much (frankly, not nearly as much as I thought). This tells me the Project is viable without exchanges if for some reason the agencies decide they don't want to participate in exchanges in the future.

	Sites Fill		**Sites Releases**		**Sites Pr**
	Long-Term Average	Dry and Critically Dry Years	Long-Term Average	Dry and Critically Dry Years	Long-Term Average
	TAF	TAF	TAF	TAF	TAF
2035 CT ALT 3A 041122	302	118	283	381	178
2035 CT ALT 3A 041122 with no exchanges	292	114	271	384	175

We are not changing the Project description to remove exchanges at Shasta or Oroville. Simply completed this sensitivity analysis to dig into some questions from CDFW.

Thought I would share. Let me or Angela know if you have any questions or concerns.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Alicia Forsythe [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=A6CDF06A7E904B65BAA21702A82AD329-AFORSYTHE]
Sent: 10/4/2022 3:08:39 PM
To: Jerry Brown [jbrown@sitesproject.org]; Kevin Spesert [kspesert@sitesproject.org]
Subject: RE: Oct. 14 Northern California Tour

Hi Jerry and Kevin – I am not planning on being on the tour next week. I saw Jennifer Bowles last week and she mentioned the tour and I said we were excited to have them back again. So she may have assumed that I was going to be there. Or this may have been a left over from the last in person WEF tour, which I did as Kevin was out.

But I cant be there next week. Are one of you planning to cover this?

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Nick Gray <Ngray@watereducation.org>
Sent: Tuesday, October 4, 2022 1:51 PM
To: Jerry Brown <jbrown@sitesproject.org>; Alicia Forsythe <aforsythe@sitesproject.org>; Kevin Spesert <kspesert@sitesproject.org>; Marcia Kivett <MKivett@sitesproject.org>
Subject: Oct. 14 Northern California Tour
Importance: High

Hi Jerry,
So sorry for the radio silence, it's been crazy here lately with our big symposium in Santa Fe last month…

Here's what I have as a placeholder in next week's tour itinerary for our **visit to Sites Valley on Friday, Oct 14**. It's what we had in the 2019 itinerary so I'm sure you have some updates, just let me know what you'd like edited. 😊 We can stop at the office in Maxwell as usual to pick up Ali or someone else on our way in for some bus time if you'd like.
Also, if you have any publications, videos, etc. that you'd like to share with tour participants, they will be given access to a Google Drive folder pre-tour and I can add any files you want to send me.

Below is the participant list as well. We have an absolutely full bus this time!
Cheers,
Nick

3:30 p.m. **ARRIVE** at Sites Valley

Ali Forsythe
Environmental Planning & Permitting Manager, Sites Reservoir Project

- Planning & building a reservoir in California
- North-of-the-Delta Offstream Storage (NODOS) Investigation

4:30 p.m. **DEPART** for Water Education Foundation

First Name	Last Name	Job Title	Company
Trelawney	Gonzales-Bullis	Water Manager	AC Foods
Jordan	Ollanik	Zone Engineer	Advanced Drainage Systems
Carl	Evers	Director Of Sustainability	AgIS Capital
Andrew	Hart	Manager	Booth Ranches LLC
Mohammad	Hasan	Engineer, Water Resources	California Department of Water Resources
Anthony	Rubio	Water Resources Engineer	California Department of Water Resources
Grace	Hoang	Senior Water Resources Engineer	California Department of Water Resources
Catherine	McCalvin	SWP Ecosystem Improvements Branch Manager	California Department of Water Resources
Nicole Stephanie	Osorio	Water Resources Engineer	California Department of Water Resources
Jennifer	Zuniga	Staff Services Manager I	California Department of Water Resources
Andrea	Abergel	Manager of Water Policy	California Municipal Utilities Association
Nigel	Browne	Senior Management Analyst	City of Fairfield
Austin	Cho	Attorney	Downey Brand
Sharon	Hu	Electrical Engineer	East Bay Municipal Utility District
Eric	Ginney	Director	ESA
Nami	Tanaka	Civil Engineer	ESA
Peer	Swan	Board Director	Irvine Ranch Water District
Juan	Rovalo	Senior Ecologist	Jacobs Engineering
Bryan	Sherrill	Water Resources Engineer in Training	Jacobs Engineering
Sonja	Petek	Principal Fiscal and Policy Analyst	Legislative Analyst's Office
Carissa	Abraham	Assistant Engineer	MBK Engineers
Alex	Van Roekel	Attorney	Nossaman
Sara	Harper	Senior Engineer	Provost & Pritchard
Lynn	Moeller	Senior Engineer	Provost & Pritchard
Gregory	Quist	Director	Rincon del Diablo Municipal Water District
Clint	Baze	General Manager	Rincon del Diablo Municipal Water District
Samantha	Harper	Water Resources Control Engineer	San Francisco Bay Water Quality Control Board
Emmett	Campbell	Sr. Water Resources Planner	San Gorgonio Pass Water Agency
Lance	Eckhart	General Manager	San Gorgonio Pass Water Agency
Kevin	Walton	Director	San Gorgonio Pass Water Agency
Larry	Smith	President	San Gorgonio Pass Water Agency

Joanne	Connelly	Life-cycle Celebrant	Self-employed
Tori	Klug	Environmental Engineer	Stantec
Adam	Witt	Senior Water Resources Engineer	Stantec
Bridget	Childs	Water Resources Engineer in Training	Stantec
Janelle	Krattiger	Attorney	Stoel Rives LLP
Jake	Sahl	Stewardship Water Associate	The Nature Conservancy
Antonia	Salas	Hydrologic Technician	U.S. Bureau of Reclamation
Jo Anna	Beck	Natural Resource Specialist	U.S. Bureau of Reclamation
John	Kurtz	Conservation Planner	U.S. Fish and Wildlife Service
Cathy	Cockrell	Writer/Editor (retired)	UC Berkeley
Scott	Shershow	Emeritus Professor of English	UC Davis
Andrew	Lakoff	Professor of Sociology	University of Southern California
Scott	Boyce	Research Hydrologist	USGS
Vince	Gin	Deputy Operating Officer - Water Supply	Valley Water
Joanna	Warrens	Walnut Farmer	Warrens Bros
Wade	Warrens	Walnut Farmer	Warrens Bros
Haley	Lehman	Technology & Strategic Communications	Water Systems Consulting
Amanda	Dwyer	Sales and Business Development Manager	Westervelt Ecological Services
Kaitlyn	Chow	Hydrologist	Yuba Water Agency

Nick Gray
Programs Director
Water Education Foundation
916.444.6240 ext.206 | 530.433.4242 (cell)
Please Note: We have moved office and our new address is:
2151 River Plaza Drive, Suite 205
Sacramento, CA 95833
Follow us on Twitter, Instagram, Facebook & LinkedIn

Join us in Sacramento October 27 for our Water Summit!
Our annual premier event will focus this year on the theme,
***Rethinking Water in the West*. Find more details and registration info here.**

From: Nick Gray
Sent: Tuesday, August 23, 2022 8:59 AM
To: Jerry Brown <jbrown@sitesproject.org>; Alicia Forsythe <aforsythe@sitesproject.org>; Kevin Spesert <kspesert@sitesproject.org>; Marcia Kivett <MKivett@sitesproject.org>
Subject: RE: Save the Date: Oct. 12-14 Northern California Tour

Thanks so much, Jerry. As soon as the post-lunch plan for that day falls into place, I'll circle back with more details.
Cheers,
Nick

From: Jerry Brown <jbrown@sitesproject.org>
Sent: Tuesday, August 23, 2022 8:20 AM
To: Nick Gray <Ngray@watereducation.org>; Alicia Forsythe <aforsythe@sitesproject.org>; Kevin Spesert <kspesert@sitesproject.org>; Marcia Kivett <MKivett@sitesproject.org>
Subject: Re: Save the Date: Oct. 12-14 Northern California Tour

Thanks for the note Nick. We are definitely looking forward to this and excited for the renewal to an in person visit. Between the three of us (Ali, Kevin, me), we'll make sure this event is staffed to ensure your customers leave satisfied.

From: Nick Gray <Ngray@watereducation.org>
Date: Friday, August 19, 2022 at 3:49 PM
To: Alicia Forsythe <aforsythe@sitesproject.org>, Jerry Brown <jbrown@sitesproject.org>, Kevin Spesert <kspesert@sitesproject.org>
Subject: RE: Save the Date: Oct. 12-14 Northern California Tour

Greetings Sites Team,
I hope your summers are going well!

Our NorCal Tour is still a couple months away but it's nearly full already. Current participant list is below. We're looking at the usual 3:30-4:30 approximate time window on the **afternoon of Fri, Oct. 14** for a visit to Sites Valley. Does that still sound good?
Happy to chat it over if you'd like, feel free to give me a call whenever's clever.
Cheers,
Nick
530.433.4242 (cell)

First Name	Last Name	Job Title	Company
Trelawney	Gonzales-Bullis	Water Manager	AC Foods
Jordan	Ollanik	Zone Engineer	Advanced Drainage Systems
Carl	Evers	Director Of Sustainability	AgIS Capital
Andrew	Hart	Manager	Booth Ranches LLC
Andrea	Abergel	Manager of Water Policy	California Municipal Utilities Association
Nigel	Browne	Senior Management Analyst	City of Fairfield
Austin	Cho	Attorney	Downey Brand
Sharon	Hu	Electrical Engineer	East Bay Municipal Utility District
Peer	Swan	Board Director	Irvine Ranch Water District
Juan	Rovalo	Senior Ecologist	Jacobs
Bryan	Sherrill	Water Resources Engineer in Training	Jacobs
Sonja	Petek	Principal Fiscal and Policy Analyst	Legislative Analyst's Office
Carissa	Abraham	Assistant Engineer	MBK Engineers
Lynn	Groundwater-Moeller	Senior Engineer	Provost and Pritchard

Sara	Harper	Senior Engineer	Provost and Pritchard
Clint	Baze	General Manager	Rincon del Diablo Municipal Water District
Gregory	Quist	Director	Rincon del Diablo Municipal Water District
Larry	Smith	President	San Gorgonio Pass Water Agency
Kevin	Walton	Director	San Gorgonio Pass Water Agency
Lance	Eckhart	General Manager	San Gorgonio Pass Water Agency
Emmett	Campbell	Sr. Water Resources Planner	San Gorgonio Pass Water Agency
Ronald	Duncan	Director	San Gorgonio Pass Water Agency
Samantha	Harper	Water Resources Control Engineer	SF Water Board - State of CA
Bridget	Childs	Water Resources Engineer in Training	Stantec
Tori	Klug	Environmental Engineer	Stantec
Janelle	Krattiger	Attorney	Stoel Rives LLP
Jake	Sahl	Stewardship Water Associate	The Nature Conservancy
Jo Anna	Beck	Natural Resource Specialist	U.S. Bureau of Reclamation
Sarah	Perrin	Conservation Planner	U.S. Fish and Wildlife Service
John	Kurtz	Conservation Planner	U.S. Fish and Wildlife Service
Scott	Shershow	Emeritis Professor of English	University of California, Davis
Scott	Boyce	Research Hydrologist	USGS
Vince	Gin	Deputy Operating Officer - Water Supply	Valley Water
Haley	Lehman	Technology & Strategic Communications	Water Systems Consulting
Kaitlyn	Chow	Hydrologist	Yuba Water Agency

Nick Gray
Programs Director
Water Education Foundation
916.444.6240 ext.206 | 530.433.4242 (cell)
Please Note: We have moved office and our new address is:
2151 River Plaza Drive, Suite 205
Sacramento, CA 95833
Follow us on Twitter, Instagram, Facebook & LinkedIn

Join us October 12-14 on our Northern California Tour!
Find more details and registration info here.

From: Nick Gray
Sent: Thursday, May 26, 2022 10:58 AM
To: Nick Gray <Ngray@watereducation.org>
Subject: Save the Date: Oct. 12-14 Northern California Tour
Importance: High

Greetings from the Water Education Foundation,
I hope you and your families are doing well!
With the successful return of our in-person spring tours now under our belt, I'm happy to confirm that we plan to also move forward with the return of our **in-person Northern California Tour** October 12-14. We have traditionally visited with you on day 3, so **please mark your calendars for Friday, October 14**, and I will follow up with you on the arrangement details over the summer. We really look forward to getting back on the road with you!
Cheers,
Nick

Nick Gray
Programs Director
Water Education Foundation
916.444.6240 ext.206 | 530.433.4242 (cell)
Please Note: We have moved office and our new address is:
2151 River Plaza Drive, Suite 205
Sacramento, CA 95833

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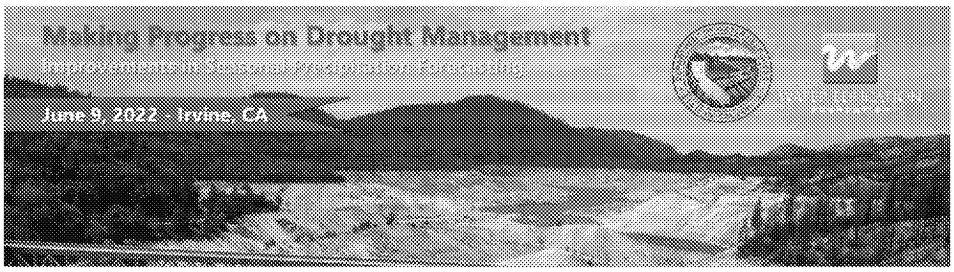
Join us in Southern California June 9 for a workshop exploring the latest science in seasonal precipitation forecasting to improve drought management. Details & registration here.



Chairperson's Meeting Agenda

Sites

Affordable Water, Sustainably Managed

Our Core Values – Safety, Trust and Integrity, Respect for Local Communities, Environmental Stewardship, Shared Responsibility and Shared Benefits, Accountability and Transparency, Proactive Innovation, Diversity and Inclusivity
Our Commitment – To live up to these values in everything we do

Date: October 6, 2022

Location: [HYPERLINK "https://teams.microsoft.com/l/meetup-join/19%3ameeting_Zjg3MmMyOGYtNGYyYy00NTkxLTk4Y2ItM2ZkOThkZDcxYjJm%40thread.v2/0?context=%7b%22Tid%22%3a%22cb2bab3d-7d90-44ea-9e31-531011b1213d%22%2c%22Oid%22%3a%22165a0912-15e6-4a14-8285-b2a97d75a363%22%7d" \t "_blank"] 1-213-379-5743 Conference ID: 816 875 088

Start Time: 2:00 p.m. **Finish Time:** 3:30 p.m.

Purpose: Ongoing update and discussion with the Chairs.

Meeting Participants:

Fritz Durst, Authority Board Chair | Valerie, Reservoir Committee Vice-Chair | Jerry Brown, Exec. Director

Discussion Topic	**Topic Leader**	**Time Allotted**
1. Follow-ups from the prior meeting: a. Public Comments @ Sept Jt Mtg b. Env Water Manager Approach – Jennifer Harder c. PPIC Report – all stored water to cold water comment d. Water Right Application Outreach and timing e. DC Engagement on Reclamation Investment f. Coordinating on broader Sac Valley interests g. Schedule/Budget for Cash Calls h. Brian Thomas	Brown	20 min
2. Review 3-Month Look Ahead	Brown	10 min
3. New Items: a. Reclamation Investment (BIL/WIIN Announcement) b. New Participants – how to participate short of capacity shareholder c. Overall Project Schedule d. Governance Discussion Update	Brown	30 min

MEMORANDUM

DATE: October 5, 2022

TO: Sites Authority Board and Reservoir Committee

FROM: Jerry Brown, Executive Director

SUBJECT: **Executive Director's Annual Performance Plan**

The following are my performance objectives for October 2022 to September 2023 which serve as the basis for the Board to evaluate my performance over the next year as Executive Director.

Key Job Responsibility	Results to Be Achieved
Staff Support to and Working with Authority Board and Reservoir Committee	Provide assistance that may be required by the Board and Committee to improve communications, teamwork, and professional relationships between Board, Committee, consultants and staff.
	Continue providing timely and significant information through regular meetings with the Coordination Committees of the Board and Committee.
	Anticipate issues of concern to the Board and Committee and communicate them as soon as possible.
	Ensure the Strategic Plan is updated as needed and guides the regular conduct of the business of the organization. Ensure any follow-up items are satisfactorily completed and make regular reports on progress.
	Review rolling 3-month look ahead for the agenda schedule with Board and Committee chairs to enable their effective facilitation of the Board and Committee functions.
	Continue to make improvements to agendas, staff project reports and workgroups/committee activity to ensure an inclusive, effective and efficient decision-making process.
	Annually review and evaluate the performance of Agents and consultants working on the Project and report results to the Board.
Management of the Project	Manage the revenues and expenditures of the Project to always be cash positive unless otherwise directed by the Board and Committee. Manage to the 2023 Annual Budget.
	Implement the Amendment 3 Project Agreement work plan.

	Ensure project's organizational structure (including consultant and agent staffing) is appropriate to complete the Amendment 3 Project Agreement work plan.
	Develop the 2023 Amendment 3 Work Plan key deliverables and ensure they are tracked and completed on time. If delays occur, identify effects on overall project schedule and approaches for mitigating negative effects.
<u>Project Information, Education and Outreach</u>	Continue outreach to key local and NGO stakeholders with the objective of maintaining a collaborative environment for addressing concerns and issues groups might have with the project.
	Continue effective communications and outreach to stakeholders, local community groups and associations to ensure that factual information is presented and support for the project continues.
	Continue outreach to "home boards" as requested by members to garner continued project support and ensure clear communication of project direction and timing.
	Conduct effective and timely outreach to State and Federal legislative offices to achieve continued support for the Project.
<u>State and Federal Agency Cooperation</u>	Cooperatively work with Reclamation to identify their level of investment in the Project, if any, and secure terms and funds for their continued participation.
	Ensure completion of the "Final" Supplemental EIS to support the "Final" Revised EIR. Ensure the final document complies with NEPA requirements and supports issuance of all federal agency permits and approvals.
	Continue discussions with State and Federal environmental and water rights permitting agencies and establish a collaborative environment that leads to meeting the overall project schedule.
	Keep the California Water Commission informed and supportive of the Project. Be competitive for any additional funds that might reallocated from other projects and at least secure the MCED for Sites.
	Continue working with DWR to ensure Sites benefits are delivered to participants that are also State Water Contractors in the manner members need to continue participation in the Project.

	Continue working with CDFW and DWR to define the terms and conditions of the benefits agreements that will need to be reached to achieve final award of Prop 1 funds. Coordinate with the other storage projects on standard terms and conditions.
Leadership in the Water Community	Stay abreast of other major storage and conveyance project activity across the state. Identify opportunities and threats and take action to best position the Project for success despite or in conjunction with these other activities.
	Monitor water-related developments in the State and Federal legislative and regulatory arenas for opportunities for funding and/or regulatory streamlining that could be beneficial to project implementation.
	Participate in ACWA Conference activities and use this as an opportunity to efficiently have meetings and discussions with the water community to ensure good communications and understanding of the Project.
	Seek out opportunities for staff to speak with groups and others about the statewide importance of this project.
	Maintain a strong presence in the water community and promote the project whenever possible.
	Continue to coordinate with other WSIP-funded projects and seek out opportunities to share best practices and coordinate efforts on key activities (e.g. funding, environmental, and water rights permitting). Maintain an effective dialogue with other project proponents at all times.

Table 1. Work Plan Key Deliverables				
Key Deliverable by Subject Area*	Target completion in			Notes
	12 Months	18 Months	36 Months	
Engineering				
Initiate Application for Permit to Construct from DSOD		✓		
Advance Engineering of Project Feature Encroachments to 65% Design Level in Support of Permitting		✓	✓	Key permit support in first 18 months
Determine Procurement and Delivery Strategy	✓			
Determine Overall Project Schedule	✓			
Preliminary Engineering (30% design level) and P1A/P1B Geotechnical Investigations		✓	✓	Complete P1A in first 18 months
Program Ops				
Execute Benefits Contracts with DWR and CDFW		✓		
Secure Final Funding with CWC			✓	
Execute Final Operations Agreement with Facility Partners, and Federal and State Agencies	✓			
Secure Federal Funding		✓		
Complete Loan Applications		✓	✓	Dependent on bank financing decision
Determine Organization Structure		✓		
Execute Benefits and Obligations Contracts		✓	✓	Dependent on bank financing decision
Permitting				
Obtain Environmental Permits Required for WSIP Final Award		✓		
Develop Mitigation Acquisition Master Plan	✓			
Receive Water Right Order and Permit		✓		
Obtain Local Agency Agreements and Permits			✓	
Planning				
Complete Final EIR/EIS	✓			NOD & ROD in August 2022
Real Estate				
Develop Land Acquisition Master Plan and ROW Manual		✓		
Acquire Land (from willing sellers)			✓	

*Communications, External Affairs, and General Project Activities subject areas serve a support function to the key deliverables provided in Table 1.

Sites

MEMORANDUM

DATE: October 5, 2022

TO: Sites Authority Board and Reservoir Committee

FROM: Jerry Brown, Executive Director

SUBJECT: **Executive Director's Annual Performance Plan**

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	Continue working with CDFW and DWR to define the terms and conditions of the benefits agreements that will need to be reached to achieve final award of Prop 1 funds. Coordinate with the other storage projects on standard terms and conditions.
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	Seek out opportunities for staff to speak with groups and others about the statewide importance of this project.
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Acquire Land (from willing sellers)			✓	

*Communications, External Affairs, and General Project Activities subject areas serve a support function to the key deliverables provided in Table 1.

From: Newens, Richard [Richard.Newens@hdrinc.com]
Sent: 10/5/2022 2:34:39 PM
To: JP Robinette [jrobinette@sitesproject.org]; Cheyanne Harris [CHarris@BrwnCald.com]
Subject: CBD Water Quality
Attachments: CBD_WaterQuality_22_1005.pptx

Hi JP and Cheyanne:

Attached is a powerpoint that was included to help organize visuals and notes. I'm hoping to use the powerpoint to help guide our discussion with focus on dialogue rather than a presentation.

The plan is to discuss currently available water quality information for CBD, regional initiatives involving the CBD, and next steps.

Please let me know if you have any questions or would like to add anything discussion points. I may make minor additions/edits to the PP prior to our discussion but the main points are in the attached and I wanted to give you time, if desired, to take a look.

Thanks,
Richard

Richard Newens, M.S.

HDR
2379 Gateway Oaks Dr., #200
Sacramento, CA 95833
D 916-679-8883
Richard.Newens@hdrinc.com

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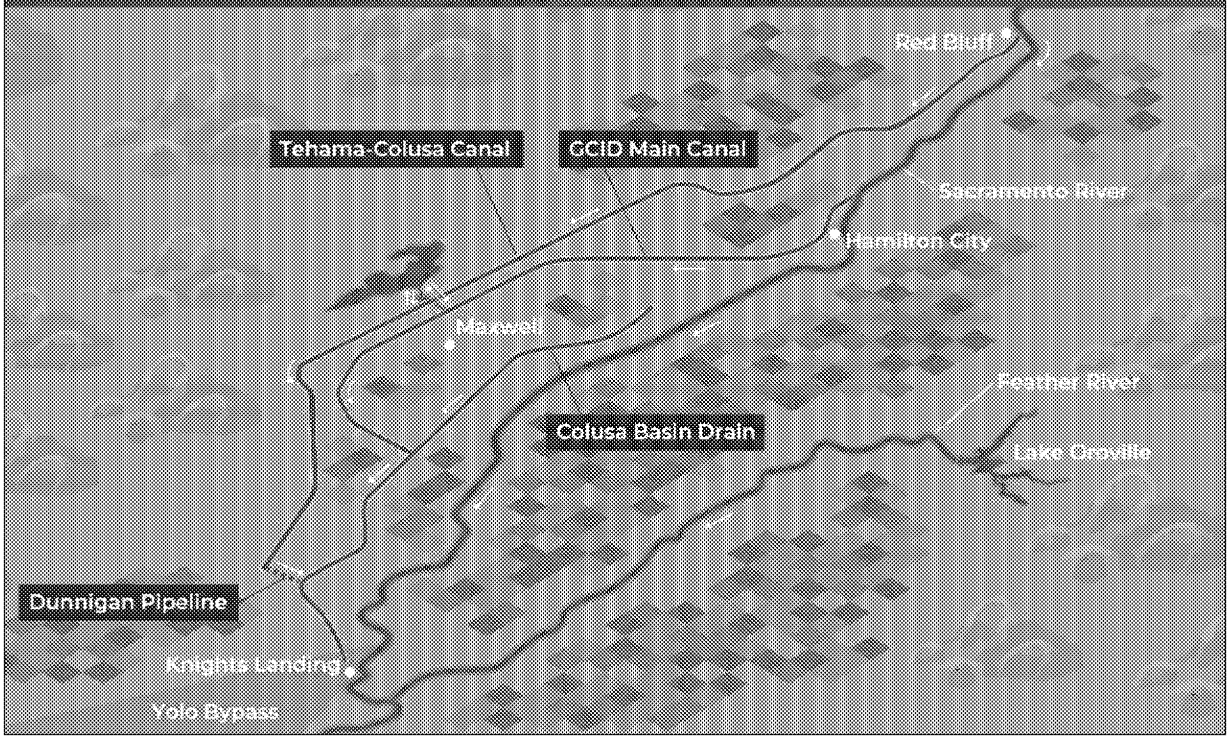
Colusa Basin Drain Water Quality

- Quick Recap
- Existing/Past Analyses
- Localized Water Quality Concerns
- Regional Water Quality Initiatives

Draft – Subject to Change – For Discussion Purposes Only

Geographical Area(s) of Concern



Draft – Subject to Change – For Discussion Purposes Only

Existing Water Quality Analyses

- Sites RDEIR/SDEIS
  *Construction, Operations, and Maintenance Effects on:
  - Inflow Water Quality
  - Reservoir Water Quality
  - Outflow Water Quality

- Chapters 2, 6, Appendix 6A, 6E, Master Response 4 (Final EIR-EIS)

Sites RDEIR/SDEIS

- Sites Constituents of Concern
  - Nutrients
  - Organic Carbon
  - Dissolved Oxygen
  - Mercury and Methylmercury
  - Others (Temp, Salinity, Metals, Pesticides, HABs)

Sites RDEIR/SDEIS

Table 6A-1. Beneficial Uses of Water Bodies in the Study Area

Surface Water Body	Municipal and Domestic Supply (MUN)	Agricultural Supply (AGR)	Industrial Service Supply (IND)	Industrial Process Supply (PRO)	Groundwater Recharge (GWR)	Fresh Water Replenishment (FRSH)	Navigation (NAV)	Hydropower Generation (POW)	Water Contact Recreation (REC-1)	Non-contact Water Recreation (REC-2)	Commercial and Sport Fishing (COMM)	Warm Fresh Water Habitat (WARM)	Cold Fresh Water Habitat (COLD)	Wildlife Habitat (WILD)	Rare, Threatened, or Endangered Species (RARE)	Migration of Aquatic Organisms (MIGR)	Spawning, Reproduction, and/or Early Development (SPWN)	Shellfish Harvesting (SHELL)	Estuarine Habitat (EST)
San Joaquin River Basin																			
San Luis Reservoir	E	E	E	–	–	–	–	E	E	E	–	E[b]	–	E	–	–	–	–	–
Sacramento River Basin																			
Shasta Lake	E	E	–	–	–	–	–	E	E	E	–	E[b]	E[b]	E	–	–	E[c,d]	–	–
Sacramento River: Shasta Dam to Colusa Basin Drain	E	E	E	–	–	–	E	E	E[a]	E	–	E[b]	E[b]	E	–	E[c,d]	E[c,d]	–	–
Colusa Basin Drain	–	E	–	–	–	–	–	–	E[a]	–	–	E[b]	E[b]	E	–	E[d]	E[d]	–	–
Sacramento River: Colusa Basin Drain to "I" Street Bridge	E	E	–	–	–	–	E	–	E[a]	E	–	E[b]	E[b]	E	–	E[c,d]	E[c,d]	–	–
Lake Oroville	E	E	–	–	–	–	–	E	E	E	–	E	E	E	–	–	E[d]	–	–
Feather River below Lake Oroville (Fish Barrier Dam to Sacramento River)	E	E	–	–	–	–	–	–	E[a]	E	–	E[b]	E[b]	E	–	E[c,d]	E[c,d]	–	–
Folsom Lake	E	E	P	–	–	–	–	E	E	E	–	E	E	E	–	–	E[d]	–	–
American River below Lake Natoma (Folsom Dam to Sacramento River)	E	E	E	–	–	–	–	E	E[a]	E	–	E[b]	E[b]	E	–	E[c,d]	E[c,d]	–	–
Yolo Bypass[e]	–	E	–	–	–	–	–	–	E	E	–	E[b]	E[b]	E	–	E[c,d]	E[d]	–	–
Sacramento-San Joaquin River Delta																			
Sacramento-San Joaquin River Delta[e,f,g]	E	E	E	E	E	–	E	–	E	E	E	E[b]	E[b]	E	E	E[c,d]	E[d]	E	E

Sites RDEIR/SDEIS

Impact Assessment Summary:

Operations:

- **Temperature**: Sites releases have minimal effects on CBD and eventually Sacramento River
  - Sites release to Yolo Bypass (thru CBD) then to Sacramento River → minimal effects
- **Salinity:** Sites releases likely to dilute high SC in CBD
  - Transport Mechanism:
    - Sac River (low; 120 us/cm) →
    - Sites Reservoir (mix – Stone Corral, Funks, and Salt Pond) →
    - Reservoir processes (evapoconcentration, dilution) →
    - Sites release to CBD (~650 us/cm in CBD) →
    - CBD transport to Sac River

Sites RDEIR/SDEIS

Impact Assessment Summary:

Operations:

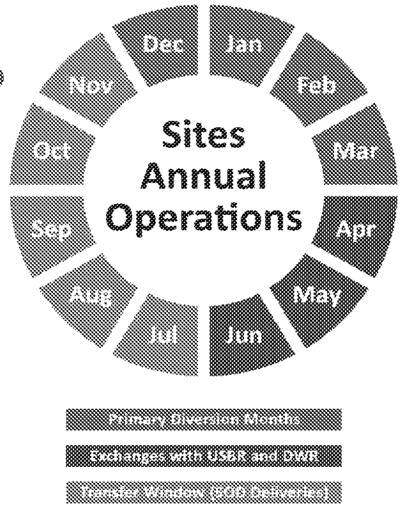
- **Nutrients**: Sites releases to the CBD would like have minimal effects on, or potentially reduce, nutrient concentrations in CBD due to dilution
- **Mercury and Methylmercury:** Sites releases would produce increased flows in the CBD, which would potentially decrease sedimentation (where mercury methylation primarily occurs).
- **Other Metals:** Sites releases would likely reduce metals concentrations in the CBD → dilution from lower metals concentration in Sacramento River
  - Sites release to CBD to Yolo Bypass → may result in elevated metals concentrations from CBD loading to Yolo Bypass

Sites RDEIR/SDEIS

Impact Assessment Summary:

Operations:

- **Pesticides:** Sites releases would have low to no concentration of pesticides → releases to CBD would dilute the relatively high pesticide concentrations in the CBD



*RDEIR/SDEIS also provided Impact Assessments for Sites Construction and Maintenance Activities

Water Quality in the CBD

- CBD Constituents of Concern
  - Pesticides
  - Salinity
  - Nutrients
  - Toxicity
  - Dissolved Oxygen
  - Mercury
  - Bacteria (E. coli)

Draft – Subject to Change – For Discussion Purposes Only

Regional Water Quality Initiatives - CBD

- **Sacramento Valley Water Quality Coalition** and **CA Rice Commission**
  - Irrigated Lands Regulatory Program (ILRP)
  - Focused on agricultural inputs and affects on water quality (both surface and groundwater)

- **Central Valley Salinity Alternatives for Long-term Sustainability (CV-SALTS)**
  - Nitrate management program
    - Management zones, well testing
  - Salt management program
    - Prioritization and Optimization Study

Biweekly EIR/EIS Meeting - Agenda

Sites
Affordable Water, Sustainably Managed

Our Core Values – Safety, Trust and Integrity, Respect for Local Communities, Environmental Stewardship, Shared Responsibility and Shared Benefits, Accountability and Transparency, Proactive Innovation, Diversity and Inclusivity
Our Commitment – To live up to these values in everything we do

Meeting Information:

Date:	October 10, 2022	**Location:**	Webex
Start Time:	3:30 p.m.	**Finish Time:**	4:30 p.m.
Purpose:	RDEIR/SDEIS Status and Coordination		

Meeting Participants:

Monique Briard, ICF	Melissa Harris, ICF
Ali Forsythe, Sites Authority	Laurie Warner Herson, Integration

Agenda:

Discussion Topic	Topic Leader	Time Allotted
1. Status of RTC Batches a. Batch 1: Approximately 650 comments and four master responses being revised b. Batch 2: Approximately 55 and 2 master responses being revised; meeting to discuss MR2 will occur the week of October 17 c. Batch 3: Approximately 425 and 3 master responses delivered September 22; review has been extended, files to be returned October 25	Melissa/ Laurie	10 min
2. Issues to Resolve (provided by ICF and discussed previously) a. Removing Folsom from the Project Description b. EC Decision and comments regarding dead pool within MR2 c. Plan for precluding fishing of unauthorized fish from reservoir to limit mercury exposure, and general plans for reservoir recreation d. Salmonid Mitigation – mitigation in the EIR/EIS that was not included in the RDEIR/SDEIS e. GHG – Mitigation costs/strategy f. Chinese Mystery Snail – Inclusion in the Final EIR/EIS pursuant to EO 13112 g. Trinity River – Additional detail about Trinity River in Chapter 2	Melissa	30 min

Draft_0019836

3.	Schedule – Comments received from Reclamation (see attached) include: a. Draft ROD needed for submittal to Department Review Team (DRT) but not SES/SOL (Richard will see it when transmitted to DC) b. 3 month schedule for FWCAR – would out it in late March based on current schedule; would not expect a draft in advance of official transmittal c. DRT will provide feedback during or up to 5 days after the date of the briefing as to whether EIS should be approved for release; if no objections, Bureau Executive may approve publication d. 508 compliant, complete Final EIS needs to go to EPA at least 1 week in advance of Friday publication date e. ROD briefing no longer required but may be triggered if the project changes between Final EIS and ROD; assume 4 weeks to complete process after Reclamation notifies ASWS of intent to sign ROD f. BO predecessor to signing ROD	Laurie/ Melissa	10 min
4.	ADA Compliance Update – recent changes requested by Reclamation	Melissa	5 min
5.	Reclamation Coordination a. FPPA Analysis b. FWCAR Schedule and options for facilitating USFWS review of Final EIS	Laurie	5 min

From: Edwards, Dawn [Dawn.Edwards@hdrinc.com]
Sent: 10/10/2022 11:01:12 AM
To: David Hubbard [Dhubbard@BrwnCald.com]; Spranza, John [john.spranza@hdrinc.com]
CC: Arsenijevic, Jelica [jelica.arsenijevic@hdrinc.com]; Lloyd, John [John.Lloyd@hdrinc.com]; Risse, Danielle [danielle.risse@hdrinc.com]; Laurie Warner Herson [laurie.warner.herson@phenixenv.com]; Alicia Forsythe [aforsythe@sitesproject.org]
Subject: RE: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)

Would that not fall under the new Mitigation Planning Team's role? That is our planned first step, but don't want to duplicate effort...

Thanks,
Dawn

Dawn Edwards
M 360.460.9581

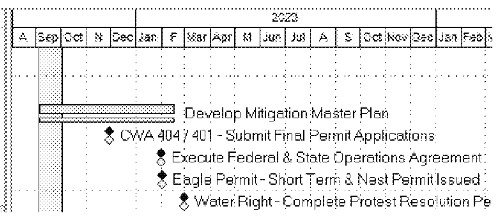
hdrinc.com/follow-us

From: David Hubbard <Dhubbard@BrwnCald.com>
Sent: Monday, October 10, 2022 10:56 AM
To: Spranza, John <john.spranza@hdrinc.com>
Cc: Arsenijevic, Jelica <jelica.arsenijevic@hdrinc.com>; Lloyd, John <John.Lloyd@hdrinc.com>; Risse, Danielle <danielle.risse@hdrinc.com>; Edwards, Dawn <Dawn.Edwards@hdrinc.com>; Laurie Warner Herson <laurie.warner.herson@phenixenv.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Subject: RE: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)

Can anyone shed light on the **Mitigation Master Plan**? I believe MBK has that task? Have they started, date?

Layout: Sites Comp vs Prior Month — Filter: All Activities

#	Activity ID	Activity Name	Start	Finish	Remaining Duration
225	Permitting		04-Jan-21 A	02-Jan-25	582
226	Key Deliverables		06-Sep-22	30-Jul-24	481
227	KD-1460	Develop Mitigation Master Plan	06-Sep-22	15-Feb-23	112
228	KD-1390	CWA 404 / 401 - Submit Final Permit Applications		29-Nov-22	0
229	KD-1240	Execute Federal & State Operations Agreement		30-Jan-23	0
230	KD-1430	Eagle Permit - Short Term & Nest Permit Issued		01-Feb-23	0
231	KD-1320	Water Right - Complete Protest Resolution Period & Resolve		27-Feb-23	0



Dave Hubbard
Project Controls
Brown and Caldwell
Cell: 832.840.1789
dhubbard@brwncald.com

From: Spranza, John <John.Spranza@hdrinc.com>
Sent: Monday, October 10, 2022 12:51 PM
To: David Hubbard <Dhubbard@BrwnCald.com>

Cc: jelica.arsenijevic <jelica.arsenijevic@hdrinc.com>; Lloyd, John <John.Lloyd@hdrinc.com>; Risse, Danielle <danielle.risse@hdrinc.com>; Edwards, Dawn <Dawn.Edwards@hdrinc.com>; laurie.warner.herson <laurie.warner.herson@phenixenv.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Subject: RE: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)

Permitting looks good. Thanks.

John Spranza

D 916.679.8858 M 818.640.2487

From: David Hubbard <Dhubbard@BrwnCald.com>
Sent: Monday, October 10, 2022 10:33 AM
To: Marcus Maltby <mmaltby@BrwnCald.com>; Cheyanne Harris <CHarris@BrwnCald.com>; Alicia Forsythe <aforsythe@sitesproject.org>; JP Robinette <jrobinette@sitesproject.org>; Spranza, John <john.spranza@hdrinc.com>; Arsenijevic, Jelica <jelica.arsenijevic@hdrinc.com>; Luu, Henry <henry.luu@hdrinc.com>; Kevin Spesert <kspesert@sitesproject.org>; bezzone@mbkengineers.com; conner <conner@cmdwest.com>; Laurie Warner Herson <laurie.warner.herson@phenixenv.com>; Risse, Danielle <danielle.risse@hdrinc.com>
Cc: Marcia Kivett <MKivett@sitesproject.org>; Justin Davies <JDavies@BrwnCald.com>
Subject: RE: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)
Importance: High

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Sites Team - Updates to our Sites Schedule have been made with input from you all; data date is now 02-October-2022. Prior to finalizing, I'm now asking that everyone please take a look at the Schedule in the link below and let me know if you're good with it or want to make additional changes.

Sites Schedule Update to 02-Oct-2022_Team Review_2022.10.10.pdf

Dave Hubbard
Project Controls
Brown and Caldwell
Cell: 832.840.1789
dhubbard@brwncald.com

From: David Hubbard
Sent: Saturday, October 1, 2022 8:40 AM
To: Marcus Maltby <mmaltby@BrwnCald.com>; Cheyanne Harris <CHarris@BrwnCald.com>; Alicia Forsythe <aforsythe@sitesproject.org>; jrobinette@sitesproject.org; john.spranza@hdrinc.com; Arsenijevic, Jelica <jelica.arsenijevic@hdrinc.com>; Henry Luu <henry.luu@hdrinc.com>; Kevin Spesert (kspesert@sitesproject.org) <kspesert@sitesproject.org>; bezzone@mbkengineers.com; Conner McDonald <conner@cmdwest.com>; Laurie Warner Herson <laurie.warner.herson@phenixenv.com>; Danielle Risse (danielle.risse@hdrinc.com) <danielle.risse@hdrinc.com>
Cc: Marcia Kivett (MKivett@sitesproject.org) <MKivett@sitesproject.org>; Justin Davies <JDavies@BrwnCald.com>
Subject: Sites Reservoir Project Schedule Update through September 2022

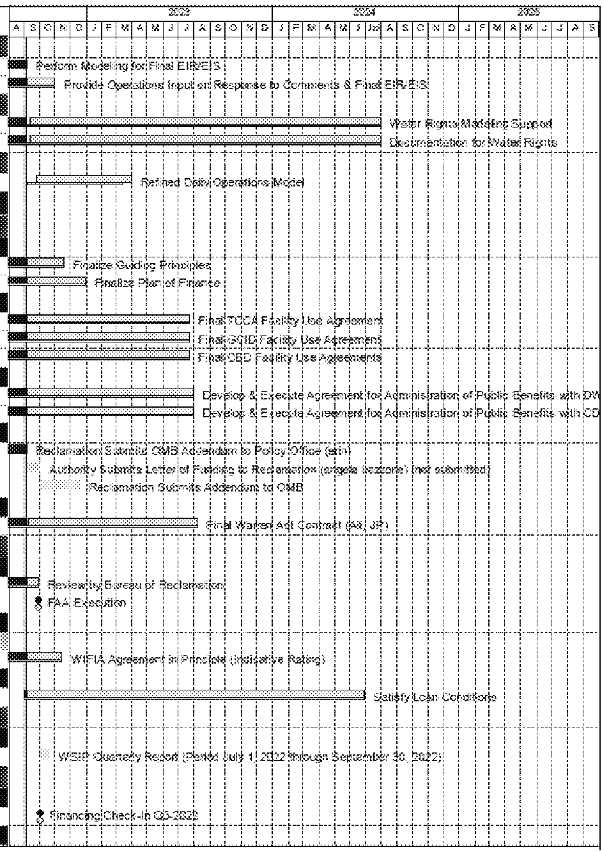
Good morning, Sites Team Members – It's time to update the Schedule through September 2022. Moving our Data Date to Sunday October 2, 2022. So, looking for all progress made up to 10/2.

I'm asking that each of you provide your updates/input as soon as you can, by midweek (10/5) ideally. Email comments and updates are fine or call me up/schedule a Teams meeting, and we can knock this out together while I share screen. See below screen shots and link to PDF on SharePoint. These are the activities filtered that should have started, finished, or continued as ongoing during the update period to 10/2. Several activities are long duration ongoing tasks – just let me know those are good as-is unless you have a new completion date.

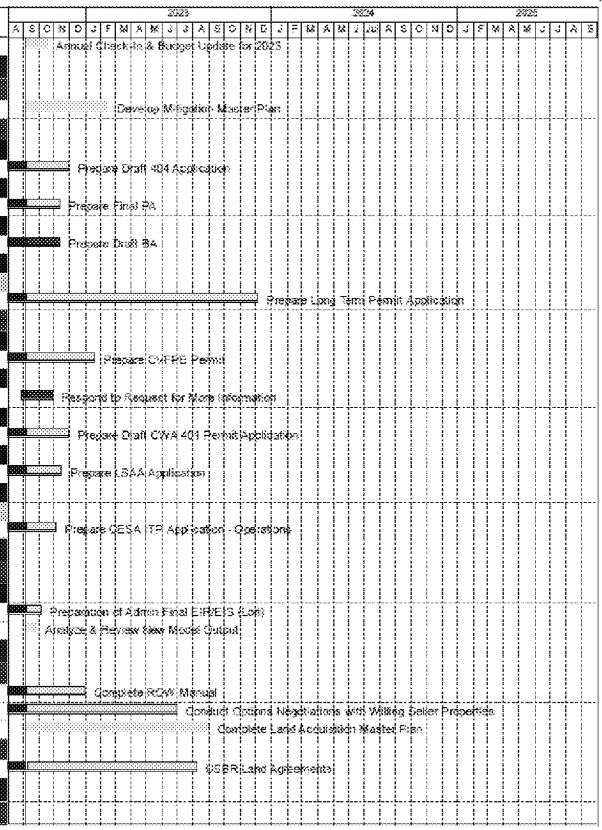
Link to file on SharePoint is here:
Sites Schedule for Update through September 2022.pdf

#	Activity ID	Activity Name	Remaining Duration	Start	Finish
1		**Sites Reservoir Project DD: 02-Oct-2022**	579	01-Sep-20 A	30-Dec-24
2		**Geotech Program**	433	22-Mar-22 A	30-May-24
3		**Permitting**	0	06-Sep-22	06-Sep-22
4		**State Agency Agreements & Permits**	0	06-Sep-22	06-Sep-22
5		**SWB CWA Section 401 Water Quality Certification - Priority 1 Geotech**	0	06-Sep-22	06-Sep-22
6	401-120	Receive 401 Permit - Geotech (regional WQCBoard needs to respond)	0		06-Sep-22
7		**Real Estate**	433	22-Mar-22 A	30-May-24
8		**Land Access Agreements**	433	22-Mar-22 A	30-May-24
9	A1250	Landowners Access Agreements for Geotech	433	22-Mar-22 A	30-May-24
10		**Colusa County**	79	22-Mar-22 A	29-Dec-22
11	LAAC-1100	Colusa Co. Landowners Access Agreements for Geotech Work Pkg #1	0	22-Mar-22 A	06-Sep-22
12	LAAC-1200	Colusa Co. Landowners Access Agreements for Geotech Work Pkg #2	79	22-Mar-22 A	29-Dec-22
13		**Yolo County**	79	22-Mar-22 A	29-Dec-22
14	LAAY-1100	Yolo Co. Landowners Access Agreements for Geotech Work Pkg #1	0	22-Mar-22 A	06-Sep-22
15	LAAY-1200	Yolo Co. Landowners Access Agreements for Geotech Work Pkg #2	79	22-Mar-22 A	29-Dec-22
16		**Glenn County**	79	22-Mar-22 A	29-Dec-22
17	LAAG-1100	Glenn Co. Landowners Access Agreements for Geotech Work Pkg #1	0	22-Mar-22 A	06-Sep-22
18	LAAG-1200	Glenn Co. Landowners Access Agreements for Geotech Work Pkg #2	79	22-Mar-22 A	29-Dec-22
19		**Geotechnical Engineering**	105	06-Sep-22	06-Feb-23
20		**Geotechnical Investigations**	105	06-Sep-22	06-Feb-23
21		**Test Pits & Trenches**	81	06-Sep-22	03-Jan-23
22	TPT-1100	Geotech Test Pits & Trenches - Bald Eagle Window	81	06-Sep-22	03-Jan-23
23		**Work Packages**	105	06-Sep-22	06-Feb-23
24	GWP-1100	Geotech Work Package #1	105	06-Sep-22	06-Feb-23
25		**Project Development**	579	01-Sep-20 A	30-Dec-24
26		**Planning**	85	01-Sep-20 A	09-Jan-23
27		**Key Deliverables**	45	24-Jan-22 A	07-Nov-22
28	KD-1130	Complete Updated Master Project Schedule (Baseline Established)	34	24-Jan-22 A	21-Oct-22
29	KD-1290	Formalize AB/RC Governance & Delegation of Authority for Phase 3	45	06-Sep-22	07-Nov-22
30		**NAHC/Local Tribes AB 52 Consultation**	85	01-Sep-20 A	09-Jan-23
31	STA-120	NAHC/Local Tribes AB 52 Consultation	85	01-Sep-20 A	09-Jan-23
32		**Reservoir Operations & Modeling**	481	03-Jan-22 A	30-Jul-24
33		**Final Sites DWR/Reclamation Operating Agreement**	108	19-Apr-22 A	30-Jan-23
34	OP-1005	Final Operating Agreement - Sites / DWR / Reclamation	108	19-Apr-22 A	30-Jan-23

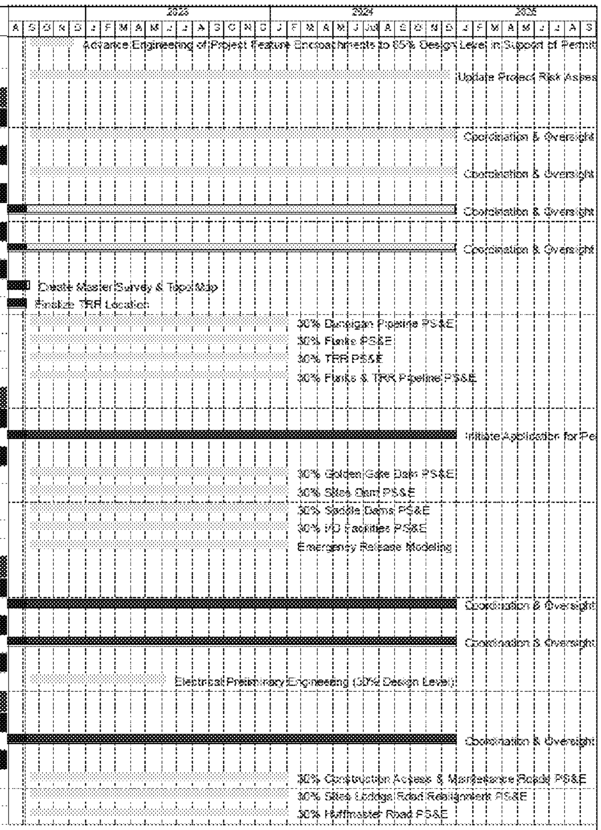
#	Activity ID	Activity Name	Remaining Duration	Start	Finish
35		Provide Operations Input on Response to Comments & Final EIR/EIS	41	09-May-22 A	01-Nov-22
36	FO-1110	Perform Modeling for Final EIR/EIS	0	09-May-22 A	06-Sep-22
37	FO-1080	Provide Operations Input on Response to Comments & Final EIR/EIS	41	24-May-22 A	01-Nov-22
38		Water Rights Modeling	475	03-Jan-22 A	30-Jul-24
39	A1200	Water Rights Modeling Support	475	03-Jan-22 A	30-Jul-24
40	A1210	Documentation for Water Rights	475	03-Jan-22 A	30-Jul-24
41		Refined Daily Operations Model	130	26-Sep-22	31-Mar-23
42	A1220	Refined Daily Operations Model	130	26-Sep-22	31-Mar-23
43		Project Agreements & Funding	460	01-Jun-21 A	28-Jun-24
44		Inter-Agency Agreements	233	01-Jun-21 A	07-Aug-23
45		Benefits & Obligations Contract with Participants	80	01-Mar-22 A	30-Dec-22
46	BO-1100	Finalize Guiding Principles	54	01-Mar-22 A	18-Nov-22
47	BO-1200	Finalize Plan of Finance	80	01-Mar-22 A	30-Dec-22
48		Facility Use Agreements	222	27-Aug-21 A	21-Jul-23
49	FO-1020	Final TCCA Facility Use Agreement	222	27-Aug-21 A	21-Jul-23
50	FO-1030	Final GCID Facility Use Agreement	222	27-Aug-21 A	21-Jul-23
51	FO-1040	Final CBD Facility Use Agreements	222	27-Aug-21 A	21-Jul-23
52		Agreements for Administration of Public Benefits	228	31-Mar-22 A	31-Jul-23
53	PB-1100	Develop & Execute Agreement for Administration of Public Benefits with DWR (ali/chey)	228	31-Mar-22 A	31-Jul-23
54	PB-1200	Develop & Execute Agreement for Administration of Public Benefits with CDFW (ali/chey)	228	31-Mar-22 A	31-Jul-23
55		Federal Funding Commitment	73	07-Feb-22 A	19-Dec-22
56	WIIN-1150	Reclamation Submits OMB Addendum to Policy Office (erin)	0	07-Feb-22 A	06-Sep-22
57	WIIN-1160	Authority Submits Letter of Funding to Reclamation (angela bezzone) (not submitted)	20	06-Sep-22	03-Oct-22
58	WIIN-1180	Reclamation Submits Addendum to OMB	53	04-Oct-22	19-Dec-22
59		US Bureau of Reclamation Warren Act	230	01-Jun-21 A	07-Aug-23
60	FED-090	Final Warren Act Contract (Ali, JP)	230	01-Jun-21 A	07-Aug-23
61		Federal Funding	460	17-Jan-22 A	28-Jun-24
62		WIIN Act FAA	19	17-Jan-22 A	30-Sep-22
63	WIIN-1120	Review by Bureau of Reclamation	19	17-Jan-22 A	30-Sep-22
64	WIIN-1140	FAA Execution	0		30-Sep-22
65		WIFIA Loan	51	05-Jul-22 A	15-Nov-22
66		Application	51	05-Jul-22 A	15-Nov-22
67	WIFIA-110	WIFIA Agreement in Principle (Indicative Rating)	51	05-Jul-22 A	15-Nov-22
68		USDA Loan	460	02-Sep-22 A	28-Jun-24
69	USDA-1060	Satisfy Loan Conditions	460	02-Sep-22 A	28-Jun-24
70		State Funding (Water Storage Investment Program, WSIP)	15	03-Oct-22	21-Oct-22
71		WSIP Early Funding Administration	15	03-Oct-22	21-Oct-22
72	WSIP-1230	WSIP Quarterly Report (Period July 1, 2022 through September 30, 2022)	15	03-Oct-22	21-Oct-22
73		Local Funding	30	06-Sep-22	17-Oct-22
74		Finance Check-Ins	0	03-Oct-22	03-Oct-22
75	FC-1280	Financing Check-In Q3-2022	0		03-Oct-22
76		Acre/Feet Participation (Reservoir Committee Cash Calls)	30	06-Sep-22	17-Oct-22



#	Activity ID	Activity Name	Remaining Duration	Start	Finish
77	AF-1100	Annual Check-In & Budget Update for 2023	30	06-Sep-22	17-Oct-22
78		Permitting	310	04-Jan-21 A	04-Dec-23
79		Key Deliverables	112	06-Sep-22	15-Feb-23
80	KD-1480	Develop Mitigation Master Plan	112	06-Sep-22	15-Feb-23
81		Federal Agency Agreements & Permits	315	11-Jan-21 A	04-Dec-23
82		Clean Water Act Section 404	58	04-Feb-21 A	28-Nov-22
83	404-050	Prepare Draft 404 Application	58	04-Feb-21 A	28-Nov-22
84		Advisory Council on Historic Preservation NHPA Section 106	49	14-Mar-22 A	11-Nov-22
85	106-081	Prepare Final PA	49	14-Mar-22 A	11-Nov-22
86		USFWS & NMFS Endangered Species Act Section 7	49	11-Jan-21 A	11-Nov-22
87	BA-200	Prepare Draft BA	49	11-Jan-21 A	11-Nov-22
88		USFWS Bald Eagle Protection Act	315	27-Jul-22 A	04-Dec-23
89		Long Term Permit	315	27-Jul-22 A	04-Dec-23
90	USFWS-140	Prepare Long Term Permit Application	315	27-Jul-22 A	04-Dec-23
91		State Agency Agreements & Permits	91	04-Jan-21 A	19-Jan-23
92		Central Valley Flood Protection Board (CVFPB) Levee Encroachment	93	13-Dec-21 A	19-Jan-23
93	CVFPB-200	Prepare CVFPB Permit	93	13-Dec-21 A	19-Jan-23
94		SWRCB Water Right Permit	38	29-Aug-22 A	28-Oct-22
95	WRP-115ac	Respond to Request for More Information	38	29-Aug-22 A	28-Oct-22
96		SWB CWA Section 401 Water Quality Certification	58	04-Jan-21 A	28-Nov-22
97	401-200	Prepare Draft CWA 401 Permit Application	58	04-Jan-21 A	28-Nov-22
98		CDFW Streambed Alteration Agreements	50	10-Jan-22 A	14-Nov-22
99	1600-200	Prepare LSAA Application	50	10-Jan-22 A	14-Nov-22
100		CDFW Incidental Take Permits	44	11-Jan-21 A	04-Nov-22
101		ITP - CESA (S# 2081) Operations	44	11-Jan-21 A	04-Nov-22
102	2081-100	Prepare CESA ITP Application - Operations	44	11-Jan-21 A	04-Nov-22
103		Environmental	22	03-Jan-22 A	05-Oct-22
104		EIR/EIS	22	03-Jan-22 A	05-Oct-22
105		Final EIR/Final EIS	22	03-Jan-22 A	05-Oct-22
106	EIR-210	Preparation of Admin Final EIR/EIS (Lori)	22	03-Jan-22 A	05-Oct-22
107	EIR-220	Analyze & Review New Model Output	15	06-Sep-22	26-Sep-22
108		Real Estate	250	02-Nov-20 A	30-Aug-23
109		Key Deliverables	250	03-Jan-22 A	30-Aug-23
110	KD-1495	Complete ROW Manual	80	03-Jan-22 A	30-Dec-22
111	KD-1500	Conduct Options Negotiations with Willing Seller Properties	206	01-Jul-22 A	28-Jun-23
112	KD-1490	Complete Land Acquisition Master Plan	250	06-Sep-22	30-Aug-23
113		USBR - Land Agreement	230	02-Nov-20 A	07-Aug-23
114	FED-100	USBR Land Agreements	230	02-Nov-20 A	07-Aug-23
115		Preliminary Engineering	585	03-Jan-22 A	30-Dec-24
116		Key Deliverables	570	15-Sep-22	16-Dec-24



#	Activity ID	Activity Name	Remaining Duration	Start	Finish
117	KD-1110	Advance Engineering of Project Feature Encroachments to 65% Design Level in Support of Permitting	60	15-Sep-22	09-Dec-22
118	KD-1210	Update Project Risk Assessments (ongoing) (Risk Mgr Bob Beduhn & Henry Luu)	570	15-Sep-22	16-Dec-24
119		**Conveyance (Pipelines, Pump Stations, Canals)**	584	03-Jan-22 A	27-Dec-24
120		**UPRR Oversight & Review**	577	15-Sep-22	27-Dec-24
121	A1110	Coordination & Oversight with UPRR	577	15-Sep-22	27-Dec-24
122		**Caltrans Oversight & Review**	577	15-Sep-22	27-Dec-24
123	A1120	Coordination & Oversight with Caltrans	577	15-Sep-22	27-Dec-24
124		**DWR Operations Oversight & Review (KLOG)**	584	03-Jan-22 A	27-Dec-24
125	A1130	Coordination & Oversight with Department of Water Resources	584	03-Jan-22 A	27-Dec-24
126		**RD 108 Oversight & Review**	584	03-Jan-22 A	27-Dec-24
127	A1140	Coordination & Oversight with Reclamation District 108	584	03-Jan-22 A	27-Dec-24
128		**Design & Analyses**	357	01-Feb-22 A	05-Feb-24
129	KD-1140	Create Master Survey & Topo Map	7	01-Feb-22 A	14-Sep-22
130	KD-1150	Finalize TRR Location	0	08-Apr-22 A	08-Sep-22
131	KD-1630	30% Dunnigan Pipeline PS&E	350	15-Sep-22	05-Feb-24
132	KD-2010	30% Funks PS&E	350	15-Sep-22	05-Feb-24
133	KD-2020	30% TRR PS&E	350	15-Sep-22	05-Feb-24
134	KD-2030	30% Funks & TRR Pipeline PS&E	350	15-Sep-22	05-Feb-24
135		**Reservoir (Dams, Tunnels)**	585	01-Feb-22 A	30-Dec-24
136		**DSOD Oversight & Review**	585	01-Feb-22 A	30-Dec-24
137	KD-1100	Initiate Application for Permit to Construct from DSOD	585	01-Feb-22 A	30-Dec-24
138		**Design & Analyses**	350	15-Sep-22	05-Feb-24
139	KD-1660	30% Golden Gate Dam PS&E	350	15-Sep-22	05-Feb-24
140	KD-2040	30% Sites Dam PS&E	350	15-Sep-22	05-Feb-24
141	KD-2050	30% Saddle Dams PS&E	350	15-Sep-22	05-Feb-24
142	KD-2060	30% I/O Facilities PS&E	350	15-Sep-22	05-Feb-24
143	KD-2070	Emergency Release Modeling	350	15-Sep-22	05-Feb-24
144		**Electrical (Substation, Switchyard, Transmission Line)**	585	03-Jan-22 A	30-Dec-24
145		**WAPA Oversight & Review**	585	03-Jan-22 A	30-Dec-24
146	A1150	Coordination & Oversight with WAPA	585	03-Jan-22 A	30-Dec-24
147		**CAISO Oversight & Review**	585	03-Jan-22 A	30-Dec-24
148	A1160	Coordination & Oversight with CAISO	585	03-Jan-22 A	30-Dec-24
149		**Design & Analyses**	185	15-Sep-22	08-Jun-23
150	KD-1640	Electrical Preliminary Engineering (30% Design Level)	185	15-Sep-22	08-Jun-23
151		**Roads & Bridges**	585	03-Jan-22 A	30-Dec-24
152		**County Oversight & Review**	585	03-Jan-22 A	30-Dec-24
153	A1170	Coordination & Oversight with County Authorities	585	03-Jan-22 A	30-Dec-24
154		**Design & Analyses**	350	15-Sep-22	05-Feb-24
155	KD-1650	30% Construction Access & Maintenance Roads PS&E	350	15-Sep-22	05-Feb-24
156	KD-2090	30% Sites Lodoga Road Realignment PS&E	350	15-Sep-22	05-Feb-24
157	KD-2100	30% Huffmaster Road PS&E	350	15-Sep-22	05-Feb-24



Dave Hubbard
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dhubbard@brwncald.com

From: David Hubbard [Dhubbard@BrwnCald.com]
Sent: 10/10/2022 1:21:48 PM
To: Edwards, Dawn [Dawn.Edwards@hdrinc.com]; Spranza, John [john.spranza@hdrinc.com]
CC: jelica.arsenijevic [jelica.arsenijevic@hdrinc.com]; Lloyd, John [John.Lloyd@hdrinc.com]; Risse, Danielle [danielle.risse@hdrinc.com]; laurie.warner.herson [laurie.warner.herson@phenixenv.com]; Alicia Forsythe [aforsythe@sitesproject.org]
Subject: Re: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)

Has Development of the Master Mitigation Plan started; date started, planned finish (outside of updates, revisions)?

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From: Edwards, Dawn <Dawn.Edwards@hdrinc.com>
Sent: Monday, October 10, 2022 2:47:24 PM
To: Spranza, John <john.spranza@hdrinc.com>; David Hubbard <Dhubbard@BrwnCald.com>
Cc: jelica.arsenijevic <jelica.arsenijevic@hdrinc.com>; Lloyd, John <John.Lloyd@hdrinc.com>; Risse, Danielle <danielle.risse@hdrinc.com>; laurie.warner.herson <laurie.warner.herson@phenixenv.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Subject: Re: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)

Great, thanks John! I think timing is in alignment with our planned first edition (expect to somewhat be living doc that will be updated as we progress).

Thanks!

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From: Spranza, John <John.Spranza@hdrinc.com>
Sent: Monday, October 10, 2022 12:43:33 PM
To: Edwards, Dawn <Dawn.Edwards@hdrinc.com>; David Hubbard <Dhubbard@BrwnCald.com>
Cc: Arsenijevic, Jelica <jelica.arsenijevic@hdrinc.com>; Lloyd, John <John.Lloyd@hdrinc.com>; Risse, Danielle <danielle.risse@hdrinc.com>; Laurie Warner Herson <laurie.warner.herson@phenixenv.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Subject: RE: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)

That task is under A23- Permitting and it is for me to support Dawn's team preparing the Master Plan. I don't have any updates for it but the date will be changing to match Dawn's new team.

John Spranza

D 916.679.8858 M 818.640.2487

From: Edwards, Dawn <Dawn.Edwards@hdrinc.com>
Sent: Monday, October 10, 2022 11:01 AM
To: David Hubbard <Dhubbard@BrwnCald.com>; Spranza, John <John.Spranza@hdrinc.com>
Cc: Arsenijevic, Jelica <jelica.arsenijevic@hdrinc.com>; Lloyd, John <John.Lloyd@hdrinc.com>; Risse, Danielle <danielle.risse@hdrinc.com>; Laurie Warner Herson <laurie.warner.herson@phenixenv.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Subject: RE: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)

Would that not fall under the new Mitigation Planning Team's role? That is our planned first step, but don't want to duplicate effort...

Thanks,
Dawn

Dawn Edwards
M 360.460.9581

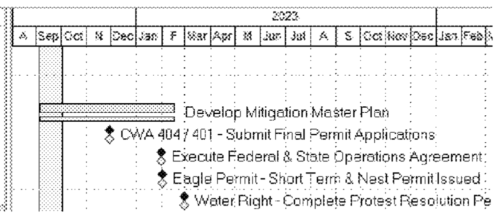
hdrinc.com/follow-us

From: David Hubbard <Dhubbard@BrwnCald.com>
Sent: Monday, October 10, 2022 10:56 AM
To: Spranza, John <john.spranza@hdrinc.com>
Cc: Arsenijevic, Jelica <jelica.arsenijevic@hdrinc.com>; Lloyd, John <John.Lloyd@hdrinc.com>; Risse, Danielle <danielle.risse@hdrinc.com>; Edwards, Dawn <Dawn.Edwards@hdrinc.com>; Laurie Warner Herson <laurie.warner.herson@phenixenv.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Subject: RE: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)

Can anyone shed light on the **Mitigation Master Plan**? I believe MBK has that task? Have they started, date?

Layout: Sites Comp vs Prior Month | Filter: All Activities

#	Activity ID	Activity Name	Start	Finish	Remaining Duration
225	Permitting		04-Jan-21 A	02-Jan-25	582
226	Key Deliverables		06-Sep-22	30-Jul-24	481
227	KD-1460	Develop Mitigation Master Plan	06-Sep-22	15-Feb-23	112
228	KD-1390	CWA 404 / 401 - Submit Final Permit Applications		29-Nov-22	0
229	KD-1240	Execute Federal & State Operations Agreement		30-Jan-23	0
230	KD-1430	Eagle Permit - Short Term & Nest Permit Issued		01-Feb-23	0
231	KD-1320	Water Right - Complete Protest Resolution Period & Resolve		27-Feb-23	0



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From: Spranza, John <John.Spranza@hdrinc.com>
Sent: Monday, October 10, 2022 12:51 PM
To: David Hubbard <Dhubbard@BrwnCald.com>
Cc: jelica.arsenijevic <jelica.arsenijevic@hdrinc.com>; Lloyd, John <John.Lloyd@hdrinc.com>; Risse, Danielle <danielle.risse@hdrinc.com>; Edwards, Dawn <Dawn.Edwards@hdrinc.com>; laurie.warner.herson <laurie.warner.herson@phenixenv.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Subject: RE: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)

Permitting looks good. Thanks.

John Spranza

D 916.679.8858 M 818.640.2487

From: David Hubbard <Dhubbard@BrwnCald.com>
Sent: Monday, October 10, 2022 10:33 AM
To: Marcus Maltby <mmaltby@BrwnCald.com>; Cheyanne Harris <CHarris@BrwnCald.com>; Alicia Forsythe <aforsythe@sitesproject.org>; JP Robinette <jrobinette@sitesproject.org>; Spranza, John <john.spranza@hdrinc.com>; Arsenijevic, Jelica <jelica.arsenijevic@hdrinc.com>; Luu, Henry <henry.luu@hdrinc.com>; Kevin Spesert <kspesert@sitesproject.org>; bezzone@mbkengineers.com; conner <conner@cmdwest.com>; Laurie Warner Herson <laurie.warner.herson@phenixenv.com>; Risse, Danielle <danielle.risse@hdrinc.com>
Cc: Marcia Kivett <MKivett@sitesproject.org>; Justin Davies <JDavies@BrwnCald.com>
Subject: RE: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)
Importance: High

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Sites Team - Updates to our Sites Schedule have been made with input from you all; data date is now 02-October-2022. Prior to finalizing, I'm now asking that everyone please take a look at the Schedule in the link below and let me know if you're good with it or want to make additional changes.

Sites Schedule Update to 02-Oct-2022 Team Review 2022.10.10.pdf

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Brown AND Caldwell 75

From: David Hubbard
Sent: Saturday, October 1, 2022 8:40 AM
To: Marcus Maltby <mmaltby@BrwnCald.com>; Cheyanne Harris <CHarris@BrwnCald.com>; Alicia Forsythe <aforsythe@sitesproject.org>; jrobinette@sitesproject.org; john.spranza@hdrinc.com; Arsenijevic, Jelica <jelica.arsenijevic@hdrinc.com>; Henry Luu <henry.luu@hdrinc.com>; Kevin Spesert (kspesert@sitesproject.org) <kspesert@sitesproject.org>; bezzone@mbkengineers.com; Conner McDonald <conner@cmdwest.com>; Laurie Warner Herson <laurie.warner.herson@phenixenv.com>; Danielle Risse (danielle.risse@hdrinc.com) <danielle.risse@hdrinc.com>
Cc: Marcia Kivett (MKivett@sitesproject.org) <MKivett@sitesproject.org>; Justin Davies <JDavies@BrwnCald.com>
Subject: Sites Reservoir Project Schedule Update through September 2022

Good morning, Sites Team Members – It's time to update the Schedule through September 2022. Moving our Data Date to Sunday October 2, 2022. So, looking for all progress made up to 10/2.
I'm asking that each of you provide your updates/input as soon as you can, by midweek (10/5) ideally. Email comments and updates are fine or call me up/schedule a Teams meeting, and we can knock this out together while I share screen. See below screen shots and link to PDF on SharePoint. These are the activities filtered that should have started, finished, or continued as ongoing during the update period to 10/2. Several activities are long duration ongoing tasks – just let me know those are good as-is unless you have a new completion date.

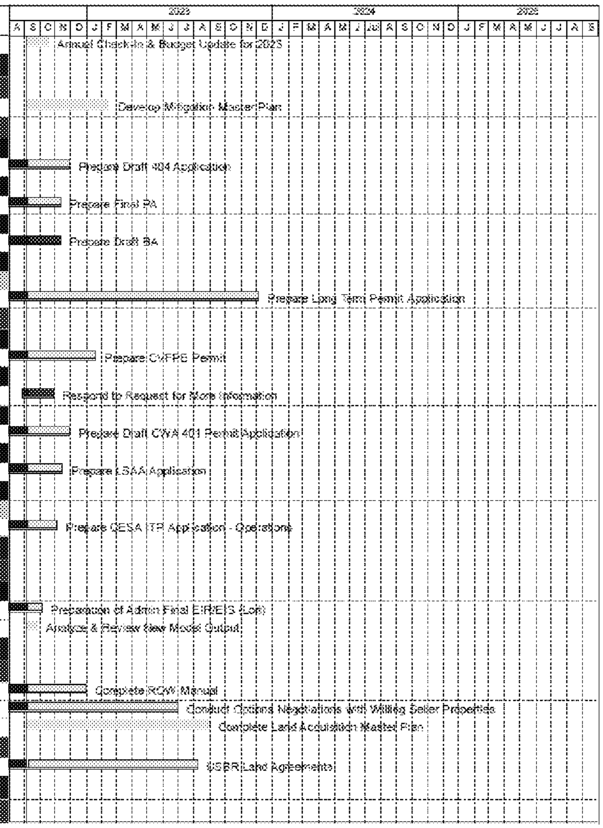
Link to file on SharePoint is here:

Sites Schedule for Update through September 2022.pdf

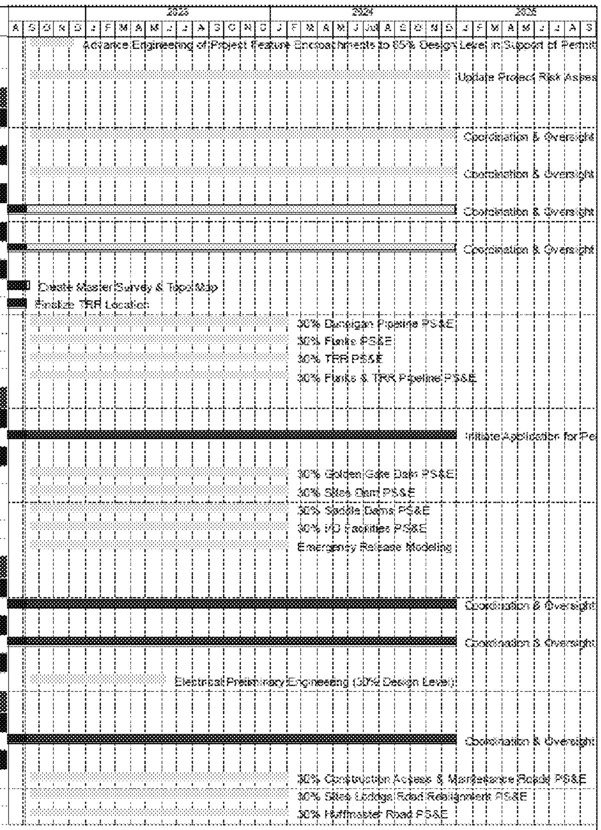
#	Activity ID	Activity Name	Remaining Duration	Start	Finish
1		Sites Reservoir Project DD: 02-Oct-2022	579	01-Sep-20 A	30-Dec-24
2		Geotech Program	433	22-Mar-22 A	30-May-24
3		Permitting	0	06-Sep-22	06-Sep-22
4		State Agency Agreements & Permits	0	06-Sep-22	06-Sep-22
5		SWB CWA Section 401 Water Quality Certification - Priority 1 Geotech	0	06-Sep-22	06-Sep-22
6	401-120	Receive 401 Permit - Geotech (regional WQCBoard needs to respond)	0		06-Sep-22
7		Real Estate	433	22-Mar-22 A	30-May-24
8		Land Access Agreements	433	22-Mar-22 A	30-May-24
9	A1250	Landowners Access Agreements for Geotech	433	22-Mar-22 A	30-May-24
10		Colusa County	79	22-Mar-22 A	29-Dec-22
11	LAAC-1100	Colusa Co. Landowners Access Agreements for Geotech Work Pkg #1	0	22-Mar-22 A	06-Sep-22
12	LAAC-1200	Colusa Co. Landowners Access Agreements for Geotech Work Pkg #2	79	22-Mar-22 A	29-Dec-22
13		Yolo County	79	22-Mar-22 A	29-Dec-22
14	LAAY-1100	Yolo Co. Landowners Access Agreements for Geotech Work Pkg #1	0	22-Mar-22 A	06-Sep-22
15	LAAY-1200	Yolo Co. Landowners Access Agreements for Geotech Work Pkg #2	79	22-Mar-22 A	29-Dec-22
16		Glenn County	79	22-Mar-22 A	29-Dec-22
17	LAAG-1100	Glenn Co. Landowners Access Agreements for Geotech Work Pkg #1	0	22-Mar-22 A	06-Sep-22
18	LAAG-1200	Glenn Co. Landowners Access Agreements for Geotech Work Pkg #2	79	22-Mar-22 A	29-Dec-22
19		Geotechnical Engineering	105	06-Sep-22	06-Feb-23
20		Geotechnical Investigations	105	06-Sep-22	06-Feb-23
21		Test Pits & Trenches	81	06-Sep-22	03-Jan-23
22	TPT-1100	Geotech Test Pits & Trenches - Bald Eagle Window	81	06-Sep-22	03-Jan-23
23		Work Packages	105	06-Sep-22	06-Feb-23
24	GWP-1100	Geotech Work Package #1	105	06-Sep-22	06-Feb-23
25		Project Development	579	01-Sep-20 A	30-Dec-24
26		Planning	85	01-Sep-20 A	09-Jan-23
27		Key Deliverables	45	24-Jan-22 A	07-Nov-22
28	KD-1130	Complete Updated Master Project Schedule (Baseline Established)	34	24-Jan-22 A	21-Oct-22
29	KD-1290	Formalize AB/RC Governance & Delegation of Authority for Phase 3	45	06-Sep-22	07-Nov-22
30		NAHC/Local Tribes AB 52 Consultation	85	01-Sep-20 A	09-Jan-23
31	STA-120	NAHC/Local Tribes AB 52 Consultation	85	01-Sep-20 A	09-Jan-23
32		Reservoir Operations & Modeling	481	03-Jan-22 A	30-Jul-24
33		Final Sites DWR/Reclamation Operating Agreement	100	19-Apr-22 A	30-Jan-23
34	OP-1005	Final Operating Agreement - Sites / DWR / Reclamation	100	19-Apr-22 A	30-Jan-23

#	Activity ID	Activity Name	Remaining Duration	Start	Finish
35		Provide Operations Input on Response to Comments & Final EIR/EIS	41	09-May-22 A	01-Nov-22
36	FO-1110	Perform Modeling for Final EIR/EIS	0	09-May-22 A	06-Sep-22
37	FO-1080	Provide Operations Input on Response to Comments & Final EIR/EIS	41	24-May-22 A	01-Nov-22
38		Water Rights Modeling	475	03-Jan-22 A	30-Jul-24
39	A1200	Water Rights Modeling Support	475	03-Jan-22 A	30-Jul-24
40	A1210	Documentation for Water Rights	475	03-Jan-22 A	30-Jul-24
41		Refined Daily Operations Model	130	26-Sep-22	31-Mar-23
42	A1220	Refined Daily Operations Model	130	26-Sep-22	31-Mar-23
43		Project Agreements & Funding	480	01-Jun-21 A	28-Jun-24
44		Inter-Agency Agreements	233	01-Jun-21 A	07-Aug-23
45		Benefits & Obligations Contract with Participants	80	01-Mar-22 A	30-Dec-22
46	BO-1100	Finalize Guiding Principles	54	01-Mar-22 A	18-Nov-22
47	BO-1200	Finalize Plan of Finance	80	01-Mar-22 A	30-Dec-22
48		Facility Use Agreements	222	27-Aug-21 A	21-Jul-23
49	FO-1020	Final TCCA Facility Use Agreement	222	27-Aug-21 A	21-Jul-23
50	FO-1030	Final GCID Facility Use Agreement	222	27-Aug-21 A	21-Jul-23
51	FO-1040	Final CBD Facility Use Agreements	222	27-Aug-21 A	21-Jul-23
52		Agreements for Administration of Public Benefits	228	31-Mar-22 A	31-Jul-23
53	PB-1100	Develop & Execute Agreement for Administration of Public Benefits with DWR (ali/chey)	228	31-Mar-22 A	31-Jul-23
54	PB-1200	Develop & Execute Agreement for Administration of Public Benefits with CDFW (ali/chey	228	31-Mar-22 A	31-Jul-23
55		Federal Funding Committment	73	07-Feb-22 A	19-Dec-22
56	WIIN-1150	Reclamation Submits OMB Addendum to Policy Office (erin)	0	07-Feb-22 A	06-Sep-22
57	WIIN-1160	Authority Submits Letter of Funding to Reclamation (angela bezzone) (not submitted)	20	06-Sep-22	03-Oct-22
58	WIIN-1180	Reclamation Submits Addendum to OMB	53	04-Oct-22	19-Dec-22
59		US Bureau of Reclamation Warren Act	230	01-Jun-21 A	07-Aug-23
60	FED-090	Final Warren Act Contract (Ali, JP)	230	01-Jun-21 A	07-Aug-23
61		Federal Funding	480	17-Jan-22 A	28-Jun-24
62		WIIN Act FAA	19	17-Jan-22 A	30-Sep-22
63	WIIN-1130	Review by Bureau of Reclamation	19	17-Jan-22 A	30-Sep-22
64	WIIN-1140	FAA Execution	0		30-Sep-22
65		WIFIA Loan	51	05-Jul-22 A	15-Nov-22
66		Application	51	05-Jul-22 A	15-Nov-22
67	WIFIA-410	WIFIA Agreement in Principle (Indicative Rating)	51	05-Jul-22 A	15-Nov-22
68		USDA Loan	480	02-Sep-22 A	28-Jun-24
69	USDA-1060	Satisfy Loan Conditions	480	02-Sep-22 A	28-Jun-24
70		State Funding (Water Storage Investment Program, WSIP)	15	03-Oct-22	21-Oct-22
71		WSIP Early Funding Administration	15	03-Oct-22	21-Oct-22
72	WSIP-1230	WSIP Quarterly Report (Period July 1, 2022 through September 30, 2022)	15	03-Oct-22	21-Oct-22
73		Local Funding	30	06-Sep-22	17-Oct-22
74		Finance Check-Ins	0	03-Oct-22	03-Oct-22
75	FC-1250	Financing Check-In Q3-2022	0		03-Oct-22
76		Acre/Feet Participation (Reservoir Committee Cash Calls)	30	06-Sep-22	17-Oct-22

#	Activity ID	Activity Name	Remaining Duration	Start	Finish
77	AF-1100	Annual Check-In & Budget Update for 2023	30	06-Sep-22	17-Oct-22
78		**Permitting**	310	04-Jan-21 A	04-Dec-23
79		**Key Deliverables**	112	06-Sep-22	15-Feb-23
80	KD-1480	Develop Mitigation Master Plan	112	06-Sep-22	15-Feb-23
81		**Federal Agency Agreements & Permits**	315	11-Jan-21 A	04-Dec-23
82		**Clean Water Act Section 404**	58	04-Feb-21 A	28-Nov-22
83	404-050	Prepare Draft 404 Application	58	04-Feb-21 A	28-Nov-22
84		**Advisory Council on Historic Preservation NHPA Section 106**	49	14-Mar-22 A	11-Nov-22
85	106-081	Prepare Final PA	49	14-Mar-22 A	11-Nov-22
86		**USFWS & NMFS Endangered Species Act Section 7**	49	11-Jan-21 A	11-Nov-22
87	BA-200	Prepare Draft BA	49	11-Jan-21 A	11-Nov-22
88		**USFWS Bald Eagle Protection Act**	315	27-Jul-22 A	04-Dec-23
89		Long Term Permit	315	27-Jul-22 A	04-Dec-23
90	USFWS-140	Prepare Long Term Permit Application	315	27-Jul-22 A	04-Dec-23
91		**State Agency Agreements & Permits**	93	04-Jan-21 A	19-Jan-23
92		**Central Valley Flood Protection Board (CVFPB) Levee Encroachment**	93	13-Dec-21 A	19-Jan-23
93	CVFPB-200	Prepare CVFPB Permit	93	13-Dec-21 A	19-Jan-23
94		**SWRCB Water Right Permit**	38	29-Aug-22 A	28-Oct-22
95	WRP-115ac	Respond to Request for More Information	38	29-Aug-22 A	28-Oct-22
96		**SWB CWA Section 401 Water Quality Certification**	58	04-Jan-21 A	28-Nov-22
97	401-200	Prepare Draft CWA 401 Permit Application	58	04-Jan-21 A	28-Nov-22
98		**CDFW Streambed Alteration Agreements**	50	10-Jan-22 A	14-Nov-22
99	1600-200	Prepare LSAA Application	50	10-Jan-22 A	14-Nov-22
100		**CDFW Incidental Take Permits**	44	11-Jan-21 A	04-Nov-22
101		ITP - CESA (Sec 2081) Operations	44	11-Jan-21 A	04-Nov-22
102	2081-100	Prepare CESA ITP Application - Operations	44	11-Jan-21 A	04-Nov-22
103		**Environmental**	22	03-Jan-22 A	05-Oct-22
104		**EIR/EIS**	22	03-Jan-22 A	05-Oct-22
105		**Final EIR/Final EIS**	22	03-Jan-22 A	05-Oct-22
106	EIR-210	Preparation of Admin Final EIR/EIS (Lori)	22	03-Jan-22 A	05-Oct-22
107	EIR-220	Analyze & Review New Model Output	15	06-Sep-22	26-Sep-22
108		**Real Estate**	250	02-Nov-20 A	30-Aug-23
109		**Key Deliverables**	250	03-Jan-22 A	30-Aug-23
110	KD-1485	Complete ROW Manual	80	03-Jan-22 A	30-Dec-22
111	KD-1500	Conduct Options Negotiations with Willing Seller Properties	206	01-Jul-22 A	28-Jun-23
112	KD-1490	Complete Land Acquisition Master Plan	250	06-Sep-22	30-Aug-23
113		**USBR - Land Agreement**	230	02-Nov-20 A	07-Aug-23
114	FED-100	USBR Land Agreements	230	02-Nov-20 A	07-Aug-23
115		**Preliminary Engineering**	585	03-Jan-22 A	30-Dec-24
116		**Key Deliverables**	570	15-Sep-22	16-Dec-24



#	Activity ID	Activity Name	Remaining Duration	Start	Finish
117	KD-1110	Advance Engineering of Project Feature Encroachments to 65% Design Level in Support of Permitting	60	15-Sep-22	09-Dec-22
118	KD-1210	Update Project Risk Assessments (ongoing) (Risk Mgr Bob Beduhn & Henry Luu)	570	15-Sep-22	16-Dec-24
119		**Conveyance (Pipelines, Pump Stations, Canals)**	584	03-Jan-22 A	27-Dec-24
120		**UPRR Oversight & Review**	577	15-Sep-22	27-Dec-24
121	A1110	Coordination & Oversight with UPRR	577	15-Sep-22	27-Dec-24
122		**Caltrans Oversight & Review**	577	15-Sep-22	27-Dec-24
123	A1120	Coordination & Oversight with Caltrans	577	15-Sep-22	27-Dec-24
124		**DWR Operations Oversight & Review (KLOG)**	584	03-Jan-22 A	27-Dec-24
125	A1130	Coordination & Oversight with Department of Water Resources	584	03-Jan-22 A	27-Dec-24
126		**RD 108 Oversight & Review**	584	03-Jan-22 A	27-Dec-24
127	A1140	Coordination & Oversight with Reclamation District 108	584	03-Jan-22 A	27-Dec-24
128		**Design & Analyses**	357	01-Feb-22 A	05-Feb-24
129	KD-1140	Create Master Survey & Topo Map	7	01-Feb-22 A	14-Sep-22
130	KD-1150	Finalize TRR Location	0	08-Apr-22 A	08-Sep-22
131	KD-1630	30% Dunnigan Pipeline PS&E	350	15-Sep-22	05-Feb-24
132	KD-2010	30% Funks PS&E	350	15-Sep-22	05-Feb-24
133	KD-2020	30% TRR PS&E	350	15-Sep-22	05-Feb-24
134	KD-2030	30% Funks & TRR Pipeline PS&E	350	15-Sep-22	05-Feb-24
135		**Reservoir (Dams, Tunnels)**	585	01-Feb-22 A	30-Dec-24
136		**DSOD Oversight & Review**	585	01-Feb-22 A	30-Dec-24
137	KD-1100	Initiate Application for Permit to Construct from DSOD	585	01-Feb-22 A	30-Dec-24
138		**Design & Analyses**	350	15-Sep-22	05-Feb-24
139	KD-1660	30% Golden Gate Dam PS&E	350	15-Sep-22	05-Feb-24
140	KD-2040	30% Sites Dam PS&E	350	15-Sep-22	05-Feb-24
141	KD-2050	30% Saddle Dams PS&E	350	15-Sep-22	05-Feb-24
142	KD-2060	30% I/O Facilities PS&E	350	15-Sep-22	05-Feb-24
143	KD-2070	Emergency Release Modeling	350	15-Sep-22	05-Feb-24
144		**Electrical (Substation, Switchyard, Transmission Line)**	585	03-Jan-22 A	30-Dec-24
145		**WAPA Oversight & Review**	585	03-Jan-22 A	30-Dec-24
146	A1150	Coordination & Oversight with WAPA	585	03-Jan-22 A	30-Dec-24
147		**CAISO Oversight & Review**	585	03-Jan-22 A	30-Dec-24
148	A1160	Coordination & Oversight with CAISO	585	03-Jan-22 A	30-Dec-24
149		**Design & Analyses**	185	15-Sep-22	09-Jun-23
150	KD-1640	Electrical Preliminary Engineering (30% Design Level)	185	15-Sep-22	09-Jun-23
151		**Roads & Bridges**	585	03-Jan-22 A	30-Dec-24
152		**County Oversight & Review**	585	03-Jan-22 A	30-Dec-24
153	A1170	Coordination & Oversight with County Authorities	585	03-Jan-22 A	30-Dec-24
154		**Design & Analyses**	350	15-Sep-22	05-Feb-24
155	KD-1650	30% Construction Access & Maintenance Roads PS&E	350	15-Sep-22	05-Feb-24
156	KD-2090	30% Sites Lodoga Road Realignment PS&E	350	15-Sep-22	05-Feb-24
157	KD-2100	30% Huffmaster Road PS&E	350	15-Sep-22	05-Feb-24



Dave Hubbard
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Cell: 832.840.1789
dhubbard@brwncald.com

From: David Hubbard [Dhubbard@BrwnCald.com]
Sent: 10/10/2022 1:29:59 PM
To: Edwards, Dawn [Dawn.Edwards@hdrinc.com]; Spranza, John [john.spranza@hdrinc.com]
CC: jelica.arsenijevic [jelica.arsenijevic@hdrinc.com]; Lloyd, John [John.Lloyd@hdrinc.com]; Risse, Danielle [danielle.risse@hdrinc.com]; laurie.warner.herson [laurie.warner.herson@phenixenv.com]; Alicia Forsythe [aforsythe@sitesproject.org]
Subject: Re: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)

Gotcha. Thanks for the clarification.

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From: Edwards, Dawn <Dawn.Edwards@hdrinc.com>
Sent: Monday, October 10, 2022 3:29:08 PM
To: Spranza, John <john.spranza@hdrinc.com>; David Hubbard <Dhubbard@BrwnCald.com>
Cc: jelica.arsenijevic <jelica.arsenijevic@hdrinc.com>; Lloyd, John <John.Lloyd@hdrinc.com>; Risse, Danielle <danielle.risse@hdrinc.com>; laurie.warner.herson <laurie.warner.herson@phenixenv.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Subject: RE: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)

If you want to be more accurate on front end (in alignment with contracts), we are in contracting for this effort now, so work will start October 2022 (rather than Sept). End date is as John notes below.

Thanks!

Dawn Edwards
M 360.460.9581

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From: Spranza, John <John.Spranza@hdrinc.com>
Sent: Monday, October 10, 2022 1:26 PM
To: David Hubbard <Dhubbard@BrwnCald.com>; Edwards, Dawn <Dawn.Edwards@hdrinc.com>
Cc: Arsenijevic, Jelica <jelica.arsenijevic@hdrinc.com>; Lloyd, John <John.Lloyd@hdrinc.com>; Risse, Danielle <danielle.risse@hdrinc.com>; Laurie Warner Herson <laurie.warner.herson@phenixenv.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Subject: RE: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)

Dave, the dates and level of detail you have are the best we have for now, we will provide more detail later.

John Spranza

D 916.679.8858 M 818.640.2487

From: David Hubbard <Dhubbard@BrwnCald.com>
Sent: Monday, October 10, 2022 1:22 PM
To: Edwards, Dawn <Dawn.Edwards@hdrinc.com>; Spranza, John <john.spranza@hdrinc.com>
Cc: Arsenijevic, Jelica <jelica.arsenijevic@hdrinc.com>; Lloyd, John <John.Lloyd@hdrinc.com>; Risse, Danielle <danielle.risse@hdrinc.com>; Laurie Warner Herson <laurie.warner.herson@phenixenv.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Subject: Re: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)

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Has Development of the Master Mitigation Plan started; date started, planned finish (outside of updates, revisions)?

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From: Edwards, Dawn <Dawn.Edwards@hdrinc.com>
Sent: Monday, October 10, 2022 2:47:24 PM
To: Spranza, John <john.spranza@hdrinc.com>; David Hubbard <Dhubbard@BrwnCald.com>
Cc: jelica.arsenijevic <jelica.arsenijevic@hdrinc.com>; Lloyd, John <John.Lloyd@hdrinc.com>; Risse, Danielle <danielle.risse@hdrinc.com>; laurie.warner.herson <laurie.warner.herson@phenixenv.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Subject: Re: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)

Great, thanks John! I think timing is in alignment with our planned first edition (expect to somewhat be living doc that will be updated as we progress).

Thanks!

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From: Spranza, John <John.Spranza@hdrinc.com>
Sent: Monday, October 10, 2022 12:43:33 PM
To: Edwards, Dawn <Dawn.Edwards@hdrinc.com>; David Hubbard <Dhubbard@BrwnCald.com>
Cc: Arsenijevic, Jelica <jelica.arsenijevic@hdrinc.com>; Lloyd, John <John.Lloyd@hdrinc.com>; Risse, Danielle <danielle.risse@hdrinc.com>; Laurie Warner Herson <laurie.warner.herson@phenixenv.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Subject: RE: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)

That task is under A23- Permitting and it is for me to support Dawn's team preparing the Master Plan. I don't have any updates for it but the date will be changing to match Dawn's new team.

John Spranza

D 916.679.8858 M 818.640.2487

From: Edwards, Dawn <Dawn.Edwards@hdrinc.com>
Sent: Monday, October 10, 2022 11:01 AM
To: David Hubbard <Dhubbard@BrwnCald.com>; Spranza, John <John.Spranza@hdrinc.com>
Cc: Arsenijevic, Jelica <jelica.arsenijevic@hdrinc.com>; Lloyd, John <John.Lloyd@hdrinc.com>; Risse, Danielle <danielle.risse@hdrinc.com>; Laurie Warner Herson <laurie.warner.herson@phenixenv.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Subject: RE: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)

Would that not fall under the new Mitigation Planning Team's role? That is our planned first step, but don't want to duplicate effort...

Thanks,
Dawn

Dawn Edwards
M 360.460.9581

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From: David Hubbard <Dhubbard@BrwnCald.com>
Sent: Monday, October 10, 2022 10:56 AM
To: Spranza, John <john.spranza@hdrinc.com>
Cc: Arsenijevic, Jelica <jelica.arsenijevic@hdrinc.com>; Lloyd, John <John.Lloyd@hdrinc.com>; Risse, Danielle <danielle.risse@hdrinc.com>; Edwards, Dawn <Dawn.Edwards@hdrinc.com>; Laurie Warner Herson <laurie.warner.herson@phenixenv.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Subject: RE: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)

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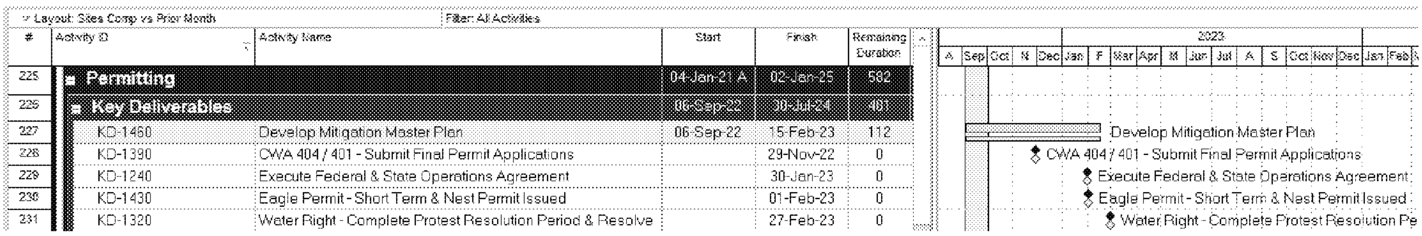
Can anyone shed light on the **Mitigation Master Plan**? I believe MBK has that task? Have they started, date?


Layout: Sites Comp vs Prior Month — Filter: All Activities

#	Activity ID	Activity Name	Start	Finish	Remaining Duration
225	Permitting		04-Jan-21 A	02-Jan-25	582
226	Key Deliverables		06-Sep-22	30-Jul-24	481
227	KD-1460	Develop Mitigation Master Plan	06-Sep-22	15-Feb-23	112
228	KD-1390	CWA 404 / 401 - Submit Final Permit Applications		29-Nov-22	0
229	KD-1240	Execute Federal & State Operations Agreement		30-Jan-23	0
230	KD-1430	Eagle Permit - Short Term & Nest Permit Issued		01-Feb-23	0
231	KD-1320	Water Right - Complete Protest Resolution Period & Resolve		27-Feb-23	0

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Brown and Caldwell 75

From: Spranza, John <John.Spranza@hdrinc.com>
Sent: Monday, October 10, 2022 12:51 PM
To: David Hubbard <Dhubbard@BrwnCald.com>
Cc: jelica.arsenijevic <jelica.arsenijevic@hdrinc.com>; Lloyd, John <John.Lloyd@hdrinc.com>; Risse, Danielle <danielle.risse@hdrinc.com>; Edwards, Dawn <Dawn.Edwards@hdrinc.com>; laurie.warner.herson <laurie.warner.herson@phenixenv.com>; Alicia Forsythe <aforsythe@sitesproject.org>
Subject: RE: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)

Permitting looks good. Thanks.

John Spranza

D 916.679.8858 M 818.640.2487

From: David Hubbard <Dhubbard@BrwnCald.com>
Sent: Monday, October 10, 2022 10:33 AM
To: Marcus Maltby <mmaltby@BrwnCald.com>; Cheyanne Harris <CHarris@BrwnCald.com>; Alicia Forsythe <aforsythe@sitesproject.org>; JP Robinette <jrobinette@sitesproject.org>; Spranza, John <john.spranza@hdrinc.com>;

Arsenijevic, Jelica <jelica.arsenijevic@hdrinc.com>; Luu, Henry <henry.luu@hdrinc.com>; Kevin Spesert <kspesert@sitesproject.org>; bezzone@mbkengineers.com; conner <conner@cmdwest.com>; Laurie Warner Herson <laurie.warner.herson@phenixenv.com>; Risse, Danielle <danielle.risse@hdrinc.com>
Cc: Marcia Kivett <MKivett@sitesproject.org>; Justin Davies <JDavies@BrwnCald.com>
Subject: RE: Sites Reservoir Project Schedule 02-October-2022 (Team Review of Updated Schedule)
Importance: High

Sites Team - Updates to our Sites Schedule have been made with input from you all; data date is now 02-October-2022. Prior to finalizing, I'm now asking that everyone please take a look at the Schedule in the link below and let me know if you're good with it or want to make additional changes.

Sites Schedule Update to 02-Oct-2022 Team Review 2022.10.10.pdf

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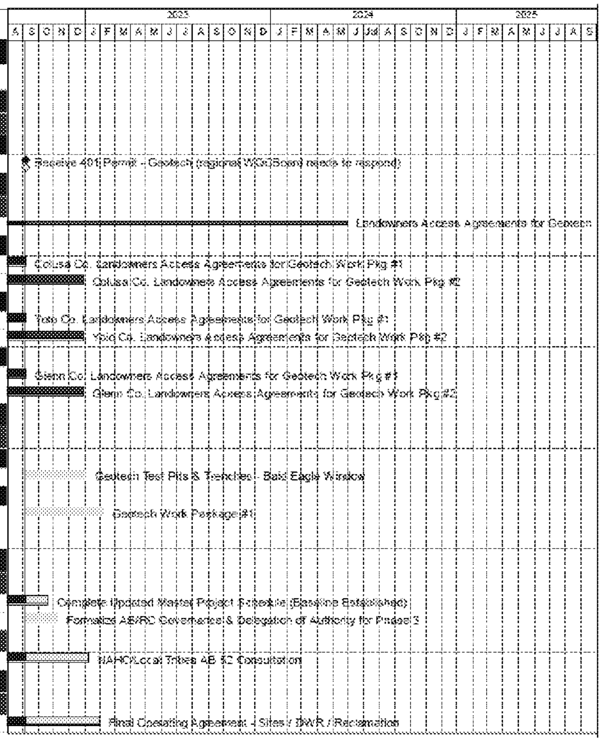
Brown AND Caldwell 75

From: David Hubbard
Sent: Saturday, October 1, 2022 8:40 AM
To: Marcus Maltby <mmaltby@BrwnCald.com>; Cheyanne Harris <CHarris@BrwnCald.com>; Alicia Forsythe <aforsythe@sitesproject.org>; jrobinette@sitesproject.org; john.spranza@hdrinc.com; Arsenijevic, Jelica <jelica.arsenijevic@hdrinc.com>; Henry Luu <henry.luu@hdrinc.com>; Kevin Spesert (kspesert@sitesproject.org) <kspesert@sitesproject.org>; bezzone@mbkengineers.com; Conner McDonald <conner@cmdwest.com>; Laurie Warner Herson <laurie.warner.herson@phenixenv.com>; Danielle Risse (danielle.risse@hdrinc.com) <danielle.risse@hdrinc.com>
Cc: Marcia Kivett (MKivett@sitesproject.org) <MKivett@sitesproject.org>; Justin Davies <JDavies@BrwnCald.com>
Subject: Sites Reservoir Project Schedule Update through September 2022

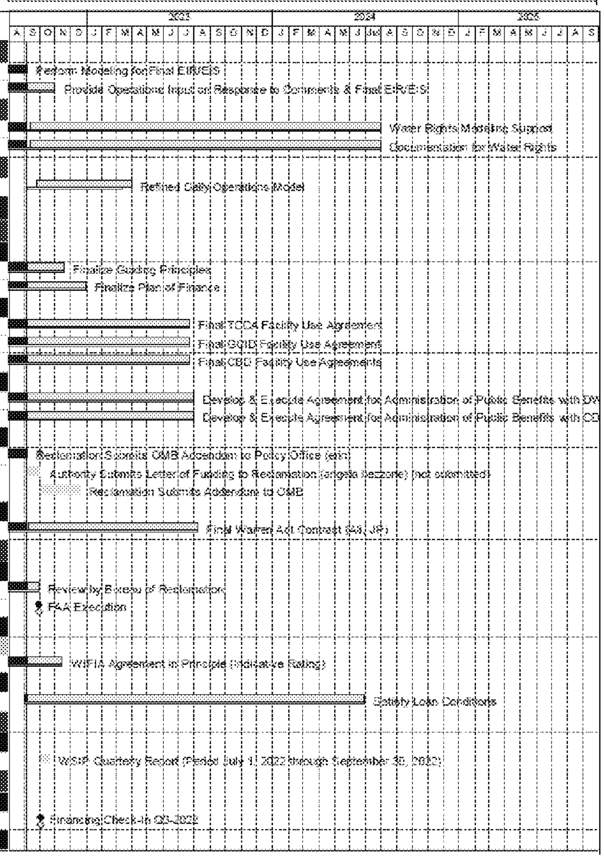
Good morning, Sites Team Members – It's time to update the Schedule through September 2022. Moving our Data Date to Sunday October 2, 2022. So, looking for all progress made up to 10/2.
I'm asking that each of you provide your updates/input as soon as you can, by midweek (10/5) ideally. Email comments and updates are fine or call me up/schedule a Teams meeting, and we can knock this out together while I share screen. See below screen shots and link to PDF on SharePoint. These are the activities filtered that should have started, finished, or continued as ongoing during the update period to 10/2. Several activities are long duration ongoing tasks – just let me know those are good as-is unless you have a new completion date.

Link to file on SharePoint is here:
Sites Schedule for Update through September 2022.pdf

#	Activity ID	Activity Name	Remaining Duration	Start	Finish
1		**Sites Reservoir Project DD: 02-Oct-2022**	579	01-Sep-20 A	30-Dec-24
2		**Geotech Program**	433	22-Mar-22 A	30-May-24
3		**Permitting**	0	06-Sep-22	06-Sep-22
4		**State Agency Agreements & Permits**	0	06-Sep-22	06-Sep-22
5		**SWB CWA Section 401 Water Quality Certification - Priority 1 Geotech**	0	06-Sep-22	06-Sep-22
6	401-120	Receive 401 Permit - Geotech (regional WQCBoard needs to respond)	0		06-Sep-22
7		**Real Estate**	433	22-Mar-22 A	30-May-24
8		**Land Access Agreements**	433	22-Mar-22 A	30-May-24
9	A1250	Landowners Access Agreements for Geotech	433	22-Mar-22 A	30-May-24
10		**Colusa County**	79	22-Mar-22 A	29-Dec-22
11	LAAC-1100	Colusa Co. Landowners Access Agreements for Geotech Work Pkg #1	0	22-Mar-22 A	06-Sep-22
12	LAAC-1200	Colusa Co. Landowners Access Agreements for Geotech Work Pkg #2	79	22-Mar-22 A	29-Dec-22
13		**Yolo County**	79	22-Mar-22 A	29-Dec-22
14	LAAY-1100	Yolo Co. Landowners Access Agreements for Geotech Work Pkg #1	0	22-Mar-22 A	06-Sep-22
15	LAAY-1200	Yolo Co. Landowners Access Agreements for Geotech Work Pkg #2	79	22-Mar-22 A	29-Dec-22
16		**Glenn County**	79	22-Mar-22 A	29-Dec-22
17	LAAG-1100	Glenn Co. Landowners Access Agreements for Geotech Work Pkg #1	0	22-Mar-22 A	06-Sep-22
18	LAAG-1200	Glenn Co. Landowners Access Agreements for Geotech Work Pkg #2	79	22-Mar-22 A	29-Dec-22
19		**Geotechnical Engineering**	105	06-Sep-22	06-Feb-23
20		**Geotechnical Investigations**	105	06-Sep-22	06-Feb-23
21		**Test Pits & Trenches**	81	06-Sep-22	03-Jan-23
22	TPT-1100	Geotech Test Pits & Trenches - Bald Eagle Window	81	06-Sep-22	03-Jan-23
23		**Work Packages**	105	06-Sep-22	06-Feb-23
24	GWP-1100	Geotech Work Package #1	105	06-Sep-22	06-Feb-23
25		**Project Development**	579	01-Sep-20 A	30-Dec-24
26		**Planning**	65	01-Sep-20 A	09-Jan-23
27		**Key Deliverables**	45	24-Jan-22 A	07-Nov-22
28	KD-1130	Complete Updated Master Project Schedule (Baseline Established)	34	24-Jan-22 A	21-Oct-22
29	KD-1290	Formalize AB/RC Governance & Delegation of Authority for Phase 3	45	06-Sep-22	07-Nov-22
30		**NAHC/Local Tribes AB 52 Consultation**	65	01-Sep-20 A	09-Jan-23
31	STA-120	NAHC/Local Tribes AB 52 Consultation	65	01-Sep-20 A	09-Jan-23
32		**Reservoir Operations & Modeling**	481	03-Jan-22 A	30-Jul-24
33		**Final Sites DWR/Reclamation Operating Agreement**	100	19-Apr-22 A	30-Jan-23
34	OP-1005	Final Operating Agreement - Sites / DWR / Reclamation	100	19-Apr-22 A	30-Jan-23



#	Activity ID	Activity Name	Remaining Duration	Start	Finish
35		**Provide Operations Input on Response to Comments & Final EIR/EIS**	41	09-May-22 A	01-Nov-22
36	FO-1110	Perform Modeling for Final EIR/EIS	0	09-May-22 A	06-Sep-22
37	FO-1050	Provide Operations Input on Response to Comments & Final EIR/EIS	41	24-May-22 A	01-Nov-22
38		**Water Rights Modeling**	475	03-Jan-22 A	30-Jul-24
39	A1200	Water Rights Modeling Support	475	03-Jan-22 A	30-Jul-24
40	A1210	Documentation for Water Rights	475	03-Jan-22 A	30-Jul-24
41		**Refined Daily Operations Model**	130	26-Sep-22	31-Mar-23
42	A1220	Refined Daily Operations Model	130	26-Sep-22	31-Mar-23
43		**Project Agreements & Funding**	460	01-Jun-21 A	28-Jun-24
44		**Inter-Agency Agreements**	230	01-Jun-21 A	07-Aug-23
45		**Benefits & Obligations Contract with Participants**	80	01-Mar-22 A	30-Dec-22
46	BO-1100	Finalize Guiding Principles	54	01-Mar-22 A	18-Nov-22
47	BO-1250	Finalize Plan of Finance	80	01-Mar-22 A	30-Dec-22
48		**Facility Use Agreements**	222	27-Aug-21 A	21-Jul-23
49	FO-1020	Final TCCA Facility Use Agreement	222	27-Aug-21 A	21-Jul-23
50	FO-1030	Final GCID Facility Use Agreement	222	27-Aug-21 A	21-Jul-23
51	FO-1040	Final CBD Facility Use Agreements	222	27-Aug-21 A	21-Jul-23
52		**Agreements for Administration of Public Benefits**	228	31-Mar-22 A	31-Jul-23
53	PB-1100	Develop & Execute Agreement for Administration of Public Benefits with DWR (ali/chey)	228	31-Mar-22 A	31-Jul-23
54	PB-1200	Develop & Execute Agreement for Administration of Public Benefits with CDFW (ali/chey)	228	31-Mar-22 A	31-Jul-23
55		**Federal Funding Commitment**	73	07-Feb-22 A	19-Dec-22
56	WIIN-1150	Reclamation Submits OMB Addendum to Policy Office (erin)	0	07-Feb-22 A	06-Sep-22
57	WIIN-1160	Authority Submits Letter of Funding to Reclamation (angela bezzone) (not submitted)	20	06-Sep-22	03-Oct-22
58	WIIN-1180	Reclamation Submits Addendum to OMB	53	04-Oct-22	19-Dec-22
59		**US Bureau of Reclamation Warren Act**	230	01-Jun-21 A	07-Aug-23
60	FED-080	Final Warren Act Contract (Ali, JP)	230	01-Jun-21 A	07-Aug-23
61		**Federal Funding**	460	17-Jan-22 A	28-Jun-24
62		**WIIN Act FAA**	19	17-Jan-22 A	30-Sep-22
63	WIIN-1120	Review by Bureau of Reclamation	19	17-Jan-22 A	30-Sep-22
64	WIIN-1140	FAA Execution	0		30-Sep-22
65		**WIFIA Loan**	51	05-Jul-22 A	15-Nov-22
66		**Application**	51	05-Jul-22 A	15-Nov-22
67	WIFIA-110	WIFIA Agreement in Principle (Indicative Rating)	51	05-Jul-22 A	15-Nov-22
68		**USDA Loan**	460	02-Sep-22 A	28-Jun-24
69	USDA-1060	Satisfy Loan Conditions	460	02-Sep-22 A	28-Jun-24
70		**State Funding (Water Storage Investment Program, WSIP)**	15	03-Oct-22	21-Oct-22
71		**WSIP Early Funding Administration**	15	03-Oct-22	21-Oct-22
72	WSIP-1230	WSIP Quarterly Report (Period July 1, 2022 through September 30, 2022)	15	03-Oct-22	21-Oct-22
73		**Local Funding**	30	06-Sep-22	17-Oct-22
74		**Finance Check-Ins**	0	03-Oct-22	03-Oct-22
75	FC-1260	Financing Check-In Q3-2022	0		03-Oct-22
76		**Acre/Feet Participation (Reservoir Committee Cash Calls)**	30	06-Sep-22	17-Oct-22



#	Activity ID	Activity Name	Remaining Duration	Start	Finish
77	AF-1100	Annual Check-In & Budget Update for 2023	30	06-Sep-22	17-Oct-22
78		**Permitting**	310	04-Jan-21 A	04-Dec-23
79		**Key Deliverables**	112	06-Sep-22	15-Feb-23
80	KD-1480	Develop Mitigation Master Plan	112	06-Sep-22	15-Feb-23
81		**Federal Agency Agreements & Permits**	315	11-Jan-21 A	04-Dec-23
82		**Clean Water Act Section 404**	58	04-Feb-21 A	28-Nov-22
83	404-050	Prepare Draft 404 Application	58	04-Feb-21 A	28-Nov-22
84		**Advisory Council on Historic Preservation NHPA Section 106**	49	14-Mar-22 A	11-Nov-22
85	106-081	Prepare Final PA	49	14-Mar-22 A	11-Nov-22
86		**USFWS & NMFS Endangered Species Act Section 7**	49	11-Jan-21 A	11-Nov-22
87	BA-200	Prepare Draft BA	49	11-Jan-21 A	11-Nov-22
88		**USFWS Bald Eagle Protection Act**	315	27-Jul-22 A	04-Dec-23
89		Long Term Permit	315	27-Jul-22 A	04-Dec-23
90	USFWS-140	Prepare Long Term Permit Application	315	27-Jul-22 A	04-Dec-23
91		**State Agency Agreements & Permits**	91	04-Jan-21 A	19-Jan-23
92		**Central Valley Flood Protection Board (CVFPB) Levee Encroachment**	93	13-Dec-21 A	19-Jan-23
93	CVFPB-200	Prepare CVFPB Permit	93	13-Dec-21 A	19-Jan-23
94		**SWRCB Water Right Permit**	38	29-Aug-22 A	28-Oct-22
95	WRP-115ac	Respond to Request for More Information	38	29-Aug-22 A	28-Oct-22
96		**SWB CWA Section 401 Water Quality Certification**	58	04-Jan-21 A	28-Nov-22
97	401-200	Prepare Draft CWA 401 Permit Application	58	04-Jan-21 A	28-Nov-22
98		**CDFW Streambed Alteration Agreements**	50	10-Jan-22 A	14-Nov-22
99	1600-200	Prepare LSAA Application	50	10-Jan-22 A	14-Nov-22
100		**CDFW Incidental Take Permits**	44	11-Jan-21 A	04-Nov-22
101		ITP - CESA (Se 2081) Operations	44	11-Jan-21 A	04-Nov-22
102	2081-100	Prepare CESA ITP Application - Operations	44	11-Jan-21 A	04-Nov-22
103		**Environmental**	22	03-Jan-22 A	05-Oct-22
104		**EIR/EIS**	22	03-Jan-22 A	05-Oct-22
105		**Final EIR/Final EIS**	22	03-Jan-22 A	05-Oct-22
106	EIR-210	Preparation of Admin Final EIR/EIS (Lori)	22	03-Jan-22 A	05-Oct-22
107	EIR-220	Analyze & Review New Model Output	15	06-Sep-22	26-Sep-22
108		**Real Estate**	250	02-Nov-20 A	30-Aug-23
109		**Key Deliverables**	250	03-Jan-22 A	30-Aug-23
110	KD-1495	Complete ROW Manual	80	03-Jan-22 A	30-Dec-22
111	KD-1500	Conduct Options Negotiations with Willing Seller Properties	206	01-Jul-22 A	28-Jun-23
112	KD-1490	Complete Land Acquisition Master Plan	250	06-Sep-22	30-Aug-23
113		**USBR - Land Agreement**	230	02-Nov-20 A	07-Aug-23
114	FED-100	USBR Land Agreements	230	02-Nov-20 A	07-Aug-23
115		**Preliminary Engineering**	585	03-Jan-22 A	30-Dec-24
116		**Key Deliverables**	570	15-Sep-22	16-Dec-24

#	Activity ID	Activity Name	Remaining Duration	Start	Finish
117	KD-1110	Advance Engineering of Project Feature Encroachments to 65% Design Level in Support of Permitting	60	15-Sep-22	09-Dec-22
118	KD-1210	Update Project Risk Assessments (ongoing) (Risk Mgr Bob Beduhn & Henry Luu)	570	15-Sep-22	16-Dec-24
119		**Conveyance (Pipelines, Pump Stations, Canals)**	584	03-Jan-22 A	27-Dec-24
120		**UPRR Oversight & Review**	577	15-Sep-22	27-Dec-24
121	A1110	Coordination & Oversight with UPRR	577	15-Sep-22	27-Dec-24
122		**Caltrans Oversight & Review**	577	15-Sep-22	27-Dec-24
123	A1120	Coordination & Oversight with Caltrans	577	15-Sep-22	27-Dec-24
124		**DWR Operations Oversight & Review (KLOG)**	584	03-Jan-22 A	27-Dec-24
125	A1130	Coordination & Oversight with Department of Water Resources	584	03-Jan-22 A	27-Dec-24
126		**RD 108 Oversight & Review**	584	03-Jan-22 A	27-Dec-24
127	A1140	Coordination & Oversight with Reclamation District 108	584	03-Jan-22 A	27-Dec-24
128		**Design & Analyses**	357	01-Feb-22 A	05-Feb-24
129	KD-1140	Create Master Survey & Topo Map	7	01-Feb-22 A	14-Sep-22
130	KD-1150	Finalize TRR Location	5	08-Apr-22 A	08-Sep-22
131	KD-1630	30% Dunnigan Pipeline PS&E	350	15-Sep-22	05-Feb-24
132	KD-2010	30% Funks PS&E	350	15-Sep-22	05-Feb-24
133	KD-2020	30% TRR PS&E	350	15-Sep-22	05-Feb-24
134	KD-2030	30% Funks & TRR Pipeline PS&E	350	15-Sep-22	05-Feb-24
135		**Reservoir (Dams, Tunnels)**	585	01-Feb-22 A	30-Dec-24
136		**DSOD Oversight & Review**	585	01-Feb-22 A	30-Dec-24
137	KD-1100	Initiate Application for Permit to Construct from DSOD	585	01-Feb-22 A	30-Dec-24
138		**Design & Analyses**	350	15-Sep-22	05-Feb-24
139	KD-1680	30% Golden Gate Dam PS&E	350	15-Sep-22	05-Feb-24
140	KD-2040	30% Sites Dam PS&E	350	15-Sep-22	05-Feb-24
141	KD-2050	30% Saddle Dams PS&E	350	15-Sep-22	05-Feb-24
142	KD-2060	30% I/O Facilities PS&E	350	15-Sep-22	05-Feb-24
143	KD-2070	Emergency Release Modeling	350	15-Sep-22	05-Feb-24
144		**Electrical (Substation, Switchyard, Transmission Line)**	585	03-Jan-22 A	30-Dec-24
145		**WAPA Oversight & Review**	585	03-Jan-22 A	30-Dec-24
146	A1150	Coordination & Oversight with WAPA	585	03-Jan-22 A	30-Dec-24
147		**CAISO Oversight & Review**	585	03-Jan-22 A	30-Dec-24
148	A1160	Coordination & Oversight with CAISO	585	03-Jan-22 A	30-Dec-24
149		**Design & Analyses**	185	15-Sep-22	05-Jun-23
150	KD-1640	Electrical Preliminary Engineering (30% Design Level)	185	15-Sep-22	05-Jun-23
151		**Roads & Bridges**	585	03-Jan-22 A	30-Dec-24
152		**County Oversight & Review**	585	03-Jan-22 A	30-Dec-24
153	A1170	Coordination & Oversight with County Authorities	585	03-Jan-22 A	30-Dec-24
154		**Design & Analyses**	350	15-Sep-22	05-Feb-24
155	KD-1650	30% Construction Access & Maintenance Roads PS&E	350	15-Sep-22	05-Feb-24
156	KD-2090	30% Sites Lodoga Road Realignment PS&E	350	15-Sep-22	05-Feb-24
157	KD-2100	30% Huffmaster Road PS&E	350	15-Sep-22	05-Feb-24

Dave Hubbard
Project Controls
Brown and Caldwell
Cell: 832.840.1789
dhubbard@brwncald.com

From: JP Robinette [jrobinette@sitesproject.org]
Sent: 10/11/2022 7:46:39 AM
To: Pat Tangora [ptangora@BrwnCald.com]
CC: Joe Trapasso [jtrapasso@sitesproject.org]; Luu, Henry [henry.luu@hdrinc.com]; Cheyanne Harris [charris@brwncald.com]
Subject: Re: Request update on Sites Reservoir Project - Phase 1 Project

Henry,

I would like you to take the lead on future requests like this, confirming with me before sending. Please see my proposed response below and let me know if you have any changes and I will submit this one to Ian.

JP

Re: Sites Reservoir Project - Phase 1
City: COLUSA (this project is closer to the town of Maxwell, California)
State: CALIFORNIA
Dodge Report #: 201600583104

- Brief summary of the project's scope of work: New water supply project involving several construction package, including: Sites Reservoir Package (dams, saddle dams / dikes, bridge), Maxwell-Sites Pumping and Generating Package (conveyance pipelines, pumping and generating plants, electrical power, and controls), Dunnigan Pipeline Package, and various other packages including roads. Overall project is currently in preliminary design and permitting.
- Construction cost estimate or cost range: $3.9 billion in 2021 dollars, class 4 (includes $600 million mitigation estimate).
- Target Bid Date: Packages will be out for bid or for qualifications based selection at various times likely starting in 2024.
- Name of Construction Manager or General Contractor (if applicable): Not yet selected.
- Target Construction start date: 2024
- Target Completion date: 2030

From: Pat Tangora <ptangora@BrwnCald.com>
Sent: Friday, October 7, 2022 10:29 AM
To: JP Robinette <jrobinette@sitesproject.org>
Cc: Joe Trapasso <jtrapasso@sitesproject.org>; Luu, Henry <henry.luu@hdrinc.com>; Cheyanne Harris <CHarris@BrwnCald.com>
Subject: RE: Request update on Sites Reservoir Project - Phase 1 Project

I think you just answer the questions as best as possible. I've taken a stab in red below. Items for you to confirm are in yellow. Also decide on who you want to have respond to these requests in the future

Patricia Tangora, Vice President
Senior Director, Owner's Advisor Services
Brown and Caldwell
ptangora@brwncald.com
T 206.749.2321 | **C** 206-819-6439

Click this link to send me large files through Hightail

Brown AND Caldwell

From: JP Robinette <jrobinette@sitesproject.org>
Sent: Friday, October 07, 2022 11:00 AM
To: Pat Tangora <ptangora@BrwnCald.com>
Cc: Joe Trapasso <jtrapasso@sitesproject.org>; Luu, Henry <henry.luu@hdrinc.com>; Cheyanne Harris <CHarris@BrwnCald.com>
Subject: Fw: Request update on Sites Reservoir Project - Phase 1 Project

Pat,

Do you have any suggestions on how we might handle this request from Dodge based on the outcome of the contract strategy?

Thanks,
JP

From: Jerry Brown <jbrown@sitesproject.org>
Sent: Friday, October 7, 2022 9:50 AM
To: JP Robinette <jrobinette@sitesproject.org>
Cc: Marcia Kivett <MKivett@sitesproject.org>
Subject: FW: Request update on Sites Reservoir Project - Phase 1 Project

Please handle providing a response to Ian on his questions below. Thanks

From: Ann Nordyke <boardclerk@countyofcolusa.com>
Date: Friday, October 7, 2022 at 9:42 AM
To: Ian Dumogho <Ian.Dumogho@construction.com>
Subject: RE: Request update on Sites Reservoir Project - Phase 1 Project

HI Ian,

As my Clerk informed you when you called, I do not take part in the Clerking of the Sites Reservoir Project, anymore. You will need to contact the Sites Office at (530) 438-2309; Street address is 122 Old Highway 99 West, Maxwell CA 95955, Mailing address is PO Box 517, Maxwell, CA 95955 and here is a link to their website https://sitesprojet.org

Ann Nordyke, CCB
Chief Deputy Clerk to the Board of Supervisors
boardclerk@countyofcolusa.com
COUNTY OF COLUSA
547 Market Street, Ste. 102
Colusa, CA 95932
(530)458-0508, Ext. 508
(530)458-0510

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From: Ian Dumogho [mailto:Ian.Dumogho@construction.com]
Sent: Thursday, October 6, 2022 10:48 AM
To: Ann Nordyke <boardclerk@countyofcolusa.com>; jwatson@sitesipa.net
Cc: Dodge_Quality <dodge_quality@construction.com>; Keith.Navale <Keith.Navale@construction.com>
Subject: Request update on Sites Reservoir Project - Phase 1 Project

REMINDER: This email originated from outside of the organization, only you can prevent ransomware attacks. Do not click links or open attachments unless you recognize the sender and know the content is safe. When in doubt, contact the Helpdesk at helpdesk@countyofcolusa.com.

Good day,

I am with Dodge Construction Network; we would like an update on the current status of this project. At your convenience, please answer the following questions or confirm the following project details or confirm the following project details:

Re: Sites Reservoir Project - Phase 1
City: COLUSA
State: CALIFORNIA
Dodge Report #: 201600583104

- Brief summary of the project's scope of work: New water supply project involving several construction package, including reservoir package (dams and saddle dams / dikes), Sites-Ledoga conveyance package (conveyance pipelines, pump stations and associated , Dunnigan Pipeline package, and various other packages including roads. Overall project is currently in preliminary design and permitting.
- Construction cost estimate or cost range: [JP?]
- Target Bid Date: Packages will be out for bid or for qualifications based selection at various times likely starting in 2024.
- Name of Construction Manager or General Contractor (if applicable): Not yet selected
- Target Construction start date: 2025
- Target Completion date: 2030

Thank you for taking the time to answer these questions. Have a good day.

Best Regards,

Ian Dumogho
National Public Planning Researcher

844-326-3826 ext:9048
construction.com

Dodge Construction Network

Disclaimer

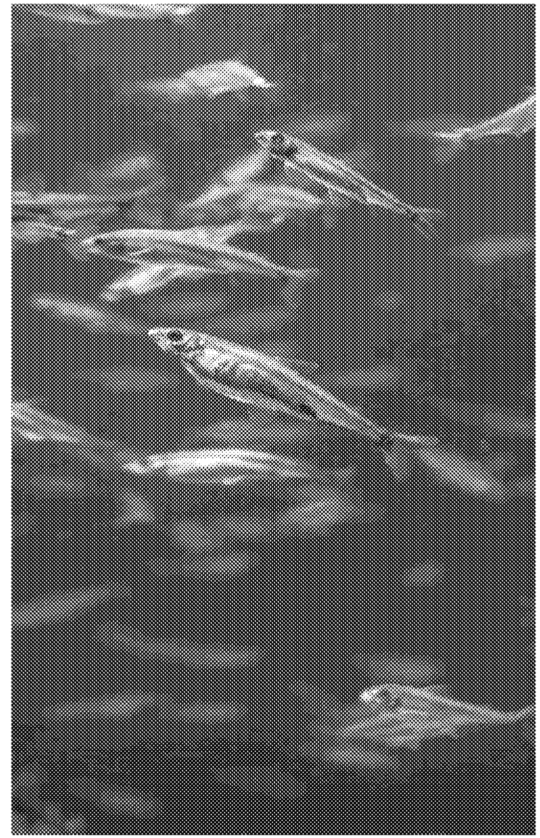
Sites Project Fishery Group Discussion No. 4

September 1, 2022

Sites

Agenda

- Group Norms
- Diversion Criteria Update
- Exchanges Update
- Modeling Update
- Schedule
- Open Topics
- Adjourn



Group Norms

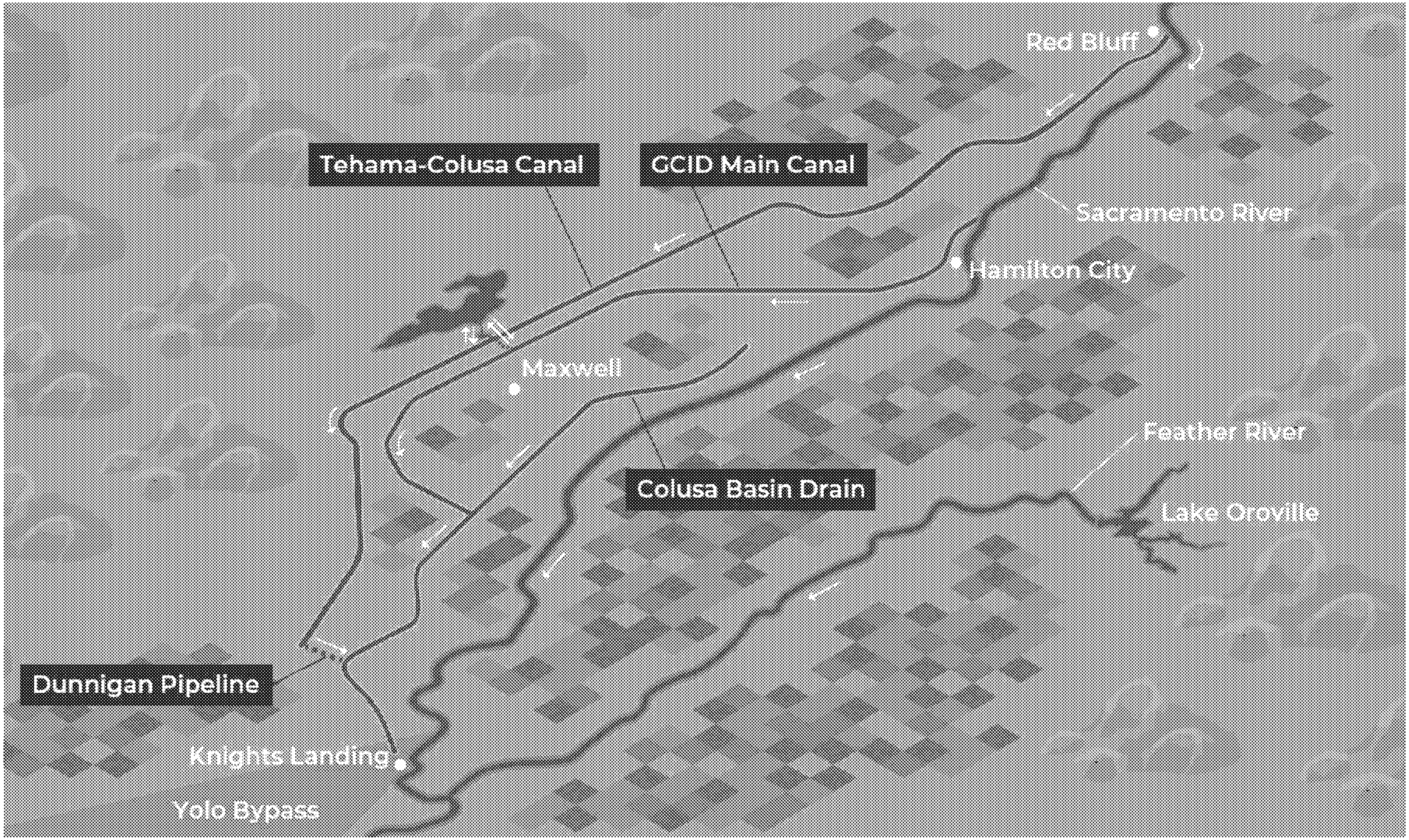
- Encourage everyone to be on video
- Mute yourself when others are speaking
- Respectful, professional dialogue
- Ask questions throughout, lets have a dialogue
  - Let the speaker finish their point
  - Use the raise your hand function in Teams if needed

Diversion Criteria

John Spranza

Sites

Project Water Operations



Alternatives Considered in the Revised Draft EIR/Supplemental Draft EIS

Facilities / Operations	Alternative 1	Alternative 2	Alternative 3
Reservoir Size	1.5 MAF	1.3 MAF	1.5 MAF
Hydropower	Incidental upon release	Same as Alt 1	Same as Alt 1
Diversion Locations	Red Bluff Pumping Plant and Hamilton City	Same as Alt 1	Same as Alt 1
Conveyance Release / Dunnigan Release	1,000 cubic feet per second (cfs) into new Dunnigan Pipeline to Colusa Basin Drain	1,000 cfs into new Dunnigan Pipeline to Sacramento River. Partial release into the Colusa Basin Drain	Same as Alt 1
Reclamation Involvement	1. Funding Partner 2. Operational Exchanges a. Within Year Exchanges b. Real-time Exchanges	Operational Exchanges a. Within Year Exchanges b. Real-time Exchanges	Same as Alt 1, **but up to 25% investment**
DWR Involvement	Operational Exchanges with Oroville and storage in SWP facilities South-of-Delta	Same as Alt 1	Same as Alt 1
Route to West Side of Reservoir	Bridge across reservoir	Paved road around southern end of reservoir	Same as Alt 1

Sites Diversion Criteria Evolution

	2017 Draft EIR/EIS	2021 RDEIR/SDEIS	2022 Final EIR/EIS
Bend Bridge Pulse Protection	Protection of all qualified precipitation-generated pulse events (i.e., peaks in river flow rather than scheduled operational events) from October to May based on the detection of fish presence and migration during the beginning of the flow event. For each event where fish presence and migration is detected, diversions would cease for 7 days	Same as 2017 DEIR/EIS	Similar except the following: (1) a qualified precipitation-generated pulse event is determined based on forecasted flows and (2) pulse protection may cease earlier than 7 days if flows at Bend Bridge exceed 29,000 cfs and Project diversions subtracted from Bend Bridge flows continue to be at least 25,000 cfs.
Minimum Bypass Flows at Wilkins Slough	Diversions allowed when flows below Wilkins Slough are above 5,000 cfs	10,700 cfs in March through May; 5,000 cfs all other times as mitigation measure	10,700 cfs October through June; 5,000 cfs September. Moved to Project Description
Minimum Bypass Flows in the Sacramento River	3,250 at RBDD and 4,000 cfs at Hamilton City; rate of diversion controlled by fish screen designs	No change	No change

Sites Diversion Criteria Evolution

	2017 Draft EIR/EIS	2021 RDEIR/SDEIS	2022 Final EIR/SEIR
Fremont Weir Notch Protections	No specific criteria	No more than 1% reduction in flow over weir when spill over the weir are less than 600 cfs. No more than a 10% reduction in flow over weir when spills over the weir are between 600 cfs and 6,000 cfs.	No longer included. Revised minimum bypass flows in the Sacramento River at Wilkins Slough and Bend Bridge Pulse Protection provide protections for Fremont Weir Notch
Sacramento River Fully Appropriated Stream and Delta Conditions	No specific criteria	Diversions allowed only when the Sacramento River is not fully appropriated (September 1 through June 14) and when Delta is in excess conditions as determined by DWR	No change
Freeport, Net Delta Outflow Index, X2, and Delta Water Quality	Diversions only be allowed when a Sacramento River flow of 15,000 cfs is present at Freeport in January; 13,000 cfs in December and February through June; and 11,000 cfs in other months.	Operations consistent with all applicable laws, regulations, biological opinions and incidental take permits, and court orders in place at the time that diversion occurs	No change

Exchanges

Steve Micko

Sites

Operations Overview

- Diversions
  - Red Bluff Pumping Plant
  - Hamilton City Pump Station
- Releases
  - TC Canal
  - GCID Canal
  - North Delta (Yolo Bypass)
  - South of Delta
- **Exchanges**
  - **Reclamation**
  - **DWR**
- Exports through the Delta

Shasta Exchanges

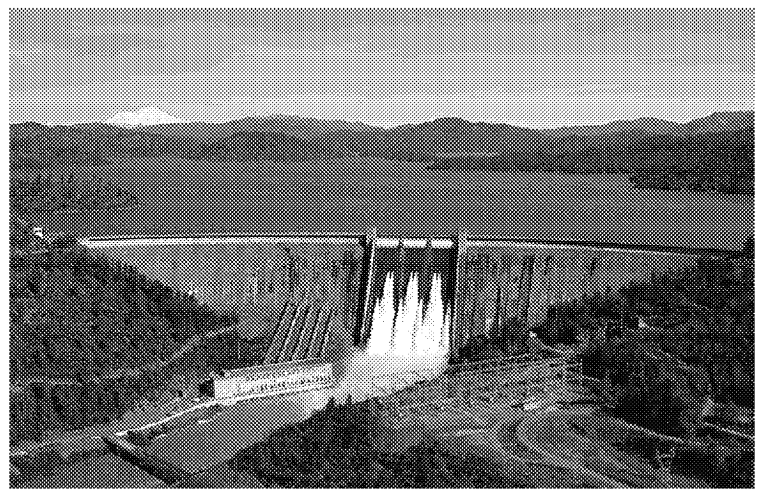
- Previous Modeling Focus:
  - Sites-Shasta exchanges focused on improving Shasta cold water pool management and incidentally improved Fall Flow Stability
- Revised Modeling Focus:
  - Shasta exchanges support Shasta cold water pool management, Fall Flow Stability and Spring Pulse Flow actions

Shasta Exchanges – Cold Water Pool Modeling Criteria

Criteria	RDEIR/SDEIS	Final EIR/EIS
Period	Dry: Apr – Jun Critical: Apr – May	Dry: Apr – Jun Critical: Apr – May
Water year types	Dry and Critical water years	Dry and Critical water years
Temperature Management Tier	Tier 2, 3 and 4 years	Tier 3 and 4 years
Min. flow at Sacramento River at Keswick	Apr – May: 6,000 cfs Jun: 10,000 cfs	No criteria
Temperature Criteria	Apr – Jun: Tiers 2 and 3: 53.5 deg F Tier 4: 56 deg F	No criteria
Sacramento Valley Conditions	Only occurs during Balanced conditions	Only occurs during Balanced conditions

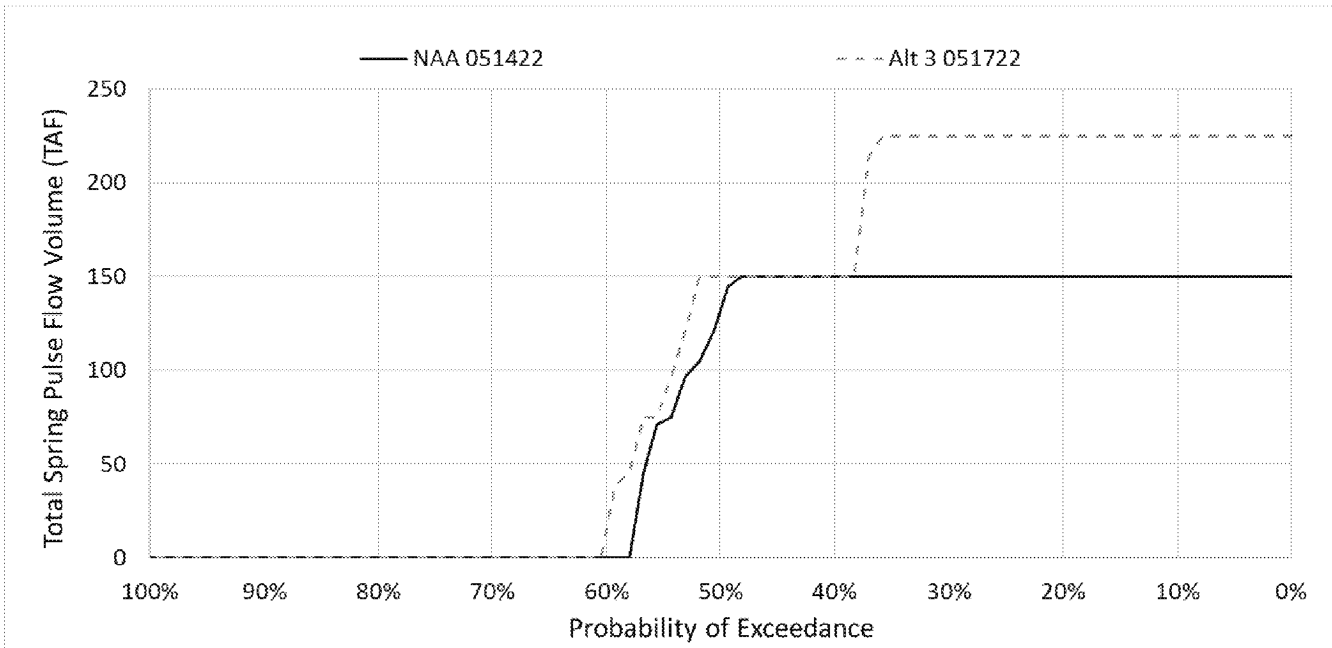
Shasta Exchanges – Fall Flow Stability Modeling Criteria

- Additional Fall Flow Stability may occur:
  - Between October through February
  - Sites storage is greater than 80% at the end of May
  - Previous month Shasta storage is greater than 3.2 MAF
  - Fall stability flows are already active



Shasta Exchanges – Spring Pulse Modeling Criteria

- Additional Spring Pulse may occur in May:
  - Sites storage is greater than 80% at the end of April
  - End of April Shasta storage is greater than 4.1 MAF



Modeling Update

Steve Micko/Ali Forsythe

Sites

Modeling Update – Diversions and Releases

Parameter	Version	Alt 1 A		Alt 1B		Alt 2		Alt 3	
		Avg	D & C	Avg	D & C	Avg	D & C	Avg	D & C
Fills (TAF)	RDEIR/ SDEIS	240	101	255	104	229	99	279	105
	FEIR/EIS	236	98	246	96	229	98	276	103
Releases (TAF)	RDEIR/ SDEIS	217	402	234	404	209	374	260	383
	FEIR/EIS	208	361	221	372	205	345	256	369

D&C = Dry and critical years

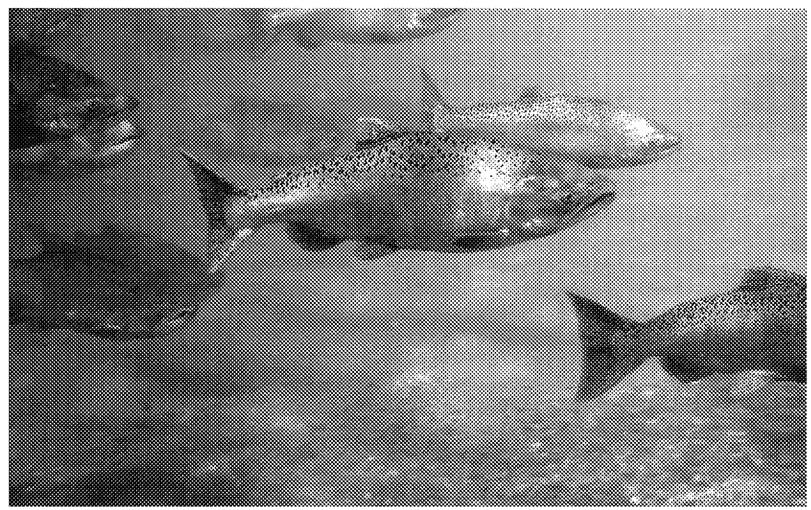
Modeling Update – Change in End of September Storage

Change in End of Sept Storage (TAF)	Version	Alt 1 A		Alt 1B		Alt 2		Alt 3	
		Avg	D & C	Avg	D & C	Avg	D & C	Avg	D & C
Shasta	RDEIR/ SDEIS	12	23	28	39	10	18	73	107
	FEIR/EIS	20	26	36	51	21	27	102	135
Oroville	RDEIR/ SDEIS	13	24	12	21	12	19	13	15
	FEIR/EIS	14	34	12	37	13	31	11	30
Folsom	RDEIR/ SDEIS	3	5	9	12	5	9	24	21
	FEIR/EIS	1	1	2	3	1	3	11	4

D&C = Dry and critical years

Modeling Update – NMFS Lifecycle Model

- Requests to run Winter-run Lifecycle Model
  - NMFS
    - RDEIR/SDEIS comments
    - Biological Opinion analysis
  - CDFW
    - RDEIR/SDEIS comments
    - Operations ITP analysis
  - USEPA
    - RDEIR/SDEIS comments



Winter-run Lifecycle Model

- Evaluates the effects of water operations on the population dynamics of Sacramento River winter-run Chinook salmon
  - Integrate effects across entire life-cycle and multiple environmental conditions
  - Sacramento River focused
- Will inform the Authority's state and federal ESA permits
  - Initial results expected in late September
- Includes the lifecycle model and a series of sub-models

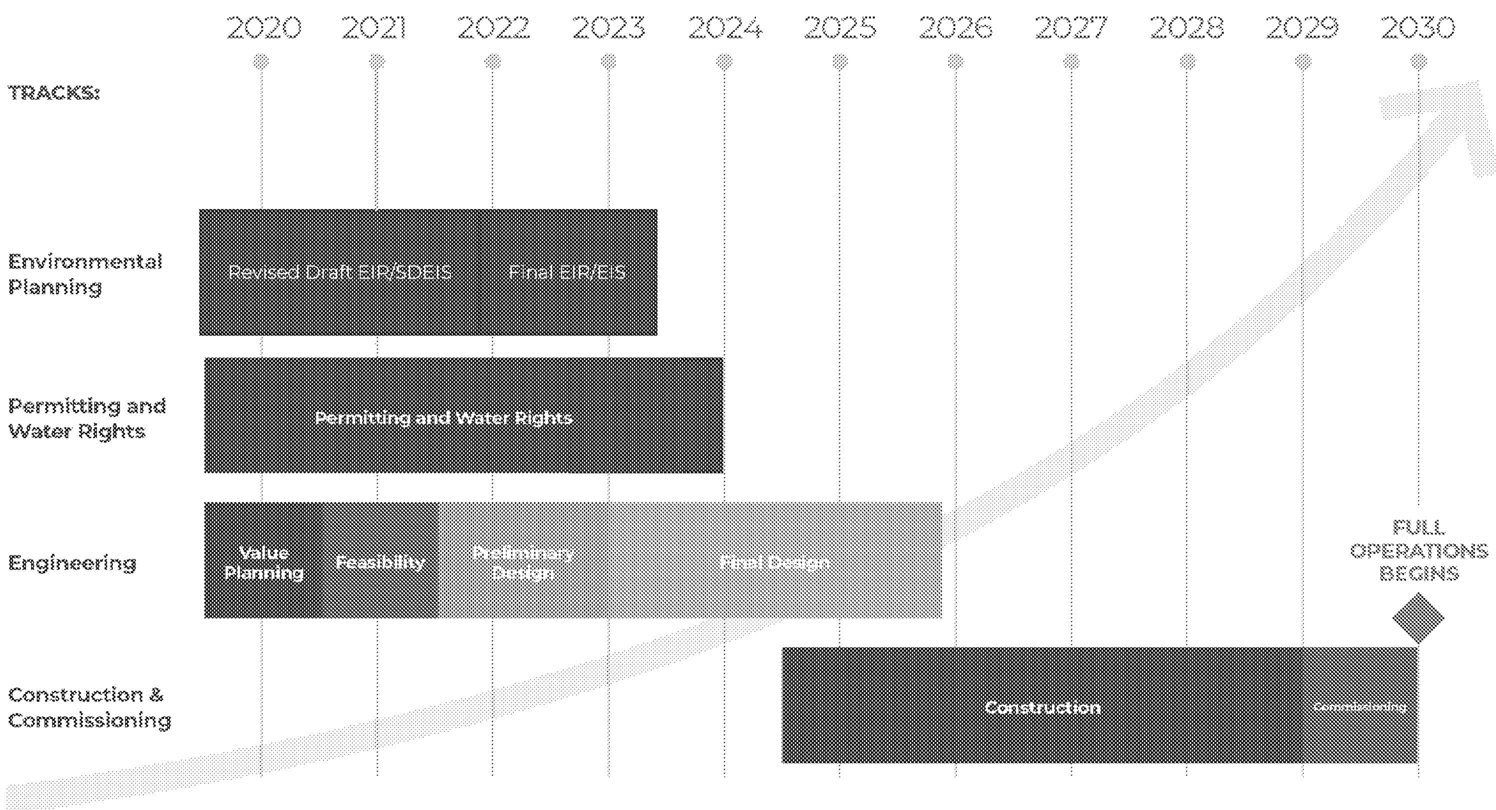
Schedule

John Spranza

Sites

Project Schedule

Sites Reservoir Project Schedule



Permitting Schedule

- State ESA Incidental Take Permit (ITP) – Construction
  - Application submitted Jan 2022
- State ESA Incidental Take Permit (ITP) – Operations
  - Application complete Q3 2022
- Biological Assessment
  - Expected to be submitted to agencies in October or November
- Water Right
  - Submitted Application in May 2022, accepted August 26
- Final EIR/EIS
  - Spring 2023

Open Topics and Agenda for Next Meeting

Sites

Thank you!

Sites

Sites

From: JP Robinette [jrobinette@sitesproject.org]
Sent: 10/11/2022 11:15:40 AM
To: Luu, Henry [Henry.Luu@hdrinc.com]
CC: Joe Trapasso [jtrapasso@sitesproject.org]; Cheyanne Harris [charris@brwncald.com]; Pat Tangora [ptangora@BrwnCald.com]
Subject: Re: Request update on Sites Reservoir Project - Phase 1 Project

Thanks Henry, closed out!

From: Luu, Henry <Henry.Luu@hdrinc.com>
Sent: Tuesday, October 11, 2022 8:37 AM
To: JP Robinette <jrobinette@sitesproject.org>
Cc: Joe Trapasso <jtrapasso@sitesproject.org>; Cheyanne Harris <charris@brwncald.com>; Pat Tangora <ptangora@BrwnCald.com>
Subject: RE: Request update on Sites Reservoir Project - Phase 1 Project

JP, minor edits for your consideration:
City: COLUSA (the new Sites Reservoir will be located west of the community of Maxwell, California)
State: CALIFORNIA
Dodge Report #: 201600583104

- Brief summary of the project's scope of work: New water supply project involving several construction packages, including: Sites Reservoir Package (dams, saddle dams / dikes, Sites Lodoga road and bridge), Maxwell-Sites Pumping and Generating Package (reservoir conveyance pipelines, pumping and generating plants, electrical power, and controls), Dunnigan Pipeline Package, and various other specialty packages such as construction of access roads and recreation facilities. Overall the project is currently in preliminary design and permitting phase.
- Construction cost estimate or cost range: $3.9 billion in 2021 dollars, AACE Class 4 cost estimate (includes approximately $600 million for environmental mitigation).
- Target Bid Date: Packages will be out for bid or for qualifications based selection at various times, likely starting in 2024.
- Name of Construction Manager or General Contractor (if applicable): Not yet selected.
- Target Construction start date: 2024
- Target Completion date: 2030

Henry H. Luu, PE
D 916.679.8857 M 916.754.7566

hdrinc.com/follow-us

From: JP Robinette <jrobinette@sitesproject.org>
Sent: Tuesday, October 11, 2022 7:47 AM
To: Pat Tangora <ptangora@BrwnCald.com>
Cc: Joe Trapasso <jtrapasso@sitesproject.org>; Luu, Henry <henry.luu@hdrinc.com>; Cheyanne Harris <charris@brwncald.com>
Subject: Re: Request update on Sites Reservoir Project - Phase 1 Project

Henry,

I would like you to take the lead on future requests like this, confirming with me before sending. Please see my proposed response below and let me know if you have any changes and I will submit this one to Ian.

JP

Re: Sites Reservoir Project - Phase 1
City: COLUSA (this project is closer to the town of Maxwell, California)
State: CALIFORNIA
Dodge Report #: 201600583104

- Brief summary of the project's scope of work: New water supply project involving several construction package, including: Sites Reservoir Package (dams, saddle dams / dikes, bridge), Maxwell-Sites Pumping and Generating Package (conveyance pipelines, pumping and generating plants, electrical power, and controls), Dunnigan Pipeline Package, and various other packages including roads. Overall project is currently in preliminary design and permitting.
- Construction cost estimate or cost range: $3.9 billion in 2021 dollars, class 4 (includes $600 million mitigation estimate).
- Target Bid Date: Packages will be out for bid or for qualifications based selection at various times likely starting in 2024.
- Name of Construction Manager or General Contractor (if applicable): Not yet selected.
- Target Construction start date: 2024
- Target Completion date: 2030

From: Pat Tangora <ptangora@BrwnCald.com>
Sent: Friday, October 7, 2022 10:29 AM
To: JP Robinette <jrobinette@sitesproject.org>
Cc: Joe Trapasso <jtrapasso@sitesproject.org>; Luu, Henry <henry.luu@hdrinc.com>; Cheyanne Harris <CHarris@BrwnCald.com>
Subject: RE: Request update on Sites Reservoir Project - Phase 1 Project

I think you just answer the questions as best as possible. I've taken a stab in red below. Items for you to confirm are in yellow. Also decide on who you want to have respond to these requests in the future

Patricia Tangora, Vice President
Senior Director, Owner's Advisor Services
Brown and Caldwell
ptangora@brwncald.com
T 206.749.2321 | **C** 206-819-6439

Click this link to send me large files through Hightail

Brown AND Caldwell

From: JP Robinette <jrobinette@sitesproject.org>
Sent: Friday, October 07, 2022 11:00 AM
To: Pat Tangora <ptangora@BrwnCald.com>
Cc: Joe Trapasso <jtrapasso@sitesproject.org>; Luu, Henry <henry.luu@hdrinc.com>; Cheyanne Harris <CHarris@BrwnCald.com>
Subject: Fw: Request update on Sites Reservoir Project - Phase 1 Project

Pat,

Do you have any suggestions on how we might handle this request from Dodge based on the outcome of the contract strategy?

Thanks,
JP

From: Jerry Brown <jbrown@sitesproject.org>
Sent: Friday, October 7, 2022 9:50 AM
To: JP Robinette <jrobinette@sitesproject.org>
Cc: Marcia Kivett <MKivett@sitesproject.org>
Subject: FW: Request update on Sites Reservoir Project - Phase 1 Project

Please handle providing a response to Ian on his questions below. Thanks

---

From: Ann Nordyke <boardclerk@countyofcolusa.com>
Date: Friday, October 7, 2022 at 9:42 AM
To: Ian Dumogho <Ian.Dumogho@construction.com>
Subject: RE: Request update on Sites Reservoir Project - Phase 1 Project

HI Ian,

As my Clerk informed you when you called, I do not take part in the Clerking of the Sites Reservoir Project, anymore. You will need to contact the Sites Office at (530) 438-2309; Street address is 122 Old Highway 99 West, Maxwell CA 95955, Mailing address is PO Box 517, Maxwell, CA 95955 and here is a link to their website https://sitesprojet.org

Ann Nordyke, CCB
Chief Deputy Clerk to the Board of Supervisors
boardclerk@countyofcolusa.com
COUNTY OF COLUSA
547 Market Street, Ste. 102
Colusa, CA 95932
(530)458-0508, Ext. 508
(530)458-0510

From: Ian Dumogho [mailto:Ian.Dumogho@construction.com]
Sent: Thursday, October 6, 2022 10:48 AM
To: Ann Nordyke <boardclerk@countyofcolusa.com>; jwatson@sitesipa.net
Cc: Dodge_Quality <dodge_quality@construction.com>; Keith.Navale <Keith.Navale@construction.com>
Subject: Request update on Sites Reservoir Project - Phase 1 Project

Good day,

I am with Dodge Construction Network; we would like an update on the current status of this project. At your convenience, please answer the following questions or confirm the following project details or confirm the following project details:

Re: Sites Reservoir Project - Phase 1
City: COLUSA
State: CALIFORNIA
Dodge Report #: 201600583104

- Brief summary of the project's scope of work: New water supply project involving several construction package, including reservoir package (dams and saddle dams / dikes), Sites-Ledoga conveyance package (conveyance pipelines, pump stations and associated , Dunnigan Pipeline package, and various other packages including roads. Overall project is currently in preliminary design and permitting.
- Construction cost estimate or cost range: [JP?]
- Target Bid Date: Packages will be out for bid or for qualifications based selection at various times likely starting in 2024.
- Name of Construction Manager or General Contractor (if applicable): Not yet selected
- Target Construction start date: 2025
- Target Completion date: 2030

Thank you for taking the time to answer these questions. Have a good day.

Best Regards,

Ian Dumogho
National Public Planning Researcher

844-326-3826 ext:9048
construction.com

Dodge Construction Network

Meeting: **Sites Authority Board's Coordination Committee**

Locations: Maxwell Project Office, 122 Old Highway 99W, Maxwell, CA 95955
See below for alternate meeting locations.

Call in: **1-213-379-5743** Code: **703 288 727#** Click here to join the meeting

Committee Chair: Fritz Durst (AB Chair/Reclamation District 108)
Committee Vice-Chair: Jeff Sutton (AB Vice-Chair/Tehama-Colusa Canal Authority)
Staff Lead: Jerry Brown, Executive Director

AGENDA

Monday, October 17, 2022 3:00 – 4:00 pm

NO ACTION or DECISION WILL BE TAKEN

ROLL CALL & CALL TO ORDER:

- Introductions
- Period for Public Comment

1. Discussion and Information Items:

1.1 Board Meeting Agenda Planning

1.2 General Coordination among Committees and Workgroups

2. Closed Session:

2.1 Potential Litigation – Gov. Code Sec. 54956.9(d)(3)

3. Upcoming Meetings:

Reservoir Committee
Friday, October 21, 2022 (9:00 am – 12:00 pm)

Authority Board Meeting
Wednesday, October 26, 2022 (1:30 – 4:00 pm)

Plan of Finance – Credit and Reserves Workshop
Friday, October 28, 2022 (9:00 – 10:30 am)

Coordination Committee
Monday, November 14, 2022 (3:00 – 4:00 pm)

Virtual Information will be provided before all meetings at Sitesproject.org.

ADJOURN

PERIOD OF PUBLIC COMMENT: Any person may speak about any subject of concern, provided it is within the jurisdiction of the Authority Board's Coordination Committee and is not already on today's agenda. The total amount of time allotted for receiving such public communication shall be limited to a total of 10 minutes per issue and each individual or group will be limited to no more than 3 minutes each within the 10 minutes allocated per issue. **Note:** No action shall be taken on comments made under this comment period.

ADA COMPLIANCE: Upon request, agendas will be made available in alternative formats to accommodate persons with disabilities. In addition, any person with a disability who requires a modification or accommodation to participate or attend this meeting may request necessary accommodation. Please make your request to the Board Clerk, specifying your disability, the format in which you would like to receive this Agenda and any other accommodation required no later than 24 hours before the start of the meeting.

Alternate Meeting Locations:

Davis Water District, 6505 Hillgate Road, Arbuckle, CA 95912

Glenn-Colusa Irrigation District, 344 East Laurel Street, Willows, CA 95988

Reclamation District 108, 975 Wilson Bend Road, Grimes, CA 95950

Tehama-Colusa Canal Authority, 5513 Highway 162, Willows, CA 95987

Meeting: **Sites Reservoir Committee's Coordination Workgroup**

Locations: Maxwell Project Office, 122 Old Highway 99W, Maxwell, CA 95955
See below for alternate meeting locations.

Call in: **1-916-538-7066** Code: **372 979 656#** Click here to join the meeting

Workgroup Chair:	Thad Bettner (RC Chair/Glenn-Colusa Irrigation District)
Workgroup Vice-Chair:	Valerie Pryor (RC Vice-Chair/Zone 7 Water Agency)
Staff Lead:	Jerry Brown, Executive Director

AGENDA

Thursday, October 13, 2022 9:00 – 10:00 am

NO ACTION or DECISION WILL BE TAKEN

ROLL CALL & CALL TO ORDER:

- Introductions
- Period for Public Comment

1. Discussion and Information Items:

1.1 Board Meeting Agenda Planning

1.2 General Coordination Among Committees and Workgroups

2. Closed Session:

2.1 Potential Litigation – Gov. Code Sec. 54956.9(d)(3)

3. Upcoming Meetings:

Reservoir Committee
Friday, October 21, 2022 (9:00 am – 12:00 pm)

Authority Board Meeting
Wednesday, October 26, 2022 (1:30 – 4:00 pm)

Plan of Finance – Credit and Reserves Workshop
Friday, October 28, 2022 (9:00 – 10:30 am)

Coordination Workgroup
Thursday, November 10, 2022 (9:00 – 10:00 am)

Virtual Information will be provided before all meetings at Sitesproject.org.

ADJOURN

PERIOD OF PUBLIC COMMENT: Any person may speak about any subject of concern, provided it is within the jurisdiction of the Reservoir Committee and is not already on today's agenda. The total amount of time allotted for receiving such public communication shall be limited to a total of 10 minutes per issue and each individual or group will be limited to no more than 3 minutes each within the 10 minutes allocated per issue. **Note:** No action shall be taken on comments made under this comment period.

ADA COMPLIANCE: Upon request, agendas will be made available in alternative formats to accommodate persons with disabilities. In addition, any person with a disability who requires a modification or accommodation to participate or attend this meeting may request necessary accommodation. Please make your request to the Board Clerk, specifying your disability, the format in which you would like to receive this Agenda and any other accommodation required no later than 24 hours before the start of the meeting.

Alternate Meeting Locations:

Coachella Valley Water District, 51501 Tyler Street, Coachella, CA 92236

Davis Water District, 6505 Hillgate Road, Arbuckle, CA 95912

Glenn-Colusa Irrigation District, 344 East Laurel Street, Willows, CA 95988

San Bernardino Valley Municipal WD, 380 E. Vanderbilt Way, San Bernardino, CA 92408

Wheeler Ridge-Maricopa Water Storage District, 12109 Hwy 166, Bakersfield, CA 93313

Zone 7 Water Agency, 100 North Canyons Parkway, Livermore, CA 94551

File Provided Natively

Environmental Planning and Permitting Work Group

October 12, 2022

Agenda

- BA & Operations ITP Adaptive Management Plan Overview
- Environmental Changes with Moving to a 60 TAF Operational Dead Pool
- Environmental Permitting and Planning Manager Report
  - Key Planning Activities Report
- Upcoming Meetings

Speaker: Ali


BA and Operations ITP
Adaptive Management Plan
John Spranza
Sites

Adaptive Management

- "A framework and flexible decision-making process for ongoing knowledge acquisition, monitoring, and evaluation leading to continuous improvement in management planning and implementation of a project to achieve specified objectives" CWC Section § 85052
  - Provides for making management decisions under uncertain conditions using the best available science
  - Allows for continuous learning resulting in management decisions based on what is learned

Speaker: Laurie

Draft - Predecisional Working Document - For Discussion Purposes Only

Goals

1. Continue the long-term operation of the Project in a manner that maintains and, if possible, increases supply reliability, ecosystem benefits and drought resiliency
2. Address scientific uncertainties related to the Sacramento River and Delta ecosystems as they relate to the effects of the Project's operations on listed species
3. Use the knowledge gained from the Program to refine Project operations to continue to avoid, minimize, and mitigate effects on listed species and water quality
4. Refine the AMP through the Project's BiOp(s) and ITP consultation

Speaker: Ali

Draft - Predecisional Working Document - For Discussion Purposes Only

Management and Governance

- Adaptive Management Committee (AMC)
  - EPP Manager, Reclamation, TCCA, GCID, DWR, a representative from each resource agency, and the lead of the AMS Team
  - Responsible for vetting recommendations from the AMS Team and forwarding recommendations to the Authority regarding approval of studies and investigations that address uncertainties and/or relate to modifications to operations or facilities that will be evaluated in the adaptive management process
- Adaptive Management Science Team (AMS Team)
  - Staffed by Authority and/or contractors with appropriate expertise
  - Responsible for developing and recommending to the Authority a course of studies to address the uncertainties
  - Collaborate with other regional science programs and experts
  - Optimize reliance on ongoing science and monitoring programs

Speaker: Ali

Draft - Predecisional Working Document - For Discussion Purposes Only

Tools

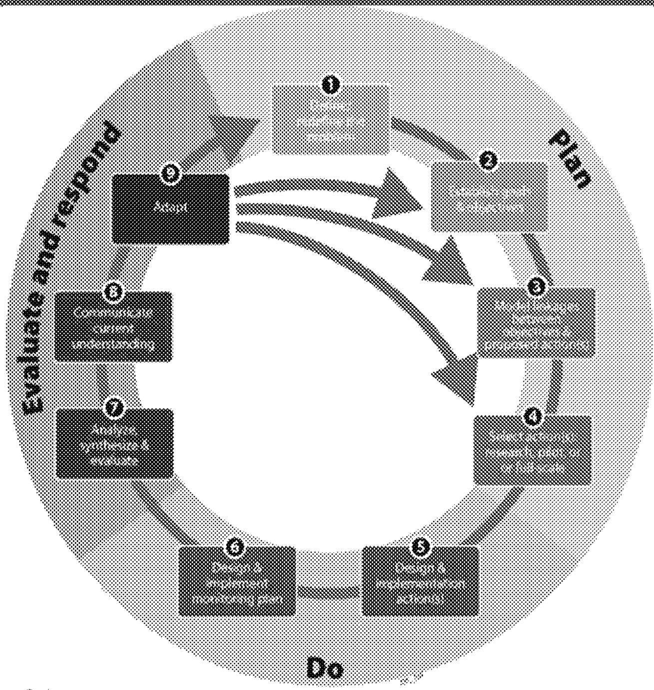
- Establish a Science Program
  - Address uncertainties and ensures safeguards in the Project's operational criteria are effective at protecting aquatic resources, environmental and water supply goals
  - Collaborate with other science programs in the watershed and Delta (e.g., Sacramento River Science Partnership, Delta Science Program, Interagency Ecological Program, etc.)
  - Prioritizing ongoing and planned monitoring and investigations over creating duplicative programs
- Perform Monitoring and Investigations
  - Independent and coordinated efforts for Authority collaboration with ongoing monitoring efforts in the region
  - Focused on Project-related issues and uncertainties
  - Results used in the Project's AMP and operations

Speaker: Ali

Draft - Predecisional Working Document - For Discussion Purposes Only

Process

- Phase 1: Planning
  - Identify issue, goals and objectives
  - Define and recommend a study plan/investigation
- Phase 2: Doing
  - Design and implement study/investigation
- Phase 3: Evaluate and Respond
  - Analyze and synthesize results
  - Collaborate with permitting agencies and research peers
  - Communicate the current understanding to research peers and obtain comments
  - Recommend AMP actions to Authority



Speaker: Ali

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Next Steps and Funding

- Share draft AMP with agencies, refine based on input
- Develop specific triggers and thresholds
  - Starting now, likely take into 2023
  - Engage with agencies once have framework
- Costs of implementing
  - Not yet determined

Speaker: Ali

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Environmental Changes with Moving to a 60 TAF Operational Dead Pool

John Spranza

Sites

Refinements to Water Quality and Fisheries Effects

- Changes in key components:
  - Water surface elevation
  - Temperature
    - Thermal stratification
  - Evapoconcentration
    - Metals
    - Harmful Algae Blooms (HABs)

NOTE – All of the operational dead pool assessments do not account for inflows from Funks and Stone Corral creeks and thus, present a more conservative assessment

Speaker: John, 60 TAF = 323 ft ASL

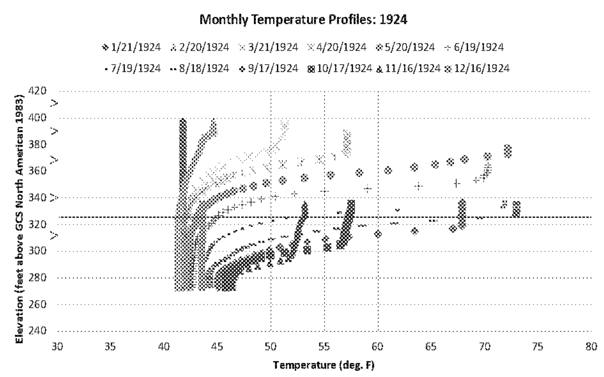
Draft - Predecisional Working Document - For Discussion Purposes Only

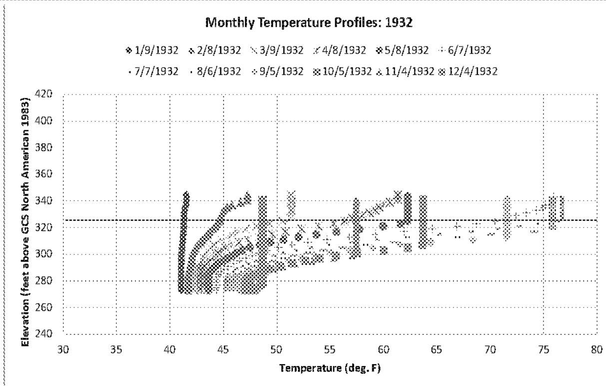
Key Takeaways

- Results in occasional periods of lower storage and increased evapoconcentration of metals
  - 46 out of 984 (4.7%) months 60 TAF dead pool is reached
  - Effect of evapoconcentration highest when no Sacramento River water is added when operational dead pool level is approached
- Negligible change in temperature of receiving waters and release of metals to receiving waters
- When near or at operational dead pool, increased likelihood that releases, if needed, into Stone Corral and Funks Creeks:
  - Could have higher concentrations cyanobacteria and cyanotoxins (HABs) than with the 120 TAF dead pool
  - Could have higher metal concentrations than with the 120 TAF dead pool

Speaker: John, 60 TAF = 323 ft ASL

Reservoir Temperature Releases Can Generally be Managed to 65°F Objective





- Reservoir release temperature objective of 65°F during the rice growing season
- Water available to blend to meet this requirement even in extreme years should releases occur
  - 1924: Storage change from Jan 500 TAF to Oct 79 TAF
  - 1932: Storage change from Jan 62 TAF to Oct 52 TAF

Speaker: I/O tower centerlines at 340, 370, 390, 410, 430, 450 and 470 feet elevation, and at the low-level intake with centerline at 311 feet dead pool storage of 60 TAF, water surface elevation is approximately 323 feet

Water Temperature of Releases to the Sacramento River Continue to be Slightly Reduced

Month	Mean Estimated Change in Water Temperature (ºF) from Sites Reservoir Releases in the Sacramento River	Median Estimated Change in Water Temperature (ºF) from Sites Reservoir Releases in the Sacramento River
January	--	--
February	--	--
March	--	--
April	-0.21	0
May	-0.26	-0.11
June	-0.12	-0.07
July	-0.12	-0.11
August	-0.28	-0.28
September	-0.12	-0.08
October	-0.15	0
November	-0.24	-0.08
December	-0.13	-0.12

- Range of temperature change in river:
  - low of -1.1 and a high 0.0 degrees F

Speaker: Ali

Draft - Predecisional Working Document - For Discussion Purposes Only

Metals Concentrations Slightly Increased, But Follow Same Trends as 120,000 AF Operational Dead Pool

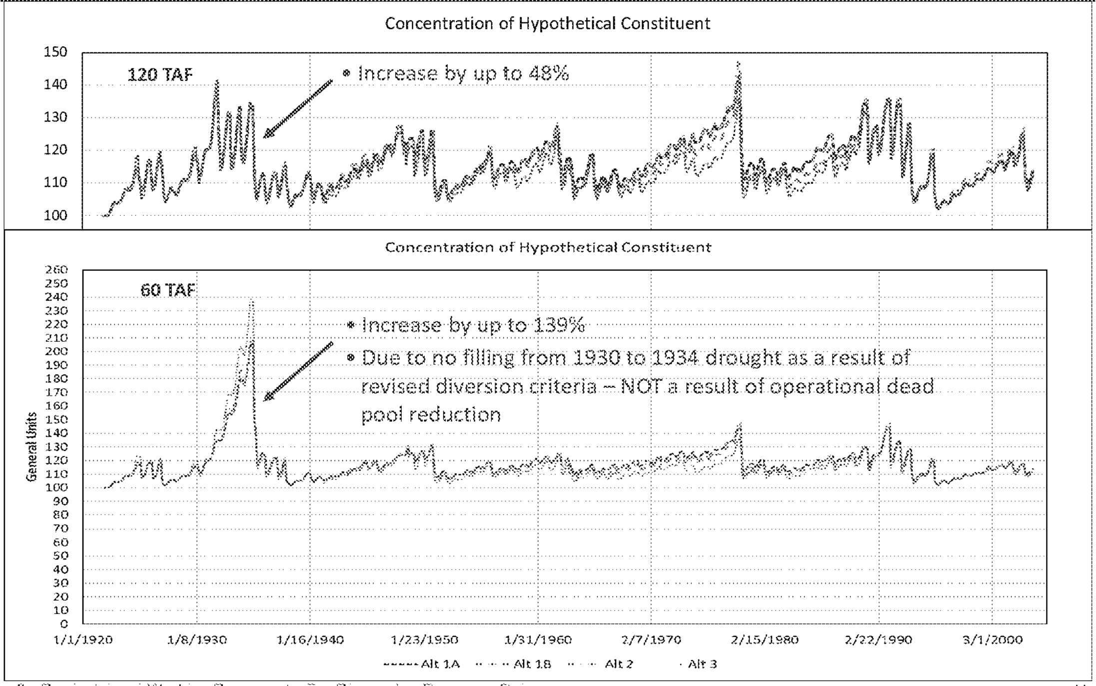
Metal	Median Estimated Sites Reservoir Concentration* Alternative 3 w/60 TAF Op Dead Pool	Median Concentration in Colusa Basin Drain**	Maximum Estimated Concentration in Sacramento River when Sites Discharge is Mixed**	95th Percentile of Concentrations in Sacramento River***
Total Aluminum	614	~140% higher than Sites	~ 80% higher than median river levels	~ 320% higher than Sites
Total Copper	4.24	~120% higher than Sites	~ 45% higher than median river levels	~ 50% higher than Sites
Total Iron	605	~200% higher than Sites	~ 100% higher than median river levels	~ 320% higher than Sites
Total Lead	0.28	~240% higher than Sites	~ 60% higher than median river levels	~ 320% higher than Sites

*Assuming Some Settling of Suspended Sediment
**During the Primary Sites Discharge Season (May–September)
*** 95% of the measured concentration values are estimated to be smaller

- Nominal change from 120,000 AF operational dead pool
- Median modeled concentration in reservoir with some sediment settling:
  - Lower than median concentration in the Colusa Basin Drain
  - Higher than median concentration in the Sacramento River
  - Lower than the measured high concentrations (95% percentile) in the Sacramento River
- Methylmercury still significant and unavoidable in Stone Corral Creek

Speaker: Ali

Evapoconcentration Increase in Final EIR/EIS BUT from Revised Wilkins Slough Criteria



Speaker: Average evaporation is 2.8 TAF per year

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What Does All This Mean for Members?

- 60 TAF operational dead pool results in changes, but trends are similar to the 120 TAF operational dead pool and changes are relatively minor
- Continue to implement a robust water quality monitoring program once the Project is operational
- Approach operational dead pool elevations in Project operations with continuous assessment of real-time monitoring data and be ready to adjust if needed

Speaker: John, 60 TAF = 323 ft ASL

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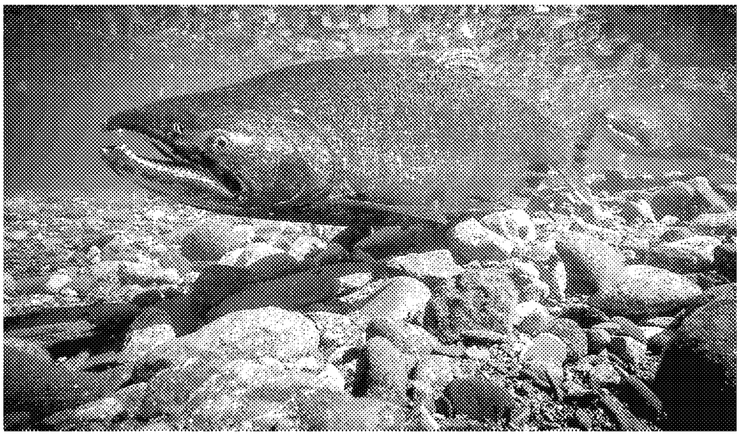
Questions



Speaker: Ali

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Environmental Planning and Permitting Manager Report

Ali Forsythe

Sites

Dashboard Update

Deliverable	Finish	Status	Notes, New or Potential Issues
Water Right Application			
• Submit to State Board	May-22		Application Submitted May
• Complete Protest Resolution Period	Aug-23		Date adjusted to incorporate time for information request from State Board
• Receive Water Right Permit	Jul-24	N/S	
Federal ESA			
• Submit BA to Reclamation	Nov-22		Date adjusted
• Receive BiOps	Aug-23	N/S	Date adjusted
State ITPs			
• Receive Construction ITP	Jun-23		
• Submit Operations ITP to CDFW	Nov-22		Draft application being prepared
• Receive Operations ITP	Jun-23	N/S	

N/S = Not Started; Green = On track; Yellow = Area of Potential Concern; = Delayed; = Completed

Speaker: Modeling complete
Seeing and assessing some unexpected results
ICF continuing to assess and determine impacts and mitigation (if needed)
Updating mitigation needs and cost estimates
Mitigation for aquatic species tends to have more negotiation
Generally not established or precedential ratios like terrestrial
Meeting with CDFW, USFWS and NMFS on financial assurances and timing of required mitigation

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Dashboard Update

Deliverable	Finish	Status	Notes, New or Potential Issues
Section 106 – Cultural Resources			
• Final Programmatic Agreement	Aug-23		Date adjusted
• Programmatic Historic Properties Management Plan	Apr-23		Ongoing meetings and coordination
Clean Water Act 404/401			
• Submit Final Permit Applications	Nov-22		Preliminary drafts submitted to agencies
• Receive 404 and 401 Permits	Jun-23		Will come shortly after Final EIR/EIS
Streambed Alteration Agreement			
• Prepare and Submit Application	Dec-22		Master Agreement
• Receive Master Agreement	Jun-23		Will come shortly after Final EIR/EIS
Eagle Permit			
• Short-Term and Nest Take Permits Issued	Feb-23		
• Long-Term Permit Issued	Mar-24		

N/S = Not Started; Green = On track; Yellow = Area of Potential Concern; [illegible] = Delayed; [illegible] = Completed

Speaker: Ali

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Dashboard Update

Deliverable	Finish	Status	Notes, New or Potential Issues
Final EIR/EIS			
• Complete Final EIR/EIS	May-23		Date adjusted
• Certify Final EIR/EIS and approve preferred project and MMRP	May-23		Date adjusted

N/S = Not Started; Green = On track; Yellow = Area of Potential Concern; [redacted] = Delayed; [redacted] = Completed

Speaker: Ali

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Next Meeting

- Next Meeting – December 7, 2022, 10 to 11 AM
- Topics –
  - Permitting
    - Water Right status briefing

Speaker: Ali

Thank you!

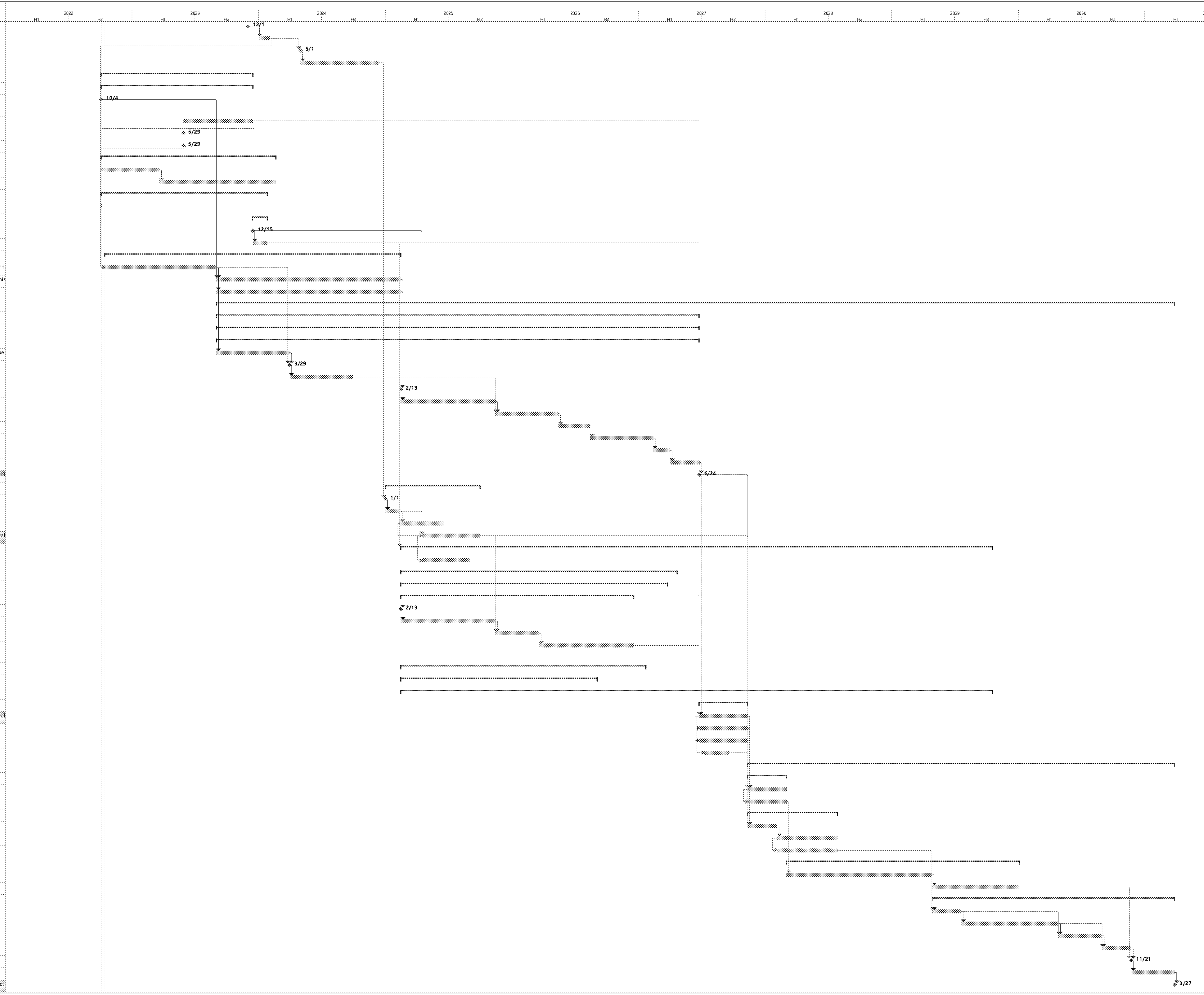
Sites

Sites

Sites Reservoir
DRAFT Preliminary Construction Schedule
Inlet-Outlet Facilities Alt 2

October 2022

ID	Task Mode	Construction Package	Task Name	Duration	Start	Finish	Predecessors	Successors	Jeff W. Notes
1			CWC Award of Funds	0 days	Fri 12/1/23	Fri 12/1/23		2	
2			Sites Board Approval/NTP for Phase 3	23 days	Wed 1/3/24	Fri 2/2/24	1	20,3	
3			Determine Engineering Procurement & Delivery Method	0 days	Wed 5/1/24	Wed 5/1/24	2	4	
4			CMAR Solicitation and Procurement	8 mons	Wed 5/1/24	Tue 12/10/24	3	39	
5			**Real Estate**	**314 days**	**Tue 10/4/22**	**Fri 12/15/23**			
6			**Land Acquisition**	**314 days**	**Tue 10/4/22**	**Fri 12/15/23**			
7			Critical Land Acquisition - P2a Geotech (Dam Foundation & Grouting)(And I/O)	0 days	Tue 10/4/22	Tue 10/4/22		21	
8			Critical Land Acquisition - P2a Geotech (Roads)	144 days	Tue 5/30/23	Fri 12/15/23		20,76	
9			**Land Use**	**0 days**	**Mon 5/29/23**	**Mon 5/29/23**			
10			Real Estate Access & Permitting (Geotech & Surveying)	0 days	Mon 5/29/23	Mon 5/29/23		20	
11			**Environmental**	**360 days**	**Tue 10/4/22**	**Mon 2/19/24**			
12			Environmental Surveys	6 mons	Tue 10/4/22	Mon 3/20/23		13	
13			Environmental Permitting	12 mons	Tue 3/21/23	Mon 2/19/24	12		
14			**Water**	**343 days?**	**Tue 10/4/22**	**Thu 1/25/24**			
15			Water Rights Acquisition (Permanent)	1 day?	Tue 10/4/22	Tue 10/4/22			
16			**Construction Water**	**30 days**	**Fri 12/15/23**	**Thu 1/25/24**			
17			Acquisition of Construction Water	0 days	Fri 12/15/23	Fri 12/15/23		42,18	
18			Initial Development of Construction Water	30 days	Fri 12/15/23	Thu 1/25/24	17	43,76	
19			**Sites Reservoir Geotechnical Investigations**	**610 days**	**Fri 10/14/22**	**Thu 2/13/25**			
20			P1 Geotech Investigation (30% Cutoff)	230 days	Fri 10/14/22	Thu 8/31/23	2,10,8	21,28,27,22	P1 only gives us 30% for *all* f
21			P2a Geotech Investigation (Dam Foundations & Grouting)(and I-O)	76 wks	Fri 9/1/23	Thu 2/13/25	20,7	30	Add critical access roads to this
22			P2a Geotech Investigation (Roads)	76 wks	Fri 9/1/23	Thu 2/13/25	20	46,51,56,61,66,	
23			**Inlet-Outlet Facilities**	**1975 days**	**Fri 9/1/23**	**Thu 3/27/31**			
24			**Engineering - Dams**	**995 days**	**Fri 9/1/23**	**Thu 6/24/27**			
25			**Inlet-Outlet Design**	**995 days**	**Fri 9/1/23**	**Thu 6/24/27**			
26			**Inlet-Outlet Design**	**995 days**	**Fri 9/1/23**	**Thu 6/24/27**			
27			Inlet-Outlet 30% Design	151 days	Fri 9/1/23	Fri 3/29/24	20	28	This could be considered a fixe
28			Inlet-Outlet Package Submittal	0 days	Fri 3/29/24	Fri 3/29/24	20,27	29	
29			DSOD Review of Inlet-Outlet 30% Design	26 wks	Mon 4/1/24	Fri 9/27/24	28	32	
30			Inlet-Outlet Geotech Data	0 days	Thu 2/13/25	Thu 2/13/25	21	31	
31			Inlet-Outlet 60% Design	39 wks	Fri 2/14/25	Thu 11/13/25	30	32	Reduce to 26 weeks
32			DSOD Review of Inlet-Outlet 60% Design	26 wks	Fri 11/14/25	Thu 5/14/26	31,29	33	
33			Inlet-Outlet 90% Design	13 wks	Fri 5/15/26	Thu 8/13/26	32	34	
34			DSOD Review of Inlet-Outlet 90% Design	26 wks	Fri 8/14/26	Thu 2/11/27	33	35	
35			Inlet-Outlet 100% Design	7 wks	Fri 2/12/27	Thu 4/1/27	34	36	
36			DSOD Review of Inlet-Outlet 100% Design Package	12 wks	Fri 4/2/27	Thu 6/24/27	35	37	
37			Inlet-Outlet DSOD Approval Received	0 days	Thu 6/24/27	Thu 6/24/27	36	82,76,85	Same Date as GG Fdn Approval
38			**CMAR Procurement**	**195 days**	**Wed 1/1/25**	**Tue 9/30/25**			
39			Award CMAR Contract	0 days	Wed 1/1/25	Wed 1/1/25	4	40	
40			Notice to Proceed	6 wks	Wed 1/1/25	Tue 2/11/25	39	42,41	
41			Early Submittals And Approvals - Dams	90 days	Wed 2/12/25	Tue 6/17/25	40	42SS+45 days	
42			CMAR Mobilization	6 mons	Wed 4/16/25	Tue 9/30/25	40,41SS+45 days,17	58,44SS,48,53,(	Same Date as GG Fdn Approval
43			**Roads, Bridges, Access, and Site Development**	**1220 days**	**Thu 2/13/25**	**Thu 10/18/29**	**18**		
44			Early Site Access and Staging Development	100 days	Wed 4/16/25	Tue 9/2/25	42SS		
45			**Northern Construction Access Roads (CR 68, CR 69, N. Rd)**	**569 days**	**Thu 2/13/25**	**Wed 4/21/27**			
50			**County Roads F, D, McDermott, Delevan**	**550 days**	**Thu 2/13/25**	**Thu 3/25/27**			
55			**Southern Construction Access Roads (Maxwell-Sites, Shoo-fly, A-1)**	**480 days**	**Thu 2/13/25**	**Thu 12/17/26**		**76**	
56			Geotechnical Data	0 days	Thu 2/13/25	Thu 2/13/25	22	57	Assume P2a (Roads)
57			Final Design	39 wks	Fri 2/14/25	Thu 11/13/25	56	58	
58			Procurement and NTP	90 days	Fri 11/14/25	Thu 3/19/26	42,57	59	
59		C1-RB3	Southern Construction Access Roads (Maxwell-Sites, Shoo-fly, A-1)	195 days	Fri 3/20/26	Thu 12/17/26	58	76	
60			**Ancillary Roads B1, B2, C1, C2, Comm N., Comm South**	**505 days**	**Thu 2/13/25**	**Thu 1/21/27**			
65			**Stone Corral Recreation Road to Sites Dam**	**405 days**	**Thu 2/13/25**	**Thu 9/3/26**			
70			**Sites Lodoga Road Realignment and Bridge**	**1220 days**	**Thu 2/13/25**	**Thu 10/18/29**			
75			**Inlet-Outlet Preliminary Work**	**100 days**	**Fri 6/25/27**	**Thu 11/11/27**			
76			Inlet-Outlet Access and Staging	100 days	Fri 6/25/27	Thu 11/11/27	42,37,8,55,18,59	77SS,79SS+10 d	Same Date as GG Fdn Approval
77			Erosion and Sediment Control	100 days	Fri 6/25/27	Thu 11/11/27	76SS	82	
78			Clearing / Grubbing Topsoil Salvage from Work Areas	100 days	Fri 6/25/27	Thu 11/11/27	76SS	82	
79			Demolition	50 days	Fri 7/9/27	Thu 9/16/27	76SS+10 days	82	
80			**Inlet Outlet Facilities**	**880 days**	**Fri 11/12/27**	**Thu 3/27/31**			
81			**Develop Downstream Portal**	**80 days**	**Fri 11/12/27**	**Thu 3/2/28**			
82			Downstream Portal Excavation	80 days	Fri 11/12/27	Thu 3/2/28	37,42,76,77,78,79	83SS	
83			Downstream Portal Rock Bolting	80 days	Fri 11/12/27	Thu 3/2/28	82SS	89	
84			**Develop Upstream Portal**	**185 days**	**Fri 11/12/27**	**Thu 7/27/28**			
85			Intake Channel Excavation	60 days	Fri 11/12/27	Thu 2/3/28	37,42,76	86	
86			Upstream Portal Excavation	125 days	Fri 2/4/28	Thu 7/27/28	85	87SS	
87			Upstream Portal Rock Bolting	125 days	Fri 2/4/28	Thu 7/27/28	86SS	92	
88			**Tunnels Excavation and Lining (Double Shift)**	**480 days**	**Fri 3/3/28**	**Thu 1/3/30**			
89			Tunnel Excavation - Double Shift	300 days	Fri 3/3/28	Thu 4/26/29	83	90,92	
90			Tunnel Lining	180 days	Fri 4/27/29	Thu 1/3/30	89	96	
91			**Intake and Outlet Structures**	**500 days**	**Fri 4/27/29**	**Thu 3/27/31**			
92			Intake Structure Foundation	60 days	Fri 4/27/29	Thu 7/19/29	89,87	93,94	
93			Intake Structure Concrete	200 days	Fri 7/20/29	Thu 4/25/30	92	95,94	
94			Intake Structure Gates and Mechanical	90 days	Fri 4/26/30	Thu 8/29/30	92,93	95	
95			I/O Completion and Restoration	60 days	Fri 8/30/30	Thu 11/21/30	93,94	96	
96			Inlet-Outlet Ready for Commissioning	0 days	Thu 11/21/3(	Thu 11/21/30	95,90	97	
97			Inlet-Outlet Startup and Commissioning	90 days	Fri 11/22/30	Thu 3/27/31	96	98	
98			Inlet-Outlet Completion	0 days	Thu 3/27/31	Thu 3/27/31	97		One Month after Dams Project



Project: DRAFT_Preliminary Sites 1.5 MAF Inlet-Outlet Schedule 10-12-22 - ES
Date: Wed 10/12/22

Task, Split, Milestone, Summary, Project Summary, Inactive Task, Inactive Milestone, Inactive Summary, Manual Task, Duration-only, Manual Summary Rollup, Manual Summary, Start-only, Finish-only, External Tasks, External Milestone, Deadline, Critical, Critical Split, Progress, Manual Progress

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File Provided Natively

From: Alicia Forsythe [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=A6CDF06A7E904B65BAA21702A82AD329-AFORSYTHE]
Sent: 10/14/2022 10:56:45 AM
To: Davis-Fadtke, Kristal@Wildlife [Kristal.Davis-Fadtke@wildlife.ca.gov]; Uttley, Paige@Wildlife [Paige.Uttley@wildlife.ca.gov]; Williams, Jonathan@Wildlife [Jonathan.Williams@wildlife.ca.gov]
Subject: RE: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Hello CDFW Team – We'd like to schedule a call with you all to review and discuss the "no exchanges" modeling. Would it be possible if you all provide a few dates and times that work for the CDFW team for a 1.5 hour meeting on this topic?

Thanks all!

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Alicia Forsythe
Sent: Wednesday, September 28, 2022 9:47 PM
To: Angela Bezzone <bezzone@mbkengineers.com>; Davis-Fadtke, Kristal@Wildlife <Kristal.Davis-Fadtke@wildlife.ca.gov>; Uttley, Paige@Wildlife <Paige.Uttley@wildlife.ca.gov>; Spranza, John <john.spranza@hdrinc.com>; Williams, Jonathan@Wildlife <Jonathan.Williams@wildlife.ca.gov>; steve.micko@jacobs.com; Rob Leaf <Rob.Leaf@jacobs.com>; Hendrick, Mike <Mike.Hendrick@icf.com>; Wilder, Rick <Rick.Wilder@icf.com>
Subject: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Hello all – Earlier this month, we had a call to discuss the possibility of what the Project may look like if exchanges with Shasta Lake and Lake Oroville were not implemented in any given year. We have completed a CALSIM II sensitivity analysis of this and the results are attached in the trend reporting spreadsheet.

The attached trend reporting spreadsheet contains the following modeled results:

- NAA 041122 2035CT – No Action Alternative, 2035 CT climate change hydrology
- ALT 3A 041122 2035CT – Alternative 3A (including current diversion criteria which includes 10,700 cfs Oct-June at Wilkins Slough), 2035 CT climate change hydrology
- ALT 3A 041122 2035CT without Shasta, nor Oroville Exchanges sensitivity analysis – Same Alternative 3A as above but without exchanges with both the CVP and SWP

It is important to note that the Authority has not changed its project description – the Project continues to include exchanges. Exchanges are voluntary and any party can choose to not conduct an exchange in a given year. We completed the attached CALSIM II sensitivity analysis to have a more informed dialogue around environmental changes that may occur in the event that exchanges are not implemented in any given year or in a series of years. As its difficult to "turn off" exchanges in only some years, the attached CALSIM II analysis was completed without exchanges in all years. This represents more of a bookend, because as noted above, exchange are part of the Project and would likely only not be implemented on a more year-by-year basis (for example, if there was too much risk that exchanged water would spill as flood water from Shasta, the Authority may elect to not participate in a given year).

Also important to note is that the modeling was completed with Alternative 3A, which includes up to 25% Reclamation investment in Sites (modeling assumed 25%). Thus, there continues to be interaction of Sites and the CVP operations due to Reclamation's investment.

We haven't yet summarized these runs. They are hot off the press. We thought we would get these out for review so folks can begin to look at the information.

Kristal, Paige and Jon – I'll let you all distribute to your staff as you see appropriate.

I'll reach back out shortly and we can get a call scheduled in 2 to 3 weeks to review the results and talk about next steps.

Thanks all!

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request 3/16/2021
Name of Project NODOS/Sites Reservoir	Federal Agency Involved US Bureau of Reclamation
Proposed Land Use Reservoir and conveyance facilities	County and State Colusa, California

PART II *(To be completed by NRCS)*	Date Request Received By NRCS 03/16/2021	Person Completing Form: Jacqueline Vega,NRCS

Does the site contain Prime, Unique, Statewide or Local Important Farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)*	YES	NO	Acres Irrigated	Average Farm Size
	☑	☐	233,746	608

Major Crop(s)	Farmable Land In Govt. Jurisdiction	Amount of Farmland As Defined in FPPA
Almonds-Meats, Rice & Walnuts	Acres: 449,584 % 60.8	Acres: 271,58 % 36.7

Name of Land Evaluation System Used	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS
CA Revised Storie Index	None	3/19/2021

PART III *(To be completed by Federal Agency)*	Alternative Site Rating: Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	13572.4	13322.5		
B. Total Acres To Be Converted Indirectly	83.44	83.44		
C. Total Acres In Site	13655.8	13405.9		
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	4,184.1	4,258.8		
B. Total Acres Statewide Important or Local Important Farmland	1,697.4	1,716.2		
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	2.1656	2.20		
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	39.05	39.05		
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)	46	46		

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	**Maximum Points**	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)				
2. Perimeter In Non-urban Use	(10)				
3. Percent Of Site Being Farmed	(20)				
4. Protection Provided By State and Local Government	(20)				
5. Distance From Urban Built-up Area	(15)				
6. Distance To Urban Support Services	(15)				
7. Size Of Present Farm Unit Compared To Average	(10)				
8. Creation Of Non-farmable Farmland	(10)				
9. Availability Of Farm Support Services	(5)				
10. On-Farm Investments	(20)				
11. Effects Of Conversion On Farm Support Services	(10)				
12. Compatibility With Existing Agricultural Use	(10)				
TOTAL SITE ASSESSMENT POINTS	160	0	0	0	0
PART VII ***(To be completed by Federal Agency)***					
Relative Value Of Farmland *(From Part V)*	100	46	46	0	0
Total Site Assessment *(From Part VI above or local site assessment)*	160	0	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	46	46	0	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES ☐ NO ☐

Reason For Selection:

Name of Federal agency representative completing this form:	Date:

(See Instructions on reverse side) **Form AD-1006 (03-02)**

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, http://fppa.nrcs.usda.gov/lesa/.

Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s)of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)

Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.

Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.

Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.

Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.

Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.

2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.
Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request 3/16/2021
Name of Project NODOS/Sites Reservoir	Federal Agency Involved US Bureau of Reclamation
Proposed Land Use Reservoir and conveyance facilities	County and State Yolo, California
PART II *(To be completed by NRCS)*	Date Request Received By NRCS 3/16/2021 — Person Completing Form: Jacqueline Vega, NRCS

Does the site contain Prime, Unique, Statewide or Local Important Farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)*	YES ☑	NO ☐	Acres Irrigated 234,703	Average Farm Size 484

Major Crop(s) Almonds, Tomatoes, and Grapes	Farmable Land In Govt. Jurisdiction Acres: 482,645 % 73.9	Amount of Farmland As Defined in FPPA Acres: 352,55 % 54.0
Name of Land Evaluation System Used CA Revised Storie Index	Name of State or Local Site Assessment System None	Date Land Evaluation Returned by NRCS 3/19/2021

		Alternative Site Rating			
PART III *(To be completed by Federal Agency)*		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly		0.67	3.258		
B. Total Acres To Be Converted Indirectly		0	0		
C. Total Acres In Site		0.67	3.258		
PART IV *(To be completed by NRCS)* Land Evaluation Information					
A. Total Acres Prime And Unique Farmland		0.0	2.40		
B. Total Acres Statewide Important or Local Important Farmland		.20	.20		
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		0.0001	0.0007		
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		61.4	33.34		
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)		40	57		
PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	**Maximum Points**	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)				
2. Perimeter In Non-urban Use	(10)				
3. Percent Of Site Being Farmed	(20)				
4. Protection Provided By State and Local Government	(20)				
5. Distance From Urban Built-up Area	(15)				
6. Distance To Urban Support Services	(15)				
7. Size Of Present Farm Unit Compared To Average	(10)				
8. Creation Of Non-farmable Farmland	(10)				
9. Availability Of Farm Support Services	(5)				
10. On-Farm Investments	(20)				
11. Effects Of Conversion On Farm Support Services	(10)				
12. Compatibility With Existing Agricultural Use	(10)				
TOTAL SITE ASSESSMENT POINTS	160	0	0	0	0
PART VII ***(To be completed by Federal Agency)***					
Relative Value Of Farmland *(From Part V)*	100	40	57	0	0
Total Site Assessment *(From Part VI above or local site assessment)*	160	0	0	0	0
TOTAL POINTS ***(Total of above 2 lines)***	260	40	57	0	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES ☐ NO ☐

Reason For Selection:

Name of Federal agency representative completing this form:	Date:

(See Instructions on reverse side) **Form AD-1006 (03-02)**

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, http://fppa.nrcs.usda.gov/lesa/.

Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s)of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)

Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.

Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.

Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.

Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.

Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.

2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.
Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \text{ X } 160 = 144 \text{ points for Site A}$$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

October xx, 2022

Camille Calimlim Touton ?
Commissioner Bureau of Reclamation
1849 C Street NW
Washington, DC 20240-0001

SUBJECT: Background on the Sites Reservoir Project

The Sites Authority understands that Reclamation is refining its feasibility analysis of potential participation levels in the "rightsized" Sites Reservoir Project. The Authority appreciates Reclamation's significant investment to date of federal dollars and significant dedication of expert staff resources. The Project is only few years away from construction and we would not be in this advanced state without Reclamation's commitments to date. ~~Without these commitments, the Project would not be as advanced as we are which is within a few years of starting construction.~~ To assist in your evaluation, the Authority offers the following explanations for some of the more unique aspects of the project that may be of interest relative to consideration of Reclamation's investment.

Sites Water Rights

The Sites Reservoir is well into the process of securing a ~~Sites~~ water right with an initial application submitted to the State Water Resources Control Board (SWRCB) on May 11, 2022, demonstrating the reasonable likelihood of the availability of water to support the Project. The ~~State Water Resources Control Board~~SWRCB accepted the application and has requested additional analysis and information primarily related to unimpaired flows and voluntary agreements associated with its ongoing Bay Delta Plan Update proceedings. The Authority's water rights team is engaging with ~~board~~ SWRCB staff to ensure the supplemental materials are satisfactory to enable ~~an~~ expeditious processing and expects delivery of the completed materials around the end of the year. While this additional work does extend the timeline of securing a water right permit, we agree with ~~applying cautiousness to~~ the SWRCB's cautious approach to the process. ~~but we~~We will continue to push ~~for balancing~~to balance this caution with the urgency that we need to act. The Authority ~~is seeing~~sees nothing in the additional analysis that deters from our confidence to demonstrate water availability. The Authority has determined not to initiate construction until the water right permit and critical aquatic and terrestrial permits are secured. This protects investors from risk associated with final permit conditions.

Operating Conditions

The operational coordination among Reclamation, the Department of Water Resources, and the Sites Authority has been ongoing and is progressing well. We are unable to fully execute agreements until CEQA/NEPA conditions are completed but we are pleased to report that the three ~~party's~~parties engage in frequent and productive technical discussions reviewing matters such as operations coordination, plans for water exchanges, and analysis of diversion and release of Sites water in coordination with state and federal operations through and including the Delta.

In terms of Reclamation's investment in the project and the benefits it would expect to receive, in March 2022 the Authority modified its EIR/EIS preferred alternative to a ~~Reclamation investment~~Reclamation investment of up to 25% of ~~project capacity~~total project cost. All of the permitting applications and environmental assessments are being developed around this scenario leaving flexibility to adjust for final positions. The Authority has established ~~general~~ guiding principles involving benefits and obligations applicable to the water district investors and intends to establish contracts with each based on these principles. Application of these same principles is envisioned for Reclamation's investment with adjustments for unique conditions primarily involving water exchanges. There is still more work to do to refine and detail the final operations, but the basic elements are in place and sufficiently describe to all investors, including Reclamation, a solid understanding and high confidence in what the Sites Project is capable of returning on investment.

Project Financing
The Sites Project is a locally led project under the charge of the Site JPA and is a beneficiary pays project, i.e. those that expect to benefit pay for the expected benefits to be received. The Authority is working with each of the Federal and State agencies and each of the Local water district beneficiaries to secure its funding necessary to support the development of the Project. The Federal benefits are resourced by federal dollars under the control of Reclamation as the project participant. The State has conditionally determined to acquire public benefits under the Water Storage Investment Program supported by funds made available by voters under Proposition 1. The Local water districts are securing their funding sources independently but are in the process of collectively establishing project financing through the EPA WIFIA Program and USDA Rural Community Loan Programs. You are very familiar with these aspects as you graciously contributed your attention and support to ~~our securing an invitation to~~ensuring OMB understood Reclamation's role in the project, which allowed the Authority to be invited to apply for EPA WIFIA loan earlier this year. We are extremely appreciative of your assistance. So, while unorthodox as compared to a typical federal-led project, the financing and funding sources are quite clear and well delineated. As a side note, the project financing approach being taken by the Authority aligns with that which is contemplated in the 2016 WIIN Act which authorizes Reclamation investment in locally led storage projects, like Sites and others.

In closing, the Sites Project offers an investment that can substantially move the needle in terms of addressing serious water supply deficiencies now and in the climate changed future for our farms, families, fish and fowl. The Authority welcomes Reclamation's investment in the Sites project and looks forward to working together in partnership on this project to address California and western water needs.

Sincerely,

Jerry Brown
Sites Authority Executive Director

Cc: Senator Feinstein
Senator Padilla
Congressman LaMalfa
Congressman Thompson
Congressman Garamendi

From: Arsenijevic, Jelica [Jelica.Arsenijevic@hdrinc.com]
Sent: 10/17/2022 9:28:02 AM
To: Alicia Forsythe [aforsythe@sitesproject.org]; Kevin Spesert [kspesert@sitesproject.org]
CC: Laurie Warner Herson [laurie.warner.herson@phenixenv.com]; Luu, Henry [henry.luu@hdrinc.com]; Conner McDonald [conner@cmdwest.com]; Alexander, Jeriann [jalexander@fugro.com]; Spranza, John [john.spranza@hdrinc.com]
Subject: FW: Sites Geotech - Positive Encounters

Hi Ali and Kevin
See a summary of recent encounters Jeriann has had with locals while conducting the geotechnical investigations. Looping you and Kevin as it may be worthwhile discussing or being aware of as we continue preparing the final EIR/EIS, have community work group meetings, etc.

Thanks Jeriann for sharing !

Jelica Arsenijevic
Environmental Project Manager

HDR
2379 Gateway Oaks Drive, Suite 200
Sacramento, CA 95833
D 916-679-8854
M 209-329-6897

Jelica.Arsenijevic@hdrinc.com

hdrinc.com/follow-us

From: Alexander, Jeriann <jalexander@fugro.com>
Sent: Saturday, October 15, 2022 8:52 AM
To: Conner <conner@cmdwest.com>; Arsenijevic, Jelica <Jelica.Arsenijevic@hdrinc.com>
Subject: Positive Encounters

Hi
This past week I let you know about positive encounters with 2 people from the Stonyford area. While they were supportive of the project they shared a few of their concerns about living in a remote part of the state.

Their own water supply for potable consumption is an ongoing and worsening concern. The State Office of Emergency services has set up a program giving away storage tanks and water.

Transportation corridor to gain access to the I5 corridor is a very sensitive issue. Being in sites Canyon has provided an eye opening view of traffic. There are a number of motorists that are making multiple trips through the canyon on a daily basis and most of them seem to be heading to or out of the Stonyford area. Delivery trucks like Fed ex and UPS are making multiple trips. I am curious if an updated traffic study is planned.

Lastly those that seem to know something about the reservoir seem surprised that a plan for water exiting the reservoir needs to be put into place. I would say most people do not understand that the reservoir while locally lead will be incorporated to a certain degree into the SWP.

Just my observations.

Best Regards,

Jeriann N. Alexander, PE, REPA
Principal Engineer
Fugro

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E jalexander@fugro.com | **W** www.fugro.com

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A 1777 Botelho Drive, Suite 262, Walnut Creek, California 94596, USA
A 469 Roland Way, Oakland, California 94621, USA

Together we create a safe and liveable world.

October 17, 2022

The Honorable M. Camille Calimlim Touton
United States Bureau of Reclamation
Commissioner
1849 C Street NW
Washington, DC 20240-0001

SUBJECT: Background on the Sites Reservoir Project

Dear Commissioner Touton:

The Sites Authority understands that Reclamation is refining its feasibility analysis of potential participation levels in the "rightsized" Sites Reservoir Project. The Authority appreciates Reclamation's significant investment to date of federal dollars and significant dedication of expert staff resources. Without these commitments, the Project would not be as advanced as we are, which is within a few years of starting construction. To assist in your evaluation, the Authority offers the following explanations for some of the more unique aspects of the project that may be of interest relative to the consideration of Reclamation's investment.

Sites Water Rights

The Sites Reservoir is well into the process of securing a Sites water right with an initial application submitted to the State Water Resources Control Board (SWRCB) on May 11, 2022, demonstrating the reasonable likelihood of the availability of water to support the Project. The SWRCB accepted the application and has requested additional analysis and information primarily related to unimpaired flows and voluntary agreements associated with its ongoing Bay-Delta Plan Update proceedings. The Authority's water rights team is engaging with the SWRCB staff to ensure the supplemental materials are satisfactory to enable expeditious processing and expects delivery of the completed materials around the end of the year. While this additional work does extend the timeline of securing a water right permit, we agree with the SWRCB's cautious approach to the process. We will continue to push to balance this caution with the urgency we need to act. The Authority sees nothing in the additional analysis that deters from our confidence to demonstrate water availability. The Authority has determined not to initiate construction until the water right permit and critical aquatic and terrestrial permits are secured. This protects investors from the risk associated with final permit conditions.

Operating Conditions

The operational coordination among Reclamation, the Department of Water Resources, and the Sites Authority has been ongoing and is progressing well. We are unable to fully execute agreements until CEQA/NEPA conditions are completed, but we are pleased to report that the three parties engage in frequent and productive technical discussions reviewing matters such as operations coordination, plans for water exchanges, and analysis of diversion and release of Sites water in coordination with state and federal operations through and including the Delta.

In terms of Reclamation's investment in the project and the benefits it would expect to receive, in March 2022, the Authority modified its EIR/EIS preferred alternative to Reclamation. Investment of up to 25% of the total project cost. All permitting applications and environmental assessments are being developed around this scenario, leaving flexibility to adjust for final positions.

The Authority has established guiding principles involving benefits and obligations applicable to the water district investors and intends to establish contracts with each based on these principles. Applying these same principles is envisioned for Reclamation's investment with adjustments for unique conditions primarily involving water exchanges. There is still more work to refine and detail the final operations, but the basic elements are in place and sufficiently describe to all investors, including Reclamation, a solid understanding and high confidence in what the Sites Project is capable of returning on investment.

Project Financing

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In closing, the Sites Project offers an investment that can substantially move the needle in terms of addressing serious water supply deficiencies now and in the climate changed future for our farms, families, fish, waterfowl, shorebirds and other wildlife. The Authority welcomes Reclamation's investment in the Sites project and looks forward to working together in partnership on this project to address California and western water needs.

Sincerely,

Jerry Brown
Sites Authority Executive Director

Cc: Senator Feinstein
Senator Padilla
Congressman LaMalfa
Congressman Thompson
Congressman Garamendi

DSOD Engagement Approach Technical Memorandum

Sites

To:	JP Robinette
CC:	-
Date:	October 8, 2022
From:	Christopher Krivanec / Henry Luu
Quality Review:	Mike Cadei
Authority Agent Review:	-
Subject:	Recommendation for DSOD Engagement Approach

1.0 Purpose

The purpose of this memorandum is to provide an overview of recommended guiding principles that the Sites Project Authority (Authority) and the California Division of Safety of Dams (DSOD) can implement to efficiently complete design, construction, and operation of the Sites Reservoir Project. This document describes an engagement plan goals, specific actions, and other considerations that should help facilitate effective coordination between the Authority and DSOD.

2.0 Goals for DSOD Engagement

The overall goals for DSOD engagement are the following:

1. Develop a partnering relationship and trust.
2. Establish and maintain clear communications.
3. Identify key issues early.
4. Coordinate resources and schedules to efficiently review and process project approvals.
5. Collaboratively work towards construction completion and operation of the Sites Reservoir to recognize ecosystem, flood control, and recreation public benefits.

3.0 Financial Obligations

The Authority is solely responsible for financing project costs including the DSOD application fee, which supports "*a wide variety of activities, including…application review and construction inspection work; engineering studies that include hydrologic, structural, and seismic stability re-evaluations; emergency response; and review and approval of mandated flood inundation maps of dams and critical appurtenant structures for emergency preparedness.*" This fee is based upon the estimated project cost of jurisdictional features and may be paid in installments commensurate with the design phase.

An agreement between the Authority and DSOD on staged fee installments has not been established. It is recommended that this is one of the first items that should be addressed with DSOD to ensure

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adequate funding is available for required resources. A payment schedule may be established based on the traditional 30%, 60%, 90%, and final submittals.

It is noted that a minimum of 20% of the total application fee is non-refundable, and there is potential for an additional fee that is assessed by DSOD in the event the actual cost exceeds the estimated cost by more than 15 percent.

4.0 Communications

The following communication plan is recommended:

1. One-on-one leadership meetings
2. Regular project management team meetings
3. Project briefings on key deliverables

One-on-one leadership meetings are intended to be informal discussions between the Sites Engineering & Construction (E&C) Manager and the DSOD Division Manager that occurs monthly. Regular bi-monthly project management team meetings to facilitate high-level project status updates are encouraged between the Sites Project Engineering Management Team (E&C Manager, Engineering Integration Lead, technical advisor) and DSOD managers. Project briefings on key deliverables will be attended by larger groups as needed and will occur just prior to DSOD reviews of those deliverables (e.g., design criteria, the GIWP, Basis of Designs, 30% Design).

Any issues or concerns that may arise are to be coordinated starting at the lowest level, during development or briefings of key deliverable, and will be escalated to the project management team if a resolution cannot be determined without management input. The Sites Engineering Integration team will be the point of contact for coordinating and facilitating resolution.

5.0 DSOD Evaluations and Schedule

Recognizing project benefits as soon as possible is a shared goal for both the Authority and the State. The Authority will prepare and share a detailed design schedule with DSOD including the timing and assumed duration of DSOD reviews. However, as this schedule is being prepared, the Authority requests input and/or validation of the following assumptions:

1. Noting that there are common elements that would overlap all project features (e.g., hydrologic setting, seismic loading), the nine separate dam design packages can be submitted independently for DSOD review.
2. A phased approach for design, review, and construction of the major dam elements (such as foundation excavation, foundation treatment/preparations, and embankment placement) is acceptable.
3. DSOD review and evaluations periods for each design submittal may take up to 6-months to complete, except review of the final plans & specifications which is anticipated to take up to 6-weeks.

The Sites Project team will coordinate with DSOD to engage the department in a process-driven approach that commits to a planned submittal and review schedule of the deliverables (i.e., design criteria, site investigations, engineering analyses, preliminary designs, etc.). The Sites Project team will ensure deliverables are submitted on time and are complete in order to facilitate efficient DSOD reviews.

6.0 Other Considerations

This Project is a monumental effort that will challenge DSOD current process and resources – the project is on a scale that has not been overseen by the department in decades. DSOD's mission to ensure dam safety aligns with the Authority's values and vision in building and operating a safe, 21st century, water storage system. It is imperative for the Authority to work collaboratively with the department to meet expectations by identifying potential support for resources and approaching project design focused on risk management to supplement the traditional standards-based criteria.

6.1 DSOD Workload and Resources

The Sites Project will have a significant impact on DSOD resources, which we understand is already stretched under current and forecasted workloads. It is recommended that discussion of DSOD's staff availability for project deliverable reviews and independent evaluations be prioritized and tracked as part of the leadership conversations. The project team will discuss with DSOD the possibility of drawing from other partner agencies (e.g., DWR, USACE or USBR) to supplement resource needs. The Authority may also explore with DSOD the possibility of funding additional DSOD resources to prioritize reviews and meet schedule goals.

6.2 Risk Informed Decision Making (RIDM)

DSOD has indicated to their jurisdictional dam owners that they are transitioning to a RIDM approach to their evaluations of dam projects. DSOD now also requires dam owners to submit dam breach inundation maps, which are published on DSOD's website. The Sites Project team will discuss how RIDM may affect the design criteria, loading conditions and designs for project, and if it may lead to modification of project requirements. RIDM may result in an optimized project that balances risk vs. costs.

From: Alicia Forsythe [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=A6CDF06A7E904B65BAA21702A82AD329-AFORSYTHE]
Sent: 10/18/2022 1:59:45 PM
To: Spranza, John [John.Spranza@hdrinc.com]
CC: Angela Bezzone [bezzone@mbkengineers.com]
Subject: RE: Aquatic Study Plan for Your Review

Hey John – 3 to 4 PM tomorrow doesn't work for me as I have a Prop 1 Roundtable call at that time. I could do anytime Thursday except 2 to 3 PM.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Spranza, John <John.Spranza@hdrinc.com>
Sent: Tuesday, October 18, 2022 1:38 PM
To: Alicia Forsythe <aforsythe@sitesproject.org>
Cc: Angela Bezzone <bezzone@mbkengineers.com>
Subject: RE: Aquatic Study Plan for Your Review

Hi,
I am trying to set this up for tomorrow between 3-4 or Thursday.

I dug into the surveys and spoke with the team about the costs, bad news is that with the exception of $55K that has already been allocated for 2022, the remaining $654K is scheduled to be spent in 2023. I did work with the team to break out the costs by task, and they are listed below with the associated scope.

The SWAMP bioassessment is equivalent to a species protocol survey, it is a state-approved methodology that they will accept and allows very little variation. One option to reduce the 2023 cost that partially kicks the can down the road would be to only do the SWAMP analysis in one of the creeks and assume that the other creek is similar. Eventually, we would have to perform the analysis on both to verify assumptions, as well as get CDFW/SWRCB to accept the one-creek methodology, but it would cut 2023 for that task by 1/3rd or more.

Task F41— Stone and Funks Flow Plan and Survey

CONSULTANT will perform the following new scope of services:

1. SWAMP Bioassessment Technical Study and Hydrogeomorphic Technical Study- Approx. $558,0000

A Surface Water Ambient Monitoring Program (SWAMP) bioassessment that focuses on the relationships between physical habitat (PHAB), water quality, benthic macroinvertebrates (BMI), and algal communities would be conducted on the reaches downstream of the proposed impoundments on Stone Corral Creek and Funks Creek (see Assumption 1 below). The bioassessment effort would be conducted using the methods described in the SWAMP 2016 SOP (Ode et al. 2016a, 2016b), or any updated version thereof.

- The ultimate number of individual sites, herein referred to as sampling reaches, on each creek would be based on access and safety; however, it is anticipated that five sampling reaches would be located on Funks Creek and that six sampling reaches would be located on Stone Corral Creek (see Figure 4 of the *Aquatic Study Plan* and Assumption 2 below).
- Water quality data would be measured using a YSI Pro DSS unit (or similar collection device), following Chapter 3 of the SWAMP 2016 Standard Operation Procedure (SOP) (Ode et al. 2016a) and recorded on standard SWAMP data forms. Water quality data obtained would include temperature, specific conductivity, salinity, dissolved oxygen, alkalinity, turbidity, pH, total nitrogen, and total phosphorus (see text below and Assumption 3 for additional water quality parameters that would be collected). All readings would be instantaneous, except for the total nitrogen and total phosphorus water samples which would be sent to a local water quality processing laboratory in northern California. The water quality analyses would be consistent with SWAMP protocols for water chemistry.
- As required by the SWAMP 2016 SOP, PHAB information would be collected at the sampling reaches at each transect and inter-transect location. At the 11 main transects, the full measurements listed in Chapter 6 of the SWAMP 2016 SOP would be taken (Ode et al. 2016a, 2016b). At the 10 inter-transects, fewer measurements would be taken per the SWAMP Stream Habitat Characterization Form Full Version field forms. PHAB data would be entered by the California Department of Fish and Wildlife (CDFW) Group at the Marine Pollution Studies Laboratory at Moss Landing Marine Laboratories (MPSL-MLML) using the SWAMP Bioassessment Field Form Microsoft Access database, and then loaded into the MPSL-MLML's Microsoft SQL Server database. PHAB metrics would be calculated using the SWAMP Bioassessment Reporting Module. The PHAB Index (called the Index of Physical Integrity [IPI]), which combines eight GIS-calculated metrics with 12 PHAB metrics to produce one IPI value per Rehn et al. 2018, would be calculated by the MPSL-MLML.
- BMI collection would be conducted according to the SWAMP 2016 SOP, using the reach-wide benthos method, which requires collection from each of the 11 major transects across the sampling reach regardless of stream habitat type (e.g., riffle, run, and pool). BMI sample taxa identification would be conducted by an outside laboratory (most likely by the Chico Aquatic Bioassessment Laboratory [Chico ABL] in Chico, California). BMI samples would be picked, sorted, and identified completely or until a 600 count (SAFIT Level 2) is reached. MPSL-MLML would be contracted to assist in the analysis of the BMI data. MPSL-MLML would use the BMI taxonomic data obtained from Chico ABL to calculate California Stream Condition Index (CSCI) scores for each sampling reach (the CSCI is a statewide biological scoring tool that translates complex data about individual BMIs found living in a stream into an overall measure of stream health [Rehn et al. 2015]).
- Algae would be collected in the same manner as the BMI samples, except that the algae would be collected 25 centimeters above the location where the BMI sample would be located. Algae samples would be collected using the sampling tools identified in the SWAMP 2016 SOP, which vary according to the substrate being sampled. Five types of algae would be collected and processed: qualitative grab, soft-bodied algae, diatoms, AFDM, and chlorophyll a. The qualitative grab, soft algae, and diatom samples would be sent to the CDFW Group at the MPSL-MLML. MPSL-MLML would report the data to Marco Sigala at Moss Landing in SWAMP template formats. Mr. Sigala would calculate the Algae Stream Condition Index (ASCI) from the data. The samples of AFDM and chlorophyll a would also be sent to MPSL-MLML, who would report the data in California Environmental Data Exchange Network template formats. MPSL-MLML follows the QA/QC procedures developed under the SWAMP.
- In addition to the standard water quality measurements included in the SWAMP bioassessment as described above, samples would be collected for additional laboratory measurements (see Assumption 3 below). The objectives for taking these additional measurements would be to compare pre-Project and Project values, determine any effect of operational adjustments on sampled water quality constituents, and compare measurement values to key stressor thresholds. These additional measurements include:
    - A suite of total and dissolved metals and metalloids, which includes aluminum, arsenic, cadmium, chromium (total), chromium, copper, iron, lead, manganese, mercury, methylmercury, nickel, selenium, silver, and zinc.

- Cyanobacteria and cyanotoxins.

Assumptions:

- Assumption 1: Access and entry will be available by the time the bioassessment surveys would need to be performed. This could be as early as February 2023, depending on the hydrologic conditions and the seasonal precipitation patterns. If access is not available by the times the subject channels go dry (in the foothill environments), baseline bioassessment data collection would not occur in these areas in 2023 (2024 would be the first year of baseline data for these areas).
- Assumption 2: Since there is no stringent guidance on establishing the number of bioassessment sampling reaches for a project such as this (Rehn pers. comm.), the number of sampling reaches was chosen to both best capture and quantify the two different elevational gradients within the study area (i.e., foothill and valley floor environments), and to have adequate spacing/distance between the sampling reaches (approximately 500 meters apart on Funks Creek above Funks Reservoir and approximately 2 kilometers apart elsewhere).
- Assumption 3: Water quality parameters associated solely with the bioassessment surveys include temperature, specific conductivity, salinity, dissolved oxygen, alkalinity, turbidity, pH, total nitrogen, and total phosphorus – these parameters would be collected once per year as there would only be one bioassessment survey at each sampling reach per year. In addition to these standard bioassessment water quality parameters, the suite of total and dissolved metals and metalloids, as well as cyanobacteria and cyanotoxins, would be collected two times a year. Presumably one of these sampling events would coincide with the bioassessment surveys.
- Assumption 4: All data would be sent to the California Environmental Data Exchange Network, where it would be available to the public for viewing and download.
- Assumption 5: A CDFW Scientific Collecting Permit (Specific Use) or Memorandum of Understanding permit would be required to complete the study design as proposed. BMI samples would be the only sacrificed species.

Deliverables:

The following will be delivered as part of these services:

- Draft 2023 Annual Bioassessment Report
- Final 2023 Annual Bioassessment Report

The annual report(s) would include BMI, algae, water quality, and PHAB output and results and a summary of each of these indicators. The most recent version of the SWAMP Stream Habitat Characterization Form, Full Version field forms would be provided in appendix format, along with representative photography of the sampling reaches.

2. Hydrogeomorphic Technical Study

The overall purpose of the Hydrogeomorphic Study would be to characterize historical and present-day streamflows, including baseflow during the spring and summer months, on Funks and Stone Corral Creeks; the relevant geomorphic characteristics of each creek (herein called geomorphic indicators); and flow levels necessary for channel maintenance of geomorphic processes required to maintain the channels in their current condition.

- Field site locations are applicable to the geomorphic component of the Hydrogeomorphic Study; hydrologic monitoring locations represent the potential locations where stilling wells, staff gages, and real-time water surface level collection devices would be installed (i.e., the hydrologic component of the Hydrogeomorphic Study). The ultimate number of field site locations on each creek would be based on access and safety; however, it is anticipated that five sites would be located on Funks Creek and that six would be located on Stone Corral Creek (see Figure 4 of the *Aquatic Study Plan* and Assumption 1 below). The locations for the geomorphic component of the Hydrogeomorphic Study would presumably be the same as the bioassessment sampling reaches as part of the SWAMP bioassessment study.
- A geomorphic assessment of the reaches of interest (i.e., the stream reaches below the dams) would constitute the first step in the analysis. The focus of the geomorphic assessment would be to determine the dominant geomorphic processes, document the surrounding landforms and channel bed topography, and to determine how the observed

morphology of each creek is influenced by the hydrologic regime and the surrounding land uses. Likewise, collection of geomorphic information would aid in the determination of overall channel stability for each creek, which has important implications for the proposed releases. Geomorphic information would include the following:

- Channel classification
- Local watershed inputs
- Hydrologic and flow patterns
- Riparian vegetation condition
- Bankfull width and depth and wetted width
- Bank instability and bank characteristics
- Channel bed substrate composition and embeddedness
- Channel complexity
- Degree of channel incision
- Stage of channel evolution
- Cross section and longitudinal profile surveys

- The hydrologic component of the Hydrogeomorphic Study would consist of both desktop (modeling and historical conditions review) and field-based efforts (generation of stage-discharge relationships). The desktop effort would provide detailed information on various (modeled) flows of interest (i.e., the 2-year, 5-year, 10-year, 50-year, and 100-year flow events), while the field-based efforts would validate/calibrate the modeling results via collection of real-time streamflow data, especially for smaller streamflow events (the flows that are expected to occur most of the time on each creek).
  - A HEC-HMS rainfall-runoff-routing watershed hydrology model would be created to generate hydrographs for both Stone Corral Creek and Funks Creek (see Assumption 2 below). Inputs into the hydrology model would include watershed land use, percent impervious inputs, soil types, precipitation and evapotranspiration, drainage network characteristics, and topography (which would be generated from available light detection and ranging [LiDAR] technology).
  - The cross section and longitudinal profile surveys as bulleted above would also serve to augment the existing LiDAR data with on-the-ground data to better capture topography in areas requiring additional detail (such as densely vegetated areas). The topographic surveys would be tied into the State Plane Coordinate System and would be sufficient to generate contours at a 1-foot interval. The data collected via the topographic surveys would also be required for generation of stage discharge relationships, as described below.
  - The primary objective of the field investigation would be to provide an accurate description of the existing watershed hydrology and variations in streamflow and water surface elevations (i.e., stage) on both Stone Corral Creek and Funks Creek. Periodic streamflow measurements (depth and velocity measurements) would be taken to develop stage-discharge relationships (rating curves) to translate the continuous water depth measurements measured with continuous stage recorders into continuous estimates of flow. These measurements would occur at the hydrologic monitoring locations as shown on Figure 5 of the *Aquatic Study Plan*.
  - Stage recorders, which measure water temperature and pressure, and vertical stilling wells would be installed in relatively deep portions of the creeks at the locations as shown on Figure 5 *Aquatic Study Plan.* Streamflow measurements would be collected to develop equations to convert the continuous stage recorder data into estimated streamflows (discharge) (see Assumption 3 below). During variable discharge conditions, streamflows would be estimated using a Marsh-McBirney Flo-Mate Model 2000 flow meter and top-setting rod following the procedures described in Module O in Chapter 8 of the SWAMP 2016 SOP (Ode et al. 2016a, 2016b).

Assumptions:

- Assumption 1: Access and entry will be available by the time the hydrogeomorphic surveys would need to be performed. Ideally this would occur in late spring 2023 (after the bioassessment surveys, so as to not compromise the integrity of the aquatic organisms), depending on the hydrologic conditions and the seasonal precipitation patterns. If access is not available by then, hydrogeomorphic data collection would not occur in these areas until fall of 2023 in order to avoid data collection during summer, when conditions in the area are known to be unsafe due to temperature conditions.

- Assumption 2: The desktop hydrologic component of the Hydrogeomorphic Study would occur during early 2023 – no field access would be required.
- Assumption 3: After the initial installation of stage recorders, up to eight separate streamflow measurement surveys would occur in 2023, depending on the variability of precipitation and associated runoff events.
- Assumption 4: No permits would be necessary for the Hydrogeomorphic Study; however, landowners would need to provide verbal or written approval to allow the establishment of permanent monuments (i.e., benchmarks) for long-term monitoring purposes.

Deliverables:

The following will be delivered as part of these services:

- Draft Baseline (2023) Hydrogeomorphic Report
- Final Baseline (2023) Hydrogeomorphic Report

The baseline report(s) would include a summary of the monitoring methods and a summary and analysis of the hydrogeomorphic monitoring results. Future (post-2023) reports would include an evaluation of site conditions in the context of the selected performance standards; a discussion of the monitoring results; a discussion of any modifications made to the monitoring methods; a discussion of the previous year's monitoring efforts; and photographs taken from the cross sections and longitudinal profiles.

Fish Community Technical Study – Approx. $112,000

A fish survey that documents the aquatic vertebrate community composition of Stone Corral Creek and Funks Creek. The fish survey would be conducted using appropriate methods (e.g. Meador et al. 1993), or any updated version thereof.

The ultimate number of individual sites, herein referred to as sampling reaches, on each creek would be based on access and safety; however, it is anticipated that six sampling reaches would be located on Funks Creek and that six sampling reaches would be located on Stone Corral Creek and would be co-located with SWAMP bioassessment sites when possible (see Figure 4 of the *Aquatic Study Plan* and Assumption 2 below).

Assumptions:

- Access and entry will be available by the time the fish surveys would need to be performed. This could be as early as May 2023, depending on the hydrologic conditions and the seasonal precipitation patterns. If access is not available by the times the subject channels go dry (in the foothill environments), baseline fish data collection would not occur in these areas in 2023 (2024 would be the first year of baseline data for these areas).
- There is no strict guidance on establishing the number of sampling reaches for a project such as this, so reaches were co-located with SWAMP bioassessment sites to provide additional habitat and benthic community measures when sampling the fish community.
- A CDFW Scientific Collecting Permit (Specific Use) or Memorandum of Understanding permit would be required to complete the study design as proposed. No fish would be sacrificed as part of the proposed effort.

Deliverables:

The following will be delivered as part of these services:

- Draft 2023 Annual Fish Community Report
- Final 2023 Annual Fish Community Report

The annual report(s) would include fish community results and would cross-reference SWAMP and Hydrogeomorphic results. Full Version field forms would be provided in appendix format, along with representative photography of the sampling reaches and aquatic vertebrate species that were observed.

Monitor Water Temperature in Funks and Stone Corral Creeks – Approx. $42,000

ICF will monitor water temperature in Funks and Stone Corral Creeks during calendar year 2023 as described in Section 6.0 of the Stone Corral Creek and Funks Creek Aquatic Study Plan. Water temperature monitoring will continue beyond 2023 but is not included in this scope.

Assumptions:

- Surveys will begin after land access is obtained. Access and monitoring are assumed to start in April of 2023.
- Temperature probes will be installed April of 2023
- It will take two days to perform site reconnaissance and install probes
- Two people will perform site visits every two months to download data except for when creeks are dry (assumed to be June through October). Visits will likely occur in June, October, and December.
- Data will be organized and graphed in Excel and checked for accuracy soon after download, but no reports other than brief status reports will be provided until summer of 2024.
- It will be possible to install temperature probes at all 10 locations specified in the study plan.
- Data will be provided to Sites Authority and not entered into a state database

Deliverables:

The following will be delivered as part of these services:

Data files and brief status report after each data download

John Spranza

D 916.679.8858 M 818.640.2487

From: Alicia Forsythe <aforsythe@sitesproject.org>
Sent: Friday, October 14, 2022 6:43 AM
To: Spranza, John <john.spranza@hdrinc.com>
Cc: Angela Bezzone <bezzone@mbkengineers.com>
Subject: RE: Aquatic Study Plan for Your Review

John – Can you schedule a call next week on this subject for us? I'd like to just talk through each one of these studies, why they are needed, and costs. We might want to have some of the ICF folks on the line also. I have a call with Colusa County and Jerry late next week, so would like to chat before Friday.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

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From: Alicia Forsythe
Sent: Friday, October 7, 2022 12:57 PM

To: Spranza, John <John.Spranza@hdrinc.com>
Cc: Angela Bezzone <bezzone@mbkengineers.com>
Subject: RE: Aquatic Study Plan for Your Review

Thanks John. The document looks good and is coming along nicely. I put it on SharePoint and put my comments in the file. Its here:

https://sitesreservoirproject.sharepoint.com/:f:/r/envpermitting/Permits/5937%20Stream%20Flow?csf=1&web=1&e=GfFZtE

Once we have a revised version, I think we should develop a short PowerPoint on it and then schedule calls with CDFW, USFWS and Colusa County to share the presentation and then ask them to review it. We need to coordinate with all three of them prior to finalizing to meet the commitments in the water right term.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

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From: Spranza, John <John.Spranza@hdrinc.com>
Sent: Wednesday, September 21, 2022 10:59 AM
To: Alicia Forsythe <aforsythe@sitesproject.org>
Cc: Angela Bezzone <bezzone@mbkengineers.com>
Subject: FW: Aquatic Study Plan for Your Review

Ali,
Attached for your review and comment is the aquatic study plan that ICF developed for Stone Corral and Funks creeks. This version incorporates three rounds of revisions that included comments from myself and MBK.

There is no immediate deadline for your review to be completed, the team will likely need to get your comments by the beginning of November to get them addressed and close this out.

Please let me know if you have any questions.

John

John Spranza

D 916.679.8858 M 818.640.2487

From: Hassrick, Jason <Jason.Hassrick@icf.com>
Sent: Tuesday, September 20, 2022 11:21 AM
To: Spranza, John <John.Spranza@hdrinc.com>
Cc: Briard, Monique <Monique.Briard@icf.com>; Hendrick, Mike <Mike.Hendrick@icf.com>; Peters, Jeff <Jeff.Peters@icf.com>; Huber, Anne <Anne.Huber@icf.com>; Warburton, Manna <Manna.Warburton@icf.com>
Subject: Aquatic Study Plan

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi John,

Attached is an updated, clean revision of the Funks and Stone Corral creeks aquatic study plan based on your and Angela's feedback. Credit goes to Manna (fish), Jeff (hydro/geomorph), and Anne (temp/contaminants) for shouldering most of the work.

Jason

JASON HASSRICK, Ph.D.
+1.530.312.3275 mobile
icf.com | LinkedIn

From: Spranza, John [John.Spranza@hdrinc.com]
Sent: 10/18/2022 2:06:27 PM
To: Alicia Forsythe [aforsythe@sitesproject.org]
CC: Angela Bezzone [bezzone@mbkengineers.com]
Subject: RE: Aquatic Study Plan for Your Review

Looks like Thursday morning works best for everyone. I will send an invite out, I'm just waiting to hear from Jason.

John Spranza

D 916.679.8858 M 818.640.2487

From: Alicia Forsythe <aforsythe@sitesproject.org>
Sent: Tuesday, October 18, 2022 2:00 PM
To: Spranza, John <john.spranza@hdrinc.com>
Cc: Angela Bezzone <bezzone@mbkengineers.com>
Subject: RE: Aquatic Study Plan for Your Review

Hey John – 3 to 4 PM tomorrow doesn't work for me as I have a Prop 1 Roundtable call at that time. I could do anytime Thursday except 2 to 3 PM.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

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From: Spranza, John <John.Spranza@hdrinc.com>
Sent: Tuesday, October 18, 2022 1:38 PM
To: Alicia Forsythe <aforsythe@sitesproject.org>
Cc: Angela Bezzone <bezzone@mbkengineers.com>
Subject: RE: Aquatic Study Plan for Your Review

Hi,
I am trying to set this up for tomorrow between 3-4 or Thursday.

I dug into the surveys and spoke with the team about the costs, bad news is that with the exception of $55K that has already been allocated for 2022, the remaining $654K is scheduled to be spent in 2023. I did work with the team to break out the costs by task, and they are listed below with the associated scope.

The SWAMP bioassessment is equivalent to a species protocol survey, it is a state-approved methodology that they will accept and allows very little variation. One option to reduce the 2023 cost that partially kicks the can down the road would be to only do the SWAMP analysis in one of the creeks and assume that the other creek is similar. Eventually, we would have to perform the analysis on both to verify assumptions, as well as get CDFW/SWRCB to accept the one-creek methodology, but it would cut 2023 for that task by 1/3rd or more.

Task F41— Stone and Funks Flow Plan and Survey

CONSULTANT will perform the following new scope of services:

1. SWAMP Bioassessment Technical Study and Hydrogeomorphic Technical Study- Approx. $558,0000

A Surface Water Ambient Monitoring Program (SWAMP) bioassessment that focuses on the relationships between physical habitat (PHAB), water quality, benthic macroinvertebrates (BMI), and algal communities would be conducted on the reaches downstream of the proposed impoundments on Stone Corral Creek and Funks Creek (see Assumption 1 below). The bioassessment effort would be conducted using the methods described in the SWAMP 2016 SOP (Ode et al. 2016a, 2016b), or any updated version thereof.

- The ultimate number of individual sites, herein referred to as sampling reaches, on each creek would be based on access and safety; however, it is anticipated that five sampling reaches would be located on Funks Creek and that six sampling reaches would be located on Stone Corral Creek (see Figure 4 of the *Aquatic Study Plan* and Assumption 2 below).
- Water quality data would be measured using a YSI Pro DSS unit (or similar collection device), following Chapter 3 of the SWAMP 2016 Standard Operation Procedure (SOP) (Ode et al. 2016a) and recorded on standard SWAMP data forms. Water quality data obtained would include temperature, specific conductivity, salinity, dissolved oxygen, alkalinity, turbidity, pH, total nitrogen, and total phosphorus (see text below and Assumption 3 for additional water quality parameters that would be collected). All readings would be instantaneous, except for the total nitrogen and total phosphorus water samples which would be sent to a local water quality processing laboratory in northern California. The water quality analyses would be consistent with SWAMP protocols for water chemistry.
- As required by the SWAMP 2016 SOP, PHAB information would be collected at the sampling reaches at each transect and inter-transect location. At the 11 main transects, the full measurements listed in Chapter 6 of the SWAMP 2016 SOP would be taken (Ode et al. 2016a, 2016b). At the 10 inter-transects, fewer measurements would be taken per the SWAMP Stream Habitat Characterization Form Full Version field forms. PHAB data would be entered by the California Department of Fish and Wildlife (CDFW) Group at the Marine Pollution Studies Laboratory at Moss Landing Marine Laboratories (MPSL-MLML) using the SWAMP Bioassessment Field Form Microsoft Access database, and then loaded into the MPSL-MLML's Microsoft SQL Server database. PHAB metrics would be calculated using the SWAMP Bioassessment Reporting Module. The PHAB Index (called the Index of Physical Integrity [IPI]), which combines eight GIS-calculated metrics with 12 PHAB metrics to produce one IPI value per Rehn et al. 2018, would be calculated by the MPSL-MLML.
- BMI collection would be conducted according to the SWAMP 2016 SOP, using the reach-wide benthos method, which requires collection from each of the 11 major transects across the sampling reach regardless of stream habitat type (e.g., riffle, run, and pool). BMI sample taxa identification would be conducted by an outside laboratory (most likely by the Chico Aquatic Bioassessment Laboratory [Chico ABL] in Chico, California). BMI samples would be picked, sorted, and identified completely or until a 600 count (SAFIT Level 2) is reached. MPSL-MLML would be contracted to assist in the analysis of the BMI data. MPSL-MLML would use the BMI taxonomic data obtained from Chico ABL to calculate California Stream Condition Index (CSCI) scores for each sampling reach (the CSCI is a statewide biological scoring tool that translates complex data about individual BMIs found living in a stream into an overall measure of stream health [Rehn et al. 2015]).
- Algae would be collected in the same manner as the BMI samples, except that the algae would be collected 25 centimeters above the location where the BMI sample would be located. Algae samples would be collected using the sampling tools identified in the SWAMP 2016 SOP, which vary according to the substrate being sampled. Five types of

algae would be collected and processed: qualitative grab, soft-bodied algae, diatoms, AFDM, and chlorophyll a. The qualitative grab, soft algae, and diatom samples would be sent to the CDFW Group at the MPSL-MLML. MPSL-MLML would report the data to Marco Sigala at Moss Landing in SWAMP template formats. Mr. Sigala would calculate the Algae Stream Condition Index (ASCI) from the data. The samples of AFDM and chlorophyll a would also be sent to MPSL-MLML, who would report the data in California Environmental Data Exchange Network template formats. MPSL-MLML follows the QA/QC procedures developed under the SWAMP.

- In addition to the standard water quality measurements included in the SWAMP bioassessment as described above, samples would be collected for additional laboratory measurements (see Assumption 3 below). The objectives for taking these additional measurements would be to compare pre-Project and Project values, determine any effect of operational adjustments on sampled water quality constituents, and compare measurement values to key stressor thresholds. These additional measurements include:
  - A suite of total and dissolved metals and metalloids, which includes aluminum, arsenic, cadmium, chromium (total), chromium, copper, iron, lead, manganese, mercury, methylmercury, nickel, selenium, silver, and zinc.
  - Cyanobacteria and cyanotoxins.

Assumptions:

- Assumption 1: Access and entry will be available by the time the bioassessment surveys would need to be performed. This could be as early as February 2023, depending on the hydrologic conditions and the seasonal precipitation patterns. If access is not available by the times the subject channels go dry (in the foothill environments), baseline bioassessment data collection would not occur in these areas in 2023 (2024 would be the first year of baseline data for these areas).
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The following will be delivered as part of these services:

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    - Stage of channel evolution
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- The hydrologic component of the Hydrogeomorphic Study would consist of both desktop (modeling and historical conditions review) and field-based efforts (generation of stage-discharge relationships). The desktop effort would provide detailed information on various (modeled) flows of interest (i.e., the 2-year, 5-year, 10-year, 50-year, and 100-year flow events), while the field-based efforts would validate/calibrate the modeling results via collection of real-time streamflow data, especially for smaller streamflow events (the flows that are expected to occur most of the time on each creek).
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    - The cross section and longitudinal profile surveys as bulleted above would also serve to augment the existing LiDAR data with on-the-ground data to better capture topography in areas requiring additional detail (such as densely vegetated areas). The topographic surveys would be tied into the State Plane Coordinate System and would be sufficient to generate contours at a 1-foot interval. The data collected via the topographic surveys would also be required for generation of stage discharge relationships, as described below.

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- Stage recorders, which measure water temperature and pressure, and vertical stilling wells would be installed in relatively deep portions of the creeks at the locations as shown on Figure 5 *Aquatic Study Plan*. Streamflow measurements would be collected to develop equations to convert the continuous stage recorder data into estimated streamflows (discharge) (see Assumption 3 below). During variable discharge conditions, streamflows would be estimated using a Marsh-McBirney Flo-Mate Model 2000 flow meter and top-setting rod following the procedures described in Module O in Chapter 8 of the SWAMP 2016 SOP (Ode et al. 2016a, 2016b).

Assumptions:

- Assumption 1: Access and entry will be available by the time the hydrogeomorphic surveys would need to be performed. Ideally this would occur in late spring 2023 (after the bioassessment surveys, so as to not compromise the integrity of the aquatic organisms), depending on the hydrologic conditions and the seasonal precipitation patterns. If access is not available by then, hydrogeomorphic data collection would not occur in these areas until fall of 2023 in order to avoid data collection during summer, when conditions in the area are known to be unsafe due to temperature conditions.
- Assumption 2: The desktop hydrologic component of the Hydrogeomorphic Study would occur during early 2023 – no field access would be required.
- Assumption 3: After the initial installation of stage recorders, up to eight separate streamflow measurement surveys would occur in 2023, depending on the variability of precipitation and associated runoff events.
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Deliverables:

The following will be delivered as part of these services:

- Draft Baseline (2023) Hydrogeomorphic Report
- Final Baseline (2023) Hydrogeomorphic Report

The baseline report(s) would include a summary of the monitoring methods and a summary and analysis of the hydrogeomorphic monitoring results. Future (post-2023) reports would include an evaluation of site conditions in the context of the selected performance standards; a discussion of the monitoring results; a discussion of any modifications made to the monitoring methods; a discussion of the previous year's monitoring efforts; and photographs taken from the cross sections and longitudinal profiles.

Fish Community Technical Study – Approx. $112,000

A fish survey that documents the aquatic vertebrate community composition of Stone Corral Creek and Funks Creek. The fish survey would be conducted using appropriate methods (e.g. Meador et al. 1993), or any updated version thereof.

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Assumptions:

- Access and entry will be available by the time the fish surveys would need to be performed. This could be as early as May 2023, depending on the hydrologic conditions and the seasonal precipitation patterns. If access is not available by the times the subject channels go dry (in the foothill environments), baseline fish data collection would not occur in these areas in 2023 (2024 would be the first year of baseline data for these areas).
- There is no strict guidance on establishing the number of sampling reaches for a project such as this, so reaches were co-located with SWAMP bioassessment sites to provide additional habitat and benthic community measures when sampling the fish community.
- A CDFW Scientific Collecting Permit (Specific Use) or Memorandum of Understanding permit would be required to complete the study design as proposed. No fish would be sacrificed as part of the proposed effort.

Deliverables:

The following will be delivered as part of these services:

- Draft 2023 Annual Fish Community Report
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The annual report(s) would include fish community results and would cross-reference SWAMP and Hydrogeomorphic results. Full Version field forms would be provided in appendix format, along with representative photography of the sampling reaches and aquatic vertebrate species that were observed.

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ICF will monitor water temperature in Funks and Stone Corral Creeks during calendar year 2023 as described in Section 6.0 of the Stone Corral Creek and Funks Creek Aquatic Study Plan. Water temperature monitoring will continue beyond 2023 but is not included in this scope.

Assumptions:

- Surveys will begin after land access is obtained. Access and monitoring are assumed to start in April of 2023.
- Temperature probes will be installed April of 2023
- It will take two days to perform site reconnaissance and install probes
- Two people will perform site visits every two months to download data except for when creeks are dry (assumed to be June through October). Visits will likely occur in June, October, and December.
- Data will be organized and graphed in Excel and checked for accuracy soon after download, but no reports other than brief status reports will be provided until summer of 2024.
- It will be possible to install temperature probes at all 10 locations specified in the study plan.
- Data will be provided to Sites Authority and not entered into a state database

Deliverables:

The following will be delivered as part of these services:

Data files and brief status report after each data download

John Spranza

D 916.679.8858 M 818.640.2487

From: Alicia Forsythe <aforsythe@sitesproject.org>
Sent: Friday, October 14, 2022 6:43 AM
To: Spranza, John <john.spranza@hdrinc.com>

Cc: Angela Bezzone <bezzone@mbkengineers.com>
Subject: RE: Aquatic Study Plan for Your Review

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

John – Can you schedule a call next week on this subject for us? I'd like to just talk through each one of these studies, why they are needed, and costs. We might want to have some of the ICF folks on the line also. I have a call with Colusa County and Jerry late next week, so would like to chat before Friday.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Alicia Forsythe
Sent: Friday, October 7, 2022 12:57 PM
To: Spranza, John <John.Spranza@hdrinc.com>
Cc: Angela Bezzone <bezzone@mbkengineers.com>
Subject: RE: Aquatic Study Plan for Your Review

Thanks John. The document looks good and is coming along nicely. I put it on SharePoint and put my comments in the file. Its here:

https://sitesreservoirproject.sharepoint.com/:f:/r/envpermitting/Permits/5937%20Stream%20Flow?csf=1&web=1&e=GfFZtE

Once we have a revised version, I think we should develop a short PowerPoint on it and then schedule calls with CDFW, USFWS and Colusa County to share the presentation and then ask them to review it. We need to coordinate with all three of them prior to finalizing to meet the commitments in the water right term.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Spranza, John <John.Spranza@hdrinc.com>
Sent: Wednesday, September 21, 2022 10:59 AM
To: Alicia Forsythe <aforsythe@sitesproject.org>

Cc: Angela Bezzone <bezzone@mbkengineers.com>
Subject: FW: Aquatic Study Plan for Your Review

Ali,
Attached for your review and comment is the aquatic study plan that ICF developed for Stone Corral and Funks creeks. This version incorporates three rounds of revisions that included comments from myself and MBK.

There is no immediate deadline for your review to be completed, the team will likely need to get your comments by the beginning of November to get them addressed and close this out.

Please let me know if you have any questions.

John

John Spranza

D 916.679.8858 M 818.640.2487

From: Hassrick, Jason <Jason.Hassrick@icf.com>
Sent: Tuesday, September 20, 2022 11:21 AM
To: Spranza, John <John.Spranza@hdrinc.com>
Cc: Briard, Monique <Monique.Briard@icf.com>; Hendrick, Mike <Mike.Hendrick@icf.com>; Peters, Jeff <Jeff.Peters@icf.com>; Huber, Anne <Anne.Huber@icf.com>; Warburton, Manna <Manna.Warburton@icf.com>
Subject: Aquatic Study Plan

Hi John,

Attached is an updated, clean revision of the Funks and Stone Corral creeks aquatic study plan based on your and Angela's feedback. Credit goes to Manna (fish), Jeff (hydro/geomorph), and Anne (temp/contaminants) for shouldering most of the work.

Jason

JASON HASSRICK, Ph.D.
+1.530.312.3275 mobile
icf.com | LinkedIn

From: Spranza, John [John.Spranza@hdrinc.com]
Sent: 10/20/2022 9:10:50 AM
To: Alicia Forsythe [aforsythe@sitesproject.org]
CC: Angela Bezzone [bezzone@mbkengineers.com]
Subject: FW: [EXTERNAL] Re: Sites WRLCM Task 1 Results Briefing

Hi,
I'm going to find some time early next week for us to talk about this and make sure you are good with the initial concerns, proposed solution and data sharing.

John

John Spranza

D 916.679.8858 M 818.640.2487

From: Micko, Steve <Steve.Micko@jacobs.com>
Sent: Thursday, October 20, 2022 8:54 AM
To: Spranza, John <john.spranza@hdrinc.com>
Cc: Angela Bezzone <bezzone@mbkengineers.com>; Greenwood, Marin <Marin.Greenwood@icf.com>
Subject: RE: [EXTERNAL] Re: Sites WRLCM Task 1 Results Briefing

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

John – You okay if I send SWFSC the modified flows that Marin and I suggest?

Best,
Steve

From: Greenwood, Marin <Marin.Greenwood@icf.com>
Sent: Thursday, October 20, 2022 8:26 AM
To: Micko, Steve <Steve.Micko@jacobs.com>
Cc: Angela Bezzone <bezzone@mbkengineers.com>; Hassrick, Jason <jason.hassrick@icf.com>; Wilder, Rick <rick.wilder@icf.com>; Hendrick, Mike <mike.hendrick@icf.com>; Lecky, Jim <jim.lecky@icf.com>; Spranza, John <john.spranza@hdrinc.com>; Leaf, Rob <Rob.Leaf@jacobs.com>; Saadat, Samaneh <Samaneh.Saadat@jacobs.com>
Subject: RE: [EXTERNAL] Re: Sites WRLCM Task 1 Results Briefing

Thanks, Steve, yes, I agree that using column D is the way forward. SWFSC would run Alt 3A with that flow input. No need to also run Alt 3A with column E.

MARIN GREENWOOD | ICF | marin.greenwood@icf.com **| +1.530.400.8081 mobile**

From: Micko, Steve <Steve.Micko@jacobs.com>
Sent: Wednesday, October 19, 2022 16:43
To: Greenwood, Marin <Marin.Greenwood@icf.com>
Cc: Angela Bezzone <bezzone@mbkengineers.com>; Hassrick, Jason <Jason.Hassrick@icf.com>; Wilder, Rick

<Rick.Wilder@icf.com>; Hendrick, Mike <Mike.Hendrick@icf.com>; Lecky, Jim <Jim.Lecky@icf.com>; Spranza, John <john.spranza@hdrinc.com>; Leaf, Rob <Rob.Leaf@jacobs.com>; Saadat, Samaneh <Samaneh.Saadat@jacobs.com>
Subject: RE: [EXTERNAL] Re: Sites WRLCM Task 1 Results Briefing

Hi Marin,

We modified Sac R at Bend Bridge flows for Alt 3A. Please see attached spreadsheet.
Modified Sac R at Bend Bridge flow, per **spatial weighting** of Sites diversions, are provided **in column D**.
Modified Sac R at Bend Bridge flow, per **subtraction of total Sites diversions**, are provided **in column E**.

To be consistent with other analyses in the BA (IOS and OBAN), I propose we modify Sac River at Bend Bridge flow with spatially weighted diversions (column D in the spreadsheet).
That being said, I'm open other opinions on this matter.

Let me know what you think. Upon agreement, we can provide these data to SWFSC/QEDA.

Best,
Steve

From: Ann Marie Osterback - NOAA Affiliate <annmarie.osterback@noaa.gov>
Sent: Wednesday, October 19, 2022 3:46 PM
To: Greenwood, Marin <Marin.Greenwood@icf.com>
Cc: Angela Bezzone <bezzone@mbkengineers.com>; Hassrick, Jason <jason.hassrick@icf.com>; Wilder, Rick <rick.wilder@icf.com>; Hendrick, Mike <mike.hendrick@icf.com>; Lecky, Jim <jim.lecky@icf.com>; Spranza, John <john.spranza@hdrinc.com>; Micko, Steve <Steve.Micko@jacobs.com>; Noble Hendrix <noble@qedaconsulting.com>; Eric Danner - NOAA Federal <eric.danner@noaa.gov>
Subject: [EXTERNAL] Re: Sites WRLCM Task 1 Results Briefing

Hi Marin,

Thanks for reaching out with next steps. I am CC-ing Noble and Eric so they're a part of the conversation as well.

Your approach seems reasonable to me and something we can accommodate within the WRLCM. The WRLCM doesn't make any assumptions about where specifically in the Lower River smolts originate from. We can run either one of the approaches (or both) you define above. Each modified Bend Bridge flow would be treated as a new scenario that we would run for just Alt 3A. Each would require re-running our Lower River Habitat Capacity model and the WRLCM with a new Bend Bridge flow covariate that Jacobs and Steve Micko would provide. We would use the same ePTM and delta/bay habitat capacity results that were already generated for Alt 3A since the DSM2 inputs will not change. Let me know if what I wrote matches your request.

Do you know when the modified Bend Bridge flows will be available?

Thanks!

Ann-Marie

On Tue, Oct 18, 2022 at 2:21 PM Greenwood, Marin <Marin.Greenwood@icf.com> wrote:

> Hello Ann Marie: thanks to you and SWFSC/QEDA team for summarizing WRLCM methods and results last week. To address the issue of riverine flow-survival and consideration of potential Sites diversion effects, I suggest the below for consideration.

The scheme below would adjust Bend Bridge flows under the assumption that the focal area for capturing Sites flow-survival effects is from Red Bluff to Sacramento (I Street Bridge) and that all smolts start at Red Bluff.

- Sacramento (I Street Bridge) is at RM 58
- Sites diversions are at Red Bluff intake (RM 243) and Hamilton City intake (RM 205): distance to Sacramento = 185 miles (Red Bluff) and 147 miles (Hamilton City)
- To account for potential diversion effects, use the following formula to modify Bend Bridge flow:
- Modified Bend Bridge flow = Bend Bridge flow minus (Sites diversions at Red Bluff intake) minus (147/185)*(Sites diversions at Hamilton City intake)
  - The latter term accounts for the Hamilton City intake being 79% (i.e., 147/185) of the distance to Sacramento from Red Bluff

Note that it may be more conservative/justified to simply subtract the Hamilton City+Red Bluff Sites diversions from the Bend Bridge flows, if your team indicates that most smolts begin their migration downstream of both Sites intakes.

Please let us know your thoughts and if you have any follow-up questions. Steve Micko and the Jacobs team is preparing both sets of Bend Bridge flows mentioned above (i.e., 1) modified with the weighting; 2) simply subtracting total Sites diversions from Bend Bridge flows), so they'd both be available. The focus would be just on Alternative 3A, which would be compared to the already completed existing conditions run.

MARIN GREENWOOD | **ICF** | marin.greenwood@icf.com | **+1.530.400.8081 mobile**

-----Original Appointment-----
From: Spranza, John <John.Spranza@hdrinc.com>
Sent: Wednesday, September 28, 2022 09:09
To: Spranza, John; Alicia Forsythe; Ann Marie Osterback - NOAA Affiliate
Cc: Angela Bezzone; Greenwood, Marin; Hassrick, Jason; Wilder, Rick; Hendrick, Mike; Lecky, Jim
Subject: Sites WRLCM Task 1 Results Briefing
When: Tuesday, October 11, 2022 14:00-15:00 (UTC-08:00) Pacific Time (US & Canada).
Where: Microsoft Teams Meeting

Science Center to present results of Task 1 life cycle model.

Microsoft Teams meeting

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--
Ann-Marie K. Osterback, Ph.D. (she/her/hers)
Assistant Project Scientist
University of California, Santa Cruz & NMFS Southwest Fisheries Science Center
110 McAllister Way
Santa Cruz, CA 95060
(408) 634-8151 (Google Voice)
annmarie.osterback@noaa.gov

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From: Luu, Henry [Henry.Luu@hdrinc.com]
Sent: 10/21/2022 9:38:07 AM
To: Marcia Kivett [MKivett@sitesproject.org]
Subject: RE: New submission on HubSpot Form "Sites Reservoir Contact Form - HubSpot Form"

Definitely. I plan on responding to James after the RC meeting.

Henry H. Luu, PE
D 916.679.8857 M 916.754.7566

hdrinc.com/follow-us

From: Marcia Kivett <MKivett@sitesproject.org>
Sent: Friday, October 21, 2022 9:25 AM
To: Luu, Henry <henry.luu@hdrinc.com>
Subject: Re: New submission on HubSpot Form "Sites Reservoir Contact Form - HubSpot Form"

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Can you bcc me on your response?

From: JP Robinette <jrobinette@sitesproject.org>
Sent: Friday, October 21, 2022 9:23 AM
To: Luu, Henry <Henry.Luu@hdrinc.com>
Cc: Marcia Kivett <MKivett@sitesproject.org>
Subject: Re: New submission on HubSpot Form "Sites Reservoir Contact Form - HubSpot Form"

Henry, yes, please coordinate and use your contact information. Thanks!

From: Luu, Henry <Henry.Luu@hdrinc.com>
Sent: Friday, October 21, 2022 9:21 AM
To: JP Robinette <jrobinette@sitesproject.org>
Cc: Marcia Kivett <MKivett@sitesproject.org>
Subject: RE: New submission on HubSpot Form "Sites Reservoir Contact Form - HubSpot Form"

JP, I'm happy to coordinate with James and connect him with our designers. A potential response:

James,

The Sites Project is currently advancing engineering efforts towards a 30% level of design. The current assumptions related to the Project pumping and generating facilities are described within the RDEIR/SDEIS that is available to the public at https://sitesproject.org/revised-draft-environmental-impact-report-supplemental-draft-environmental-impact-statement/. Design details are being defined and will be optimized as the Project approaches construction. We appreciate your outreach and are happy to engage in conversations with your team regarding project needs. Please feel free to coordinate with <insert contact info – JP or Henry>.

Henry H. Luu, PE
D 916.679.8857 M 916.754.7566

hdrinc.com/follow-us

From: Marcia Kivett <MKivett@sitesproject.org>
Sent: Friday, October 21, 2022 5:59 AM
To: JP Robinette <jrobinette@sitesproject.org>; Luu, Henry <henry.luu@hdrinc.com>
Subject: Re: New submission on HubSpot Form "Sites Reservoir Contact Form - HubSpot Form"

JP/Henry, who should answer the below question?

From: HubSpot Forms <noreply@hubspot.com>
Sent: Thursday, October 20, 2022 11:44 AM
To: Sarah Rossetto <srossetto@katzandassociates.com>
Subject: New submission on HubSpot Form "Sites Reservoir Contact Form - HubSpot Form"

New submission on HubSpot Form "Sites Reservoir Contact Form - HubSpot Form"

Page submitted on: Contact - Sites Reservoir

Email:

james.slocum@xylem.com

First Name:

James

Message:

Who I speak with concerning the potential pumps required for this project? I've supplied some of the largest pumps to DWR and MWD in the past would like a better understanding of the pumps considered as this project moves forward. Thank you

View in HubSpot

- **CONTACT**
- James (james.slocum@xylem.com)

HubSpot, Inc.
25 First Street, 2nd Floor
Cambridge, MA 02141

From: Sarah Rossetto [srossetto@katzandassociates.com]
Sent: 10/21/2022 5:30:44 PM
To: Marcia Kivett [MKivett@sitesproject.org]
Subject: RE: New submission on HubSpot Form "Sites Reservoir Contact Form - HubSpot Form"

Thank you so much! Have a great weekend.

From: Marcia Kivett <MKivett@sitesproject.org>
Sent: Friday, October 21, 2022 10:26 AM
To: Sarah Rossetto <srossetto@katzandassociates.com>; Sites Project <info@sitesproject.org>
Subject: Fwd: New submission on HubSpot Form "Sites Reservoir Contact Form - HubSpot Form"

Hi Sarah,

Please see the response to the question below from Henry.

Sent from my iPad

Begin forwarded message:

From: "Luu, Henry" <Henry.Luu@hdrinc.com>
Date: October 21, 2022 at 1:18:37 PM EDT
To: james.slocum@xylem.com
Subject: RE: New submission on HubSpot Form "Sites Reservoir Contact Form - HubSpot Form"

Hello James,

The Sites Project is currently advancing engineering efforts towards a 30% level of design. The current assumptions related to the Project pumping and generating facilities are described within the RDEIR/SDEIS that is available to the public at https://sitesproject.org/revised-draft-environmental-impact-report-supplemental-draft-environmental-impact-statement/. Design details are being defined and will be optimized as the Project approaches construction. We appreciate your outreach and are happy to engage in conversations with your team regarding project needs. Please feel free to contact me if you would like to schedule a meeting or have further questions.

Henry H. Luu, PE
D 916.679.8857 M 916.754.7566

hdrinc.com/follow-us

From: HubSpot Forms <noreply@hubspot.com>
Sent: Thursday, October 20, 2022 11:44 AM
To: Sarah Rossetto <srossetto@katzandassociates.com>
Subject: New submission on HubSpot Form "Sites Reservoir Contact Form - HubSpot Form"

[redacted]

HubSpot

New submission on HubSpot Form "Sites Reservoir Contact Form - HubSpot Form"

Page submitted on: Contact - Sites Reservoir

Email:

james.slocum@xylem.com

First Name:

James

Message:

Who I speak with concerning the potential pumps required for this project? I've supplied some of the largest pumps to DWR and MWD in the past would like a better understanding of the pumps considered as this project moves forward. Thank you

View in HubSpot

- **CONTACT**

1. James (james.slocum@xylem.com)

Video Summary

Interview-heavy video describing ongoing impacts of drought on California communities. These impacts underscore how important it is to capture water when it's abundant. And there ARE times when it is abundant.

Video Outline

Key Points for Voiceover

- Drought is ravaging California communities.
- Farmers are fallowing their fields.
- Rural communities no longer have reliable, clean drinking water.
- Towns that rely heavily on revenue from agriculture are cutting back on basic community services.

Interview #1

Family farmer speaking directly to impacts – acres fallowed, describing impacts to their production, to their families, to their employees, etc.

Visuals: View of farm, farmer's home, close up of face – need to show human aspect of the drought

Interview #2

Farm worker describing how their day to day has changed as drought continues, importance of farming/food production to their families, communities.

Visuals: Family eating meal at table, view of fallowed fields, working with hands, view of crops/food

Interview #3

Agricultural community firefighter/police officer/teacher speaking to what they are seeing in their community, loss of tax revenue and the impacts that has on basic social services/public safety etc., fire suppression concerns.

Visuals: Community/town, schools, firetruck. Show individual being interviewed in their uniform or professional attire.

Key Points for Voiceover

- This is not just a rural issue, or even just a California issue. Over a third of the country's vegetables and three-quarters of the country's fruits and nuts are grown in California.
- Food security
- And across California, the landscape is changing as water supplies dwindle.

Interview #4

Urban water agency describing their impacts. Water comes out of the tap when customers turn it but cities are not without impacts. Need specific impacts noted.

Visuals: Depends on agency and content.

Key Points for Voiceover

- Because of these devastating impacts, California MUST capture water when it is abundant
- And the ARE times when there is simply more water than our current system can handle

Visuals: Footage of high flows, flooding (could we show Oroville??)

Interview #5

Sites board member speaking to how we've seen incredibly high flows on the Sacramento River, but today it's barely moving. They water is there, but we need to be able to capture it. That's where Sites comes in.

Visuals: High flows and then current footage

Key Points for Voiceover:

- Sites Reservoir will store water from these high flow periods and save it for dry years, like the one we are in now.
- The water will go to people, the environment and farms.
- We don't have any storage like Sites Reservoir today. This is a new way of preparing for droughts.
- And as climate change worsens, Sites will provide even more benefit.

To learn more, visit www.sitesproject.org.

From: JP Robinette [jrobinette@sitesproject.org]
Sent: 10/24/2022 3:41:18 PM
To: Cheyanne Harris [CHarris@BrwnCald.com]

Do you recall when the RC/AB decided to recirculate the EIR/EIS?

From: Alicia Forsythe [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=A6CDF06A7E904B65BAA21702A82AD329-AFORSYTHE]
Sent: 10/24/2022 6:29:36 PM
To: Spranza, John [john.spranza@hdrinc.com]; steve.micko@jacobs.com; Angela Bezzone [bezzone@mbkengineers.com]
Subject: FW: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Hi John, Steve and Angela – Does the following dates/times work for you for a meeting with CDFW on the "without exchanges" modeling? I'd like to get 1.5 hours with CDFW.

10/28: 10-noon
10/31: 2:30-4
11/2: 10-12:30
11/4:12-4

John, can you also check in with the ICF team? I think Sophie, Rick and Mike were the critical players – if I remember correctly.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Davis-Fadtke, Kristal@Wildlife <Kristal.Davis-Fadtke@wildlife.ca.gov>
Sent: Monday, October 24, 2022 4:29 PM
To: Alicia Forsythe <aforsythe@sitesproject.org>; Uttley, Paige@Wildlife <Paige.Uttley@wildlife.ca.gov>; Williams, Jonathan@Wildlife <Jonathan.Williams@wildlife.ca.gov>
Subject: RE: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Hi Ali,

My apologies for the delay in getting back to you. We are available during the following times:
10/28: 10-1:30
10/31: 1-4
11/2: 10-12:30
11/4:12-4

Thanks,

Kristal

From: Alicia Forsythe <aforsythe@sitesproject.org>
Sent: Friday, October 14, 2022 10:57 AM

To: Davis-Fadtke, Kristal@Wildlife <Kristal.Davis-Fadtke@wildlife.ca.gov>; Uttley, Paige@Wildlife <Paige.Uttley@wildlife.ca.gov>; Williams, Jonathan@Wildlife <Jonathan.Williams@wildlife.ca.gov>
Subject: RE: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Hello CDFW Team – We'd like to schedule a call with you all to review and discuss the "no exchanges" modeling. Would it be possible if you all provide a few dates and times that work for the CDFW team for a 1.5 hour meeting on this topic?

Thanks all!

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Alicia Forsythe
Sent: Wednesday, September 28, 2022 9:47 PM
To: Angela Bezzone <bezzone@mbkengineers.com>; Davis-Fadtke, Kristal@Wildlife <Kristal.Davis-Fadtke@wildlife.ca.gov>; Uttley, Paige@Wildlife <Paige.Uttley@wildlife.ca.gov>; Spranza, John <john.spranza@hdrinc.com>; Williams, Jonathan@Wildlife <Jonathan.Williams@wildlife.ca.gov>; steve.micko@jacobs.com; Rob Leaf <Rob.Leaf@jacobs.com>; Hendrick, Mike <Mike.Hendrick@icf.com>; Wilder, Rick <Rick.Wilder@icf.com>
Subject: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Hello all – Earlier this month, we had a call to discuss the possibility of what the Project may look like if exchanges with Shasta Lake and Lake Oroville were not implemented in any given year. We have completed a CALSIM II sensitivity analysis of this and the results are attached in the trend reporting spreadsheet.

The attached trend reporting spreadsheet contains the following modeled results:

- NAA 041122 2035CT – No Action Alternative, 2035 CT climate change hydrology
- ALT 3A 041122 2035CT – Alternative 3A (including current diversion criteria which includes 10,700 cfs Oct-June at Wilkins Slough), 2035 CT climate change hydrology
- ALT 3A 041122 2035CT without Shasta, nor Oroville Exchanges sensitivity analysis – Same Alternative 3A as above but without exchanges with both the CVP and SWP

It is important to note that the Authority has not changed its project description – the Project continues to include exchanges. Exchanges are voluntary and any party can choose to not conduct an exchange in a given year. We completed the attached CALSIM II sensitivity analysis to have a more informed dialogue around environmental changes that may occur in the event that exchanges are not implemented in any given year or in a series of years. As its difficult to "turn off" exchanges in only some years, the attached CALSIM II analysis was completed without exchanges in all years. This represents more of a bookend, because as noted above, exchange are part of the Project and would likely only not be implemented on a more year-by-year basis (for example, if there was too much risk that exchanged water would spill as flood water from Shasta, the Authority may elect to not participate in a given year).

Also important to note is that the modeling was completed with Alternative 3A, which includes up to 25% Reclamation investment in Sites (modeling assumed 25%). Thus, there continues to be interaction of Sites and the CVP operations due to Reclamation's investment.

We haven't yet summarized these runs. They are hot off the press. We thought we would get these out for review so folks can begin to look at the information.

Kristal, Paige and Jon – I'll let you all distribute to your staff as you see appropriate.

I'll reach back out shortly and we can get a call scheduled in 2 to 3 weeks to review the results and talk about next steps.

Thanks all!

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Alicia Forsythe [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=A6CDF06A7E904B65BAA21702A82AD329-AFORSYTHE]
Sent: 10/24/2022 6:30:04 PM
To: Davis-Fadtke, Kristal@Wildlife [Kristal.Davis-Fadtke@wildlife.ca.gov]; Uttley, Paige@Wildlife [Paige.Uttley@wildlife.ca.gov]; Williams, Jonathan@Wildlife [Jonathan.Williams@wildlife.ca.gov]
Subject: RE: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Thanks Kristal. I am checking in with the Sites team and will circle back shortly.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Davis-Fadtke, Kristal@Wildlife <Kristal.Davis-Fadtke@wildlife.ca.gov>
Sent: Monday, October 24, 2022 4:29 PM
To: Alicia Forsythe <aforsythe@sitesproject.org>; Uttley, Paige@Wildlife <Paige.Uttley@wildlife.ca.gov>; Williams, Jonathan@Wildlife <Jonathan.Williams@wildlife.ca.gov>
Subject: RE: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Hi Ali,

My apologies for the delay in getting back to you. We are available during the following times:
10/28: 10-1:30
10/31: 1-4
11/2: 10-12:30
11/4:12-4

Thanks,

Kristal

From: Alicia Forsythe <aforsythe@sitesproject.org>
Sent: Friday, October 14, 2022 10:57 AM
To: Davis-Fadtke, Kristal@Wildlife <Kristal.Davis-Fadtke@wildlife.ca.gov>; Uttley, Paige@Wildlife <Paige.Uttley@wildlife.ca.gov>; Williams, Jonathan@Wildlife <Jonathan.Williams@wildlife.ca.gov>
Subject: RE: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Hello CDFW Team – We'd like to schedule a call with you all to review and discuss the "no exchanges" modeling. Would it be possible if you all provide a few dates and times that work for the CDFW team for a 1.5 hour meeting on this topic?

Thanks all!

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Alicia Forsythe
Sent: Wednesday, September 28, 2022 9:47 PM
To: Angela Bezzone <bezzone@mbkengineers.com>; Davis-Fadtke, Kristal@Wildlife <Kristal.Davis-Fadtke@wildlife.ca.gov>; Uttley, Paige@Wildlife <Paige.Uttley@wildlife.ca.gov>; Spranza, John <john.spranza@hdrinc.com>; Williams, Jonathan@Wildlife <Jonathan.Williams@wildlife.ca.gov>; steve.micko@jacobs.com; Rob Leaf <Rob.Leaf@jacobs.com>; Hendrick, Mike <Mike.Hendrick@icf.com>; Wilder, Rick <Rick.Wilder@icf.com>
Subject: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Hello all – Earlier this month, we had a call to discuss the possibility of what the Project may look like if exchanges with Shasta Lake and Lake Oroville were not implemented in any given year. We have completed a CALSIM II sensitivity analysis of this and the results are attached in the trend reporting spreadsheet.

The attached trend reporting spreadsheet contains the following modeled results:

- NAA 041122 2035CT – No Action Alternative, 2035 CT climate change hydrology
- ALT 3A 041122 2035CT – Alternative 3A (including current diversion criteria which includes 10,700 cfs Oct-June at Wilkins Slough), 2035 CT climate change hydrology
- ALT 3A 041122 2035CT without Shasta, nor Oroville Exchanges sensitivity analysis – Same Alternative 3A as above but without exchanges with both the CVP and SWP

It is important to note that the Authority has not changed its project description – the Project continues to include exchanges. Exchanges are voluntary and any party can choose to not conduct an exchange in a given year. We completed the attached CALSIM II sensitivity analysis to have a more informed dialogue around environmental changes that may occur in the event that exchanges are not implemented in any given year or in a series of years. As its difficult to "turn off" exchanges in only some years, the attached CALSIM II analysis was completed without exchanges in all years. This represents more of a bookend, because as noted above, exchange are part of the Project and would likely only not be implemented on a more year-by-year basis (for example, if there was too much risk that exchanged water would spill as flood water from Shasta, the Authority may elect to not participate in a given year).

Also important to note is that the modeling was completed with Alternative 3A, which includes up to 25% Reclamation investment in Sites (modeling assumed 25%). Thus, there continues to be interaction of Sites and the CVP operations due to Reclamation's investment.

We haven't yet summarized these runs. They are hot off the press. We thought we would get these out for review so folks can begin to look at the information.

Kristal, Paige and Jon – I'll let you all distribute to your staff as you see appropriate.

I'll reach back out shortly and we can get a call scheduled in 2 to 3 weeks to review the results and talk about next steps.

Thanks all!

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Newens, Richard [Richard.Newens@hdrinc.com]
Sent: 10/24/2022 8:04:47 PM
To: JP Robinette [jrobinette@sitesproject.org]; Cheyanne Harris [CHarris@BrwnCald.com]
Subject: CBD Updates
Attachments: CBD_Toolbox_Working_2022_1024.docx

Hi JP and Cheyanne:

Attached is a working Word document that has notes regarding this entire exercise that will also double as a progress tracking tool for our discussions. I still need to add some items but wanted to get something out to you prior to our 11AM discussion tomorrow (10/25). Please let me know if there are any questions.

Thanks,
Richard

Richard Newens, M.S.

HDR
2379 Gateway Oaks Dr., #200
Sacramento, CA 95833
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Contacts of Interest (working)

Commented [NR1]: Need to confirm contact information and add new folks as they are identified.

Goal is to compile list of key contacts to eventually communicate benefits of Sites releases (or key contacts to help facilitate communication with local landowners/farmers).

Bruce Houdesheldt – Sacramento Valley Water Quality Coalition (SVWQC)

Cell : 916-952-1287
Phone: 916-442-8333
Email: BruceH@norcalwater.org

Tim Johnson – Cal Rice Commission CEO

Paul Buttner – Cal Rice Commission Environmental Affairs Manager

Bruce Linquist – UC Davis Rice Specialist

Phone: (530) 752-3125
E-mail: balinquist@ucdavis.edu

Toolbox (working)

Goal to develop "toolbox" to use for communicating with Sites project area stakeholders regarding water quality in the region and CBD.

CBD Constituents of Concern

- The CBD is a man-made channel in Glenn, Colusa, and Yolo counties designed to convey agricultural return flows and storm runoff from the Colusa Basin to the Sacramento River at the Knights Landing Outfall Gates (KLOG).
- The CBD receives inflow from local creeks (inc. Funks and Stone Corral Creeks) and discharge and runoff from the Colusa agricultural basin.

Constituent	**Significance**	**Summary**
Metals	CBD 303(d) listed for some metals	Sites releases expected to decrease metals concentrations in CBD.
Mercury		
Pesticides	Pesticides in irrigation discharge and storm runoff from agricultural input.	
Dissolved Oxygen		
Nutrients		
Salinity		
Temperature		

Commented [NR2]: ICF has done thorough analyses for the final EIR/EIS. RN needs to work with ICF/John Spranza to accurately translate summaries for various stakeholders.

Sites_CBD _Rice Com Summary Brief

Commented [NR3]: Notes from discussion between Sites (John S) and Rice Commission regarding water quality in the CBD and effects from Sites releases.

Valley-Wide Water Quality Initiatives

CV Salts

Prioritization and Optimization Salt Management Study (LWA and GEI Consultants)

- CV Salts is working to develop salinity targets for the entire Central Valley
- Next step is to work on identifying study area(s) that represent different Central Valley hydrologic regions – factors include willingness of local stakeholder participation, cropping, water supply source, rainfall, soil characteristics, local water quality
- November 2022 Executive Committee meeting will include presentation to Committee regarding proposed selection criteria

Maps

Commented [NR4]: Preliminary maps – need to get input on what can be added to improve usability.

- Sac Valley WQ Coalition monitoring sites and drainage areas

ATTACHMENT_SVWQC_Monitoring_DR/

- Rice Coalition monitoring sites and parcels

ATTACHMENT_Rice_Lands_DRAFT.pdf

BEFORE THE BOARD OF DIRECTORS OF THE SITES PROJECT AUTHORITY

RESOLUTION NO. 2022-___

In the Matter of:

SITES PROJECT AUTHORITY RESOLUTION PROVIDING FOR THE PRIORITIZATION OF USE FOR SITES PROJECT REVENUES

WHEREAS, the Board of Directors of the Sites Project Authority (the "Board" and the "Sites Authority," respectively), pursuant to the Sites Authority's procedures and the California Government Code, from time to time, may adopt policy for the administration of the Sites Authority;

WHEREAS, the Sites Authority is developing a water supply and storage project commonly referred to as the "Sites Reservoir Project" and related facilities;

WHEREAS, the Sites Authority expects to receive certain revenues (as further defined below, the "Revenues") from water supply and storage contractors, the California Department of Water Resources, the United States Bureau of Reclamation and others; and

WHEREAS, the Board, by adoption of this Master Resolution, desires to adopt guidance providing for the prioritization of use for such Revenues.

NOW, THEREFORE BE IT RESOLVED, by this Board of Directors:

Section 1. **<u>Recitals</u>**. The facts stated in the recitals above are true and correct, and the Board so finds and determines.

Section 2. **<u>Definitions</u>.** Unless the context otherwise requires, the terms defined in this section shall for all purposes hereof and of any amendment hereof or supplement hereto and of any opinion or report or other document mentioned herein or therein have the meanings defined herein. Such definitions are equally applicable to both the singular and plural forms of any of the terms defined herein:

(a) <u>Authorized Officer.</u> "Authorized Officer" means (i) the Executive Director of the Sites Authority or, if there is no officer designated as the Executive Director, the Treasurer of the Sites Authority or (ii) the highest ranking member of the finance staff of the Sites Authority; and, in each case, the written designee thereof.

(b) <u>Benefits and Obligations Contracts</u>. "Benefits and Obligations Contracts" means water supply and water storage contracts entered into by the Sites Authority with agricultural, municipal and/or industrial water providers with respect to the Project but shall not include any agreement or arrangement for water service or water storage with DWR or Reclamation.

(c) Board. "Board" means the Board of Directors of the Sites Authority.

(d) DWR. "DWR" means the California Department of Water Resources, including any successor thereto.

(e) Fiscal Year. "Fiscal Year" means the period beginning on January 1 of each year and ending on the last day of December of such year, or any other accounting period hereafter selected and designated by the Board as the Fiscal Year of the Sites Authority.

(f) Fixed Operation and Maintenance Costs. "Fixed Operation and Maintenance Costs" mean Operation and Maintenance Costs which do not vary by the amount of water diverted, stored or released from the Project, as more particularly determined in accordance with the Benefits and Obligations Contracts.

(g) Fixed Project Costs. "Fixed Project Costs" mean capital costs, including debt service on Project Obligations, reserves established for the payment of debt service on Project Obligations, other amounts due under the Project Obligations and other payments under the Benefits and Obligations Contracts other than payments constituting Fixed Operation and Maintenance Costs and Variable Operation and Maintenance Costs of the Project, as more particularly determined in accordance with the Benefits and Obligations Contracts.

(h) Joint Powers Agreement. "Joint Powers Agreement" means the Fourth Amended and Restated Joint Exercise of Powers Agreement, effective March 23, 2017, by and among the parties set forth on the execution page thereof, as amended and supplemented from time-to-time in accordance therewith.

(i) Liquidity Reserve. "Liquidity Reserve" means "Fund _____" maintained by the Sites Authority in accordance with Section 3.5 hereof.

(j) Liquidity Reserve Requirement. "Liquidity Reserve Requirement" means, for any Fiscal Year, an amount equal to (i) 10% of the debt service payable during such Fiscal Year with respect to all Project Obligations outstanding on the first day of such Fiscal Year, plus (ii) 10% of total Fixed Operation and Maintenance Costs payable during such Fiscal Year.

(k) Master Resolution. "Master Resolution" means this resolution as this resolution may be amended from time-to-time in accordance with Section 4.3 hereof.

(l) Net Revenues. "Net Revenues" means, for any Fiscal Year, Revenues minus Operation and Maintenance Costs.

(m) Operation and Maintenance Costs. "Operation and Maintenance Costs" means costs spent or incurred for operation and maintenance of the Project, calculated in accordance with Generally Accepted Accounting Principles; but excluding in all cases depreciation, replacement and obsolescence charges or reserves therefor and amortization of intangibles, including amortization of water rights, unrealized losses on investments, write offs of the value of impaired assets and bookkeeping entries of similar nature as well as any other non-cash expenses.

(n) Project. "Project" means a water supply and storage project commonly referred to as the Sites Reservoir Project, the entire physical infrastructure and capital improvements to be designed, constructed, commissioned, and completed by the Sites Authority.

(o) Project Obligations. "Project Obligations" means any bonds, notes, loans or other evidences of indebtedness issued or incurred by or on behalf of the Sites Authority with respect to the Project.

(p) Reclamation. "Reclamation" means the United States of America, Department of the Interior, Bureau of Reclamation, including any successor thereto.

(q) Revenue Fund. "Revenue Fund" means the "Fund __-____________" maintained by the Sites Authority in accordance with Section 3.1 hereof, and including any other funds and accounts into which the Sites Authority deposits Revenues.

(r) Revenues. "Revenues" means, with respect to any Fiscal Year, all amounts received by the Sites Authority with respect to the Project, including but not limited to (i) (A) amounts received by the Sites Authority in connection with water supply and storage contracts with respect to the Project, including the Benefits and Obligations Contracts, (B) amounts received by the Sites Authority in connection with agreements or other arrangements entered into with DWR and Reclamation with respect to the Project, (C) other amounts received by the Sites Authority related to the operation of the Project, (D) transfers from the Liquidity Reserve as provided in Section 3.5 hereof and (E) other amounts received by the Sites Authority to the extent designated by the Board as "Revenues", and (ii) all income from the investment of any Revenues in the (A) Revenue Fund, (B) Liquidity Reserve, and (C) any other fund or account created with respect to any Project Obligation to the extent investment earnings thereon are required by the terms of such Project Obligation to be transferred to the Revenue Fund or the Liquidity Reserve.

(s) Sites Authority. "Sites Authority" means the Sites Project Authority, an independent joint powers authority established pursuant to the Joint Exercise of Powers Agreement to exercise powers common to the Sites Authority members to, among other things, effectively study, promote, develop, design, finance, acquire, construct, manage, and operate Sites Reservoir Project and related facilities such as recreation and power generation.

(t) Variable Operation and Maintenance Costs. "Variable Operation and Maintenance Costs" means Operation and Maintenance Costs which vary by the amount of water diverted, stored or released from the Project, as more particularly determined in accordance with the Benefits and Obligations Contracts.

Section 3. Prioritization of Use for Revenues.

Section 3.1. Revenue Fund.

The Sites Authority hereby continues and agrees to maintain, so long as any Project Obligations remain unpaid, the Revenue Fund to be held by the Sites Authority. Amounts in the Revenue Fund shall be disbursed, allocated and applied solely to the uses and purposes hereinafter described in this Master Resolution, and shall be accounted for separately and apart from all other accounts, funds, money or other resources of the Sites Authority.

All Revenues and all amounts on deposit in the Revenue Fund are hereby allocated to the payment of the Operation and Maintenance Costs, Project Obligations and other costs as set forth in Section 3.2. The Revenues and all amounts on deposit in the Revenue Fund shall not be used for any other purpose while any Project Obligations remain unpaid. Any investment earnings on amounts on deposit in the Revenue Fund shall be retained in the Revenue Fund.

Section 3.2. Prioritization of Use for Revenues.

All Revenues received by the Sites Authority shall be deposited into the Revenue Fund established and held by the Sites Authority pursuant to Section 3.1 hereof and allocated in the following priority:

a. to the payment of Operation and Maintenance Costs;

b. to the payment of senior lien Project Obligations;

c. to replenish bond reserve funds established for senior Project Obligations, if any;

d. to the payment of subordinate lien Project Obligations;

e. to replenish bond reserve funds established for subordinate lien Project Obligations, if any;

f. to restore the amount on deposit in the Liquidity Reserve to the Liquidity Reserve Requirement; and

g. as long as the Sites Authority determines there will be sufficient Revenues to make the payments set forth in (a) through (f) above, to pay any other Project costs, including Fixed Project Costs not previously paid under (b) through (e) above, permitted by law, under the Joint Powers Agreement and the Benefits and Obligations Contracts.

Section 3.3. Project Obligations. The Sites Authority shall not issue or incur any additional Project Obligations unless the Sites Authority has certified that (i) no material event of default has occurred under any Project Obligations and is continuing, (ii) each of the Benefits and Obligations Contracts is in full force and effect, and (iii) such additional Project Obligation is entitled to the benefits this Master Resolution.

Section 3.4. Rate Sufficiency. (a) The Sites Authority hereby covenants to establish charges under the Benefits and Obligations Contracts at the beginning of each Fiscal Year which, together with Revenues billed and collected with respect to such Fiscal Year prior to the commencement of such Fiscal Year and with other Sites Authority Revenues, are reasonably expected to be at least sufficient to yield Net Revenues, together with amounts on deposit in the Liquidity Reserve, of at least 1.00 times Project Obligation debt service payable during such Fiscal Year.

(b) So long as the Sites Authority has complied with its obligations set forth in subsection (a) above, the failure of Net Revenues to meet the threshold in the prior subsection (a) with respect to a Fiscal Year shall not constitute a default or an event of default hereunder so long as the Authority has complied with its obligation set forth in clause (a) above with respect to the following Fiscal Year.

Section 3.5. Liquidity Reserve. The Sites Authority hereby covenants and agrees to maintain, so long as any Project Obligations remain outstanding, the Liquidity Reserve to be held by the Sites Authority. Amounts in the Liquidity Reserve shall be disbursed, allocated and applied solely to the uses and purposes hereinafter described in this Master Resolution, and shall be accounted for separately and apart from all other accounts, funds, money or other resources of the Sites Authority.

So long as any Project Obligations remain outstanding, the Sites Authority shall maintain in the Liquidity Reserve an amount equal to the Liquidity Reserve Requirement. On or prior to the date of incurrence of any Project Obligations, the Sites Authority shall deposit to the Liquidity Reserve an amount necessary, if any, to increase the amount on deposit in the Liquidity Reserve to the Liquidity Reserve Requirement, including in the calculation of the Liquidity Reserve Requirement any debt service payable during the then-current Fiscal Year with respect to such Project Obligations.

In the event of any deficiency in the Liquidity Reserve, the Sites Authority shall replenish such deficiency in accordance with Section 3.2 hereof.

Amounts in the Liquidity Reserve shall be withdrawn by the Sites Authority upon the written direction of an Authorized Officer solely for the purposes set forth in Sections 3.2(a), 3.2(e) and 3.2(g) hereof. Any amounts withdrawn from the Liquidity Reserve shall be deposited into the Revenue Fund and applied pursuant to Section 3.2 hereof. Any amounts in the Liquidity Reserve in excess of the Liquidity Reserve Requirement on the last day of any Fiscal Year may be transferred in accordance with the written direction of an Authorized Officer from the Liquidity Reserve to the Revenue Fund and applied pursuant to Section 3.2 hereof. Any investment earnings on amounts on deposit in the Liquidity Reserve shall be transferred on the last day of any Fiscal Year into the Revenue Fund and applied pursuant to Section 3.2 hereof unless such transfer would cause the amount on deposit in the Liquidity Reserve to be less than the Liquidity Reserve Requirement.

Section 3.6. Enforcement Provisions. The Sites Authority hereby covenants to enforce the Benefits and Obligations Contracts and other agreements pursuant to which the Sites Authority receives Revenues with other parties, including Reclamation and DWR, to the fullest extent necessary to assure sufficient Revenues will be available to pay all amounts with respect to Operation and Maintenance Costs and Project Obligations when due.

Section 3.7. Billing Provisions. The Sites Authority hereby covenants to bill (i) all amounts payable as Fixed Operation and Maintenance Costs under the Benefits and Obligations Contracts annually in advance in accordance with the Benefits and Obligations Contracts, (ii) all amounts payable as Variable Operation and Maintenance Costs semi-annually in advance in accordance with the Benefits and Obligations Contracts, (iii) all amounts due under Project Obligations annually in advance in accordance with the Benefits and Obligations Contracts, and (iv) all Fixed Project Costs, other than amounts due under Project Obligations, semi-annually in advance in accordance with the Benefits and Obligations Contracts.

Section 3.8. Investment. All amounts on deposit in the Revenue Fund and the Liquidity Reserve shall be invested in accordance with the Sites Authority investment policy as in effect from time-to-time.

Section 4. Miscellaneous.

Section 4.1. Benefits of this Master Resolution Limited to Certain Parties. Nothing contained herein, expressed or implied, is intended to give any person other than the Sites Authority or the parties to a Project Obligation any right, remedy or claim under or pursuant hereto, and any agreement or covenant required herein to be performed by or on behalf of the Sites Authority shall be for the sole and exclusive benefit of such other parties.

Section 4.2. Successor is Deemed Included in all References to Predecessor. Whenever the Sites Authority is named or referred to herein, such reference shall be deemed to include the successor to the powers, duties and functions that are presently vested in the Sites Authority, and all agreements and covenants required hereby to be performed by or on behalf of the Sites Authority shall bind and inure to the benefit of the successors thereof whether so expressed or not.

Section 4.3. Amendments. Except as may be otherwise provided in a Project Obligation, the Sites Authority may amend the provisions of this Master Resolution in accordance with the provisions of the Joint Powers Agreement and the bylaws of the Authority in effect from time-to-time.

Section 4.4. Partial Invalidity. If any one or more of the agreements or covenants or portions thereof required hereby to be performed by or on the part of the Sites Authority shall be contrary to law, then such agreement or agreements, such covenant or covenants or such portions thereof shall be null and void and shall be deemed separable from the remaining agreements and covenants or portions thereof and shall in no way affect the validity hereof. The Sites Authority hereby declares that it would have adopted this Master Resolution, and each and every other article, section, paragraph, subdivision, sentence, clause and phrase hereof irrespective of the fact that any one or more articles, sections, paragraphs, subdivisions, sentences, clauses or phrases hereof or the application thereof to any person or circumstance may be held to be unconstitutional, unenforceable or invalid.

Section 4.5. Repeal of Inconsistent Resolutions. Any resolution of the Sites Authority and any part of any resolution inconsistent herewith is hereby repealed to the extent of such inconsistency.

Section 4.6. Additional Covenants. Nothing in this Master Resolution shall prohibit the Sites Authority from entering into additional covenants with or for the benefit of the owners of Project Obligations.

Section 4.7. Effect. This Master Resolution shall take effect immediately.

PASSED, APPROVED AND ADOPTED by the Board of Directors of the Sites Project Authority this 21st day of November 2022 by the following vote:

AYES: Directors

NOES: Directors

ABSENT: Directors

ABSTAIN: Directors

I, Fritz Durst, Chair Authority Board of the Sites Project Authority, do hereby certify that the resolution set forth above is true and accurate copy of the resolution adopted by the Board of Directors of the Sites Project Authority at a duly called meeting of the Board on November 21, 2022 and that said resolution has not been rescinded, amended or modified and is in full force and effect as of the date hereof.

In Witness Whereof, I have executed this certificate this __th day of _________ 2022.

____

Fritz Durst, Chair Authority Board, Sites Project Authority

Sites Reservoir Benefits and Obligations Contract Guiding Principles and Preliminary Terms (updated to support Indicative Credit Rating)

Preamble

The Sites Reservoir Project (the Project) is a proposed 1.3-1.5 million acre-foot off-stream reservoir located approximately 10 miles West of the town of Maxwell, California. The Project includes the development and operation of infrastructure including necessary dams, pipelines, pump stations, power transmission lines, and other facilities needed to provide new water supply and storage. The Project will utilize existing and new conveyance facilities to divert water from the Sacramento River for storage in the reservoir and for releases. The Project will provide public benefits including environmental water supply, recreation, and regional flood control benefits. The Project also will provide water storage and water supply benefits to participating water agencies.

The Project is being developed by the Sites Project Authority (the Sites Authority), a public agency formed in 2010 through the execution of a Joint Exercise of Powers Agreement (the JPA Agreement) whose members are public agencies in the Sacramento River Watershed. The JPA Agreement and associated Bylaws identify requirements and obligations for membership in the Sites Authority and allow for Project Agreements to govern funding and participation in any project the Sites Authority undertakes. The Sites Authority has created a Reservoir Committee consisting of certain Sites Authority members and other municipal entities and special districts that will pay to participate in and receive benefits from the Project ("Participants"). The Sites Authority may also enter into agreements with other agencies for the purposes of developing the Project (see Related Agreements).

The Project is being developed in phases including Phase 1 (*complete*) — formation of the JPA and state funding award, Phase 2 (*in progress*) — certification of environmental impact report and statement and acquisition of key permits, Phase 3 — final design and right-of-way acquisition, Phase 4 — construction and commissioning, and Phase 5 — construction close-out and operations.

The Sites Authority has entered into Project funding agreements for the development of the Project through Phase 2 with Participants, and with State agencies and the federal government. The JPA has also received acknowledgment from the United States Environmental Protection Agency ("EPA") that the Project is eligible to apply for a $2.2B WIFIA loan. The Sites Authority is taking the steps needed to secure an indicative credit rating and develop other documents required to apply for the WIFIA loan in the spring of 2023.

It is anticipated that beginning in Phase 3 and/or upon the initiation of long-term or short-term Project financing, the Sites Authority will enter into a Sites Reservoir Benefits and Obligations Contract (the Contract) with Participants. The purpose of this document is to establish guiding principles and preliminary terms to help guide development of the Contract between the Sites Authority and the Participants (where the Sites Authority and Participants are collectively referred to as "the parties").

Several details still need to be finalized for a full and complete Contract to be reached; however, the parties believe this document represents their mutual understanding of the allocation of Project benefits, costs, risks, financing obligations, and ownership obligations. The parties agree to take this document to their agency management and governing bodies to receive their feedback and input and then will work cooperatively and in good faith to consider the feedback and input and work to resolve issues identified and to establish the Contract by approximately Fall 2023, prior to initiating Project financing.

Addressed principles include:

- Roles and Responsibilities
- Project Assets and Ownership
- Beneficiary Pays
- Financing and Funding by Participants
- Leasing or Sale of Storage and Sales of Water
- Minimum Contract Term, Successor Agreements, and Changes

Related Agreements

The Participants acknowledge that the Sites Authority intends to enter into Agreements for the Administration of Public Benefits with various agencies of the State of California and to enter into an agreement with the Bureau of Reclamation for federal government funding a portion of the Project in exchange for agreed upon Project benefits. The Sites Authority is currently in discussions with the State of California and the Bureau of Reclamation regarding these Agreements. While these state and federal agencies are not Participants and will not be party to the Contract, they have crucial roles in providing some Project funding, in administering public benefits and in coordinating Project operations with the State Water Project (SWP) and federal Central Valley Project (CVP) operations. Through future agreements between the Sites Authority and the State of California agencies and between the Sites Authority and the federal government, the Sites Authority intends to share Project risks, obligations, and costs in a manner that is proportional to the public benefits that these entities will receive from the Project. As a result, Project obligations, costs and risks will be borne by the Participants, various State agencies, and the federal government although the allocation of costs, risks, obligations and benefits will require a number of separate agreements.

The Participants also acknowledge that the Project relies on existing conveyance facilities to receive and transmit water in and out of the Reservoir and the Sites Authority is working cooperatively to negotiate Facilities Use Agreements and Facility Partner Design and Construction Agreements for use of and, where applicable improvements to the Glenn-Colusa Irrigation District (GCID) Main Canal, fish screen and pump station; the Tehama Colusa Canal, and associated fish screen and pump station, operated by the Tehama Colusa Canal Authority (TCCA); and the Colusa Basin Drain and associated facilities (altogether referred to as "Partner Facilities"). The Sites Authority is currently negotiating a memorandum of understanding (MOU) with GCID and TCCA and will subsequently be negotiating planning agreements to help guide activities by these parties and the Sites Authority prior to execution of the Facilities Use Agreements and Facility Partner Design and Construction Agreements. The Sites Authority Bylaws Section 2.5 requires that written consent be secured from GCID and TCCA prior to certain actions being taken by the Sites Authority which carries an added limitation on the Sites Authority's independent activities.

In addition to the agreements described above, the Sites Authority entered into a MOU with Colusa County regarding the storage and use of water from Funks Creek and Stone Corral Creek and the relationship of these waters to the Sites Authority's Water Right application and Colusa County's Area of Origin Water Right claims.

Definitions

Throughout this document, a number of defined terms are used. These terms are defined below and their relationship to other definitions used in various Project Agreements and other Project documents are explained.

Cost Allocation Framework: approach to be developed by the Sites Authority to account for which Participants use which Project facilities and Partner Facilities based on input provided by the Participants. The Cost Allocation Framework distinguishes between Base Facilities and Downstream Facilities and also accounts for the use of Project and Partner Facilities by State of California agencies and the federal government.

> **Base Facilities:** Project facilities and Partner Facilities that are used and paid for by all Participants, the State of California, and the federal government. Examples include Sites Reservoir, Funks Reservoir, the Terminal Regulating Reservoir, portion of the Tehama Colusa Canal upstream of the Sites Reservoir Project, and the portion of the Glenn Colusa Irrigation District Main Canal upstream of the Sites Reservoir Project.
>
> **Downstream Facilities:** Project facilities and Partner Facilities that are used and paid for by certain Participants, the State of California, and the federal government. Examples include the Dunnigan Pipeline and Colusa Basin Drain.

Fiscal Year: the period beginning on January 1 of each year and ending on the last day of December of such year, or any other accounting period hereafter selected and designated by the Sites Authority as the Fiscal Year of the Sites Authority.

Participants: Also referred to as Reservoir Committee members, Participants are the entities that pay to participate and receive benefits in the Sites Reservoir Project including certain Sites Authority members and other municipal entities and special districts. Participants are not the same as Storage Partners.

Partner Facilities: existing conveyance facilities owned and operated by other entities that have excess capacity that can be used by Project Participants to access benefits from the Project.

Plan of Finance: the plan identifying and evaluating feasible funding options, including financing and pay-go options, and describing the requirements for funding the non-public cost share of all project costs.

Project Water Right (Water Right): The water right obtained and owned by the Sites Authority for the Sites Reservoir Project.

Reservoir Committee: A Sites Authority authorized committee consisting of certain Sites Authority members and other municipal entities and special districts to fulfill certain obligations under the Joint Exercise of Powers Agreement.

Reservoir Project Agreement: the agreement in which Participants indicate their individual participation levels (percentage of non-public benefits to be invested in) and commitment to project funding based on authorization by the respective home agency. The Reservoir Project Agreement is also referred to as the Participation Agreement.

Sites Reservoir Benefits and Obligations Contract (Contract): water supply and water storage contracts entered into by the Sites Authority with Participants that provide for the allocation of Project benefits, costs, risks, financing obligations, and ownership obligations.

Sites Reservoir Project (Project): Sites dams, reservoirs, certain associated diversion and conveyance facilities, and other associated facilities, mitigation lands, and Water Right.

Sites Project Authority (Sites Authority): an independent joint powers authority established to exercise powers common to the Authority Members to, among other things, effectively study, promote, develop, design, finance, acquire, construct, manage, and operate Sites Reservoir and related facilities such as recreation and power generation.

Sites Storage Principles: The document entitled "*Principles for the Storage, Delivery, and Sale of Sites Reservoir Project Water*" adopted by the Sites Authority in 2021 and hereunder referred to as the Sites Storage Principles. The Sites Storage Principles are adopted by reference into these *Guiding Principles and Preliminary Terms*.

Storage Allocation: the amount of storage space (storage volume) in Sites Reservoir allocated to a Storage Partner, as agreed upon in that Storage Partner's Contract. Dead storage is not allocated to any Storage Partner.

Storage Partners: as defined in the Storage Principles, the governmental agencies, water organizations, and others who have funded and received a Storage Allocation in Sites Reservoir and the resulting water supply or water supply related environmental benefits from the Project. Storage Partners include the Participants, the State of California, and the federal government.

WIFIA Reserve Policy: Establishes and defines certain financial reserves which are intended to ensure that the Sites Authority always has sufficient funds on hand to pay its operating, capital, and debt service cost obligations on time.

Principles and Preliminary Terms

1. Roles and Responsibilities

1.1 The Sites Authority, as currently defined by its governing documents and agreements, will act as the developer and operator of the Project and is responsible for obtaining input from the Participants to help guide its decisions.

1.1.1 As the developer, the Sites Authority is responsible for obtaining the required Project Water Right, securing the Project site and any required property rights, acting as the lead agency with regard to complying with CEQA requirements, obtaining Project permits, evaluating funding options, obtaining financing for a portion of Project capital costs, collecting funds for administration and payment of financing costs, payment of Project capital costs during construction (including debt service and reserves), entering into agreements needed to support development of the Project, and overseeing Project design and construction.

1.1.2 As the operator, the Sites Authority will be responsible for: allocating water to and from storage in accordance with the Storage Principles (or its successor) and requests from individual Participants, the terms of the Contract and other agreements, and with the Project Water Right; operating, maintaining, and replacing Project Facilities; permit and agreement compliance; collecting funds for administering financing and payment of Project capital costs (including debt service and reserves); operations, maintenance, replacement and administrative / management costs; and all other functions related to administration of the Project and the Project Agreements. The Sites Authority and Participant roles in Project financing are further described in Section 4, Financing.

1.2 The Participants (Reservoir Committee members), as currently defined by the Sites Authority's Bylaws and Reservoir Project Agreement, as amended, are responsible for: implementing responsibilities under the authorities delegated to the Reservoir Committee by the Sites Authority; covering Project costs (except for those obligations covered by grants, by Agreements for the Administration of Public Benefits with various agencies of the State of California, or by federal agreements); assuming certain Project risks and obligations as will be described in the Contract; and providing input to the Sites Authority regarding Project funding, governance, and risk management.

1.2.1 As it relates to covering Project costs, the Participants are responsible for using their individual authorities (authority to establish and collect rates, taxing authority etc.) to ensure reliable cashflow to the Sites Authority to provide for the timely payment of Project costs (including debt service and reserves).

1.2.2 As it relates to assuming certain Project risks and obligations, the parties agree that the Participants must have the opportunity for meaningful input into the definition and management of those risks and obligations. For clarity, risk management decisions that will materially affect Project costs and / or Participant's risk exposure shall be made by the Sites Authority consistent with duly authorized recommendations of the Reservoir Committee. For example, any decision to expand the Project scope to include significant purchase of property downstream of the dam as a means of mitigating flooding or dam failure risk would fall into this category.

1.2.3 As it relates to providing input to the Sites Authority more broadly, the Participants are all individual members of the Sites Reservoir Committee (and its workgroups) established by the Sites Authority to undertake specific work activities for the development of the Sites Reservoir Project.

1.3 Future Changes to Roles and Responsibilities. The parties acknowledge that future changes in the roles and responsibilities (governance and decision making) between the Sites Authority and Participants will need to be considered as the Project progresses. Such changes will be considered prior to initiation of each subsequent Project phase 3, 4, and 5. The parties acknowledge that Sacramento Valley leadership and Project participants from outside of the Sacramento Valley are both equally essential for Project success and have governance needs that must be met. The parties have agreed that the attached diagram (see Exhibit 1) represents an accurate representation of these interests. Any changes to the existing governance and decision making would require approval of the Sites Authority via a change to the Sites Authority governing documents and Bylaws. Loan agreements and borrowing agreements executed by the Sites Authority may also limit the type of governance changes that may be made.

2. Project Assets and Ownership

2.1 Project Infrastructure. Project infrastructure, including the land on which Project facilities are sited, including buffer and mitigation lands and physical features of the Project (excluding Partner Facilities) will be owned by the Sites Authority.

2.2 Other Assets. Other assets as described below, will be owned by the Sites Authority and/or by Participants.

2.2.1 Water Right. The Project Water Right will be owned by the Sites Authority .

2.2.2 Storage. A Participant's Storage Allocation will be an asset owned and controlled by the Participant consistent with certain operating limits established by the Sites Authority and the Contract. Storage Allocations and the associated rights to Sites water will be considered saleable and leasable assets, subject to certain terms to be determined in the Contract. (See Section 5 below). A preliminary schedule of Storage Allocations among the Participants is included in Amendment 3 to the Reservoir Project Agreement.

2.2.3 Stored Water. Water stored in Sites Reservoir and allocated to individual Participants in accordance with the Contract will be owned by said Participants.

2.2.4 Conveyance. Capacity ownership, priority, use, and ability to sell or lease capacity rights in Project conveyance will be established by the Contract.

2.2.5 Power Generation. Power sales will be managed by the Sites Authority. Allocation of revenues from power generated upon releases of stored water will be established by the Contract.

2.2.6 Demand exceeds availability. Allocation of water and capacity when demand exceeds availability will be established by the Contract.

3. Beneficiary Pays

3.1 The parties agree that, in principle, Project costs should be allocated consistent with the flow of Project benefits and obligations. For clarity, this means that a Participant receiving benefits from the Project or from a Partner Facility agrees to pay a pro-rated share of fixed and variable Project costs (minus those costs covered by State agencies and the federal government under separate agreements) and, if applicable, wheeling charges assessed by the Sites Authority to cover the cost of use of Partner Facilities. The parties also agree that the levels of reserves held by the Sites Authority will reflect those payment and funding risks that are applicable to all Participants as provided for in the WIFIA Reserve Policy. The Sites Authority will develop a Cost Allocation Framework to account for which Participants use which Sites Facilities and Partner Facilities, with input from the Participants. The Cost Allocation Framework will also account for use of the Sites Reservoir and Partner Facilities by State of California Agencies and the federal government.

3.2 Project Costs include actual costs of Project development (i.e., land, Water Right, permits, mitigation), design, construction, debt service, operation and maintenance, major renewals and replacements, and administrative costs. Project development costs to date have been funded on a pay-as-you-go basis.

3.2.1 Project fixed costs (excluding fixed costs associated with Partner Facilities) will include debt service (finance participants only), administrative and general costs of the Sites Authority, operations and maintenance costs (including any ongoing mitigation and monitoring costs), costs of replacements and renewals, and costs to develop and maintain financial sufficiency reserves. Project fixed costs (excluding fixed costs associated with Partner Facilities) will be allocated between all Participants based on their Storage Allocation (excluding any storage allocated to federal and California state agencies whose fixed costs will be allocated based on their percent shares, under separate agreements).

3.2.2 Project variable costs generally include power consumption (pumping) net any revenues from power generation and wheeling costs to account for use of Partner Facilities. Variable costs will be allocated based on the estimated annual amount of water moved into and out of storage by each Participant as a percent share of the total annual amount of water moved into and out of storage by all Participants. At the end of the Fiscal Year a true-up process will be used to align estimated and actual quantities of water moved. State agency and federal government allocation of Project variable costs will be defined in separate agreements with those entities.

3.3 Partner Facility Costs. The parties recognize that certain Partner Facilities are needed to realize Project benefits but that not all Participants need to use all the Partner Facilities. Partner Facility costs will be allocated to Participants based on actual use and wheeling rates established in the respective Facilities Use Agreements.

3.4 Preliminary allocation of Project costs among Participants are attached to the Plan of Finance; these allocations are subject to change.

4. Financing

4.1 The parties agree that the Sites Authority will issue debt to fund all or a portion of the Project capital costs at such time that the Sites Authority has obtained the water right and has otherwise made sufficient progress such that the Sites Authority as advised by the Reservoir Committee, has determined that debt issuance is warranted. The Sites Authority will use its best efforts to obtain cost-effective financing with due consideration of terms and conditions. The Sites Authority, in consultation with its Municipal Advisor and Bond Counsel, will comply with all applicable federal and state law.

4.2 The parties further recognize that benefits to the Project as a whole would result from group financing (i.e., lower interest rates, ability of all Participants to fund their obligations) and that financing entities that lend to the Project may impose conditions on the financing that will likely impact each of the Participants. The parties agree to continue to evaluate group financing along with other financing methods beneficial to the Project.

4.2.1 Group Financing and Ratings of Individual Participants

4.2.1.1 Group financing will depend on the shared risk of default among all Participants, not only on those Participants participating in the group financing. Participants' ability to lease or sell their Storage Allocation and/ or to sell Sites water will help serve as a backstop to default for those Participants included in the group financing. In addition, the Participants agree to explore and develop other risk management approaches to support the group financing.

4.2.1.2 Not all of the Participants that may wish to participate in group financing are rated by recognized credit rating agencies and are therefore unable to lend their credit rating to a group financing. Therefore, for group financing to be viable, the financing will need to be based on the credit ratings of a significant subset of those Participants that are rated. To the extent that an unrated Participant wishes to be rated and is likely able to obtain a rating of "A" or better, the parties agree that such Participants are encouraged to inquire into the process for obtaining an individual credit rating.

4.2.1.3 The parties acknowledge that those Participants lending their rating to a group financing are taking additional risk and the parties agree to explore means to offset this risk, including those measures described in 4.2.1.1.

4.2.2 Obligations of "pay-go" Participants to Support Project Financing

4.2.2.1 The parties recognize that some Participants may wish to obtain their own financing or to pay Project costs as they are incurred out of their own available revenues ("pay-go").

4.2.2.2 "Pay-go" Participants recognize that they will receive an indirect benefit from Project group financing in that it provides a greater assurance there will be a sufficient number of Participants committed to a long-term investment in the Project which assures viability of the Project.

4.2.2.3 "Pay-go" will be allowed as long as it does not materially adversely affect the ability to obtain group financing for the Project.

4.2.2.4 "Pay-go" Participants also recognize the Sites Authority's need for reliable cash-flow to fund Project design and construction. Therefore each "pay-go" Participant will commit to fund reserves through early payment to reliably meet the Sites Authority's funding obligations.

4.2.3 For group financing to be viable, financing entities have indicated they will require any financing agreement to include a "Project Sufficiency Pledge" or other means for all Participants to share the risk of default. All Participants will need to agree to these obligations, even if they select a "pay-go" option.

4.3 JPA Credit Rating. The parties support the Sites Authority's efforts to obtain an investment grade credit rating as part of its efforts to obtain the WIFIA loan and other project financing and agree in principle to the following terms:

4.4 Payment of Project Costs. In order to better allow the Sites Authority and Participants to minimize Participant paid reserves levels at the Sites Authority and to minimize borrowed (debt service) reserves, amounts payable under the Contract are proposed be paid by each Participant as set forth in the WIFIA Reserve Policy:

4.4.1.1 Fixed Project Costs- Each Participant will agree to pay the Sites Authority semi-annually one year in advance 100% of the projected fixed project costs (debt service and repair and replacement costs) and Fixed Operation and Maintenance Costs allocated to such Participant for the Fiscal Year. At the end of the Fiscal Year, a true-up process will be used to compare estimated and actual fixed project costs with any overpayment by a given Participant credited to that Participant.

4.4.1.2 Variable Operation and Maintenance Costs – Each Participant will agree to pay the Sites Authority the variable operation and maintenance costs allocated to such Participant semi-annually six months in advance. At the end of the Fiscal Year a true-up process will be used to compare estimated and actual variable project costs with any overpayment by a given Participant credited to that Participant.

4.4.2 Supplemental Billing. Amounts invoiced to the Participants are expected to be based on budget estimates. In the event that amounts billed by the Sites Authority are insufficient to pay the actual fixed project costs and fixed operation and maintenance costs or variable operation and maintenance costs for a Fiscal Year, the Sites Authority will have authority to send out supplemental bills due and payable during such Fiscal Year for any short fall.

4.4.3 Nature of Payments Obligation. Each Participant will agree to pay all costs due and payable under its Contract for both water supply and water storage as an operation and maintenance expenses of such Participant and will be irrevocable, whether or not water is delivered or storage provided and whether or not the Project is completed or operable.

4.4.4 Cure for Payment Defaults. For failure to make payments by the date due, a default "waterfall" process will be utilized, as defined in the Plan of Finance.

5. Leasing or Sale of Storage and Sales of Water

5.1 **Storage.** Participants may share, lease, or sell their Storage Allocation with other Participants and with other entities. The terms of storage sharing, leasing, or sale are at the discretion of the Participant who is a party to the storage or lease agreement but must not negatively impact other Participants' proportional share of first priority allocated benefits. Any sharing, leasing, or sale of a Storage Allocation must be consistent with the Project Water Right and Project permits. Any sharing, leasing or sale will be coordinated with the Sites Authority so that proper Project operations and water accounting can be maintained. A Participant may not transfer or assign any of its rights or obligations to the Sites Authority as part of any sharing or leasing agreement; the Participant will be ultimately responsible for meeting any such obligations to the Sites Authority.

Any lease of a Storage Allocation must specify rights to stored water at the beginning and end of the lease period, which would likely cover a multi-year term. Leasing of a Storage Allocation may provide a Participant with a means to generate revenue to help cover Project costs.

Any sale or lease agreement for a Storage Allocation must specify how conveyance constraints will limit withdrawals from storage and how reservoir losses will be accounted for; these provisions shall be consistent with any procedures and policies established by the Sites Authority including provisions in the Storage Principles that indicate losses will be allocated proportionately to each Storage Partner based on the amount of water in storage. The Sites Authority will develop a methodology for determining and allocating losses that take into account losses associated with diversions, losses due to reservoir evaporation and seepage, deliveries to Participants located north of the Sacramento River Delta (i.e., Participants not required to use the Dunnigan Pipeline), deliveries to Participants located south of the Sacramento River Delta (i.e., Participants making use of the Dunnigan Pipeline), and deliveries to the Yolo Bypass. The methodology will also account for monthly and/or seasonal variations and may be updated by the Sites Authority from time to time to reflect changes in climate or other factors affecting the amount of losses.

Any sale of a Participant's Storage Allocation cannot result in a change to the Project's bond rating, violate any agreed-to financing covenants, or otherwise pose any risk to Project financing, and may be subject to the approval of the financing entity(ies) depending on the terms of any financing agreement. The sale of a Participant's Storage Allocation will require approval by the Sites Authority regardless of whether or not the sale is to another Participant or to a non-Participant because, in addition to affecting financing, sales could affect the allocation of water north and south of the Sacramento River Delta which in turn could affect access to conveyance because of capacity constraints of the conveyance infrastructure. Such approval shall not be unreasonably withheld by the Sites Authority.

Any Participant selling or leasing its Storage Allocation must first pay any money due to the Sites Authority and thus receive payment "net" of any payments owed to the Sites Authority.

Participants will be given "right of first refusal" with respect to the sale or lease of a Storage Allocation by another Participant. While the Sites Authority may act in an administrative role with respect to such sales or leases, the Sites Authority will not act to set the price for water at the Sites Reservoir. The Sites Authority will, however, set charges for wheeling water from the Sites Reservoir to the point where conveyed water exits the Sites system.

5.2 Water Sales. Participants may sell water held in their Storage Allocation to other Participants or other entities. The terms of sales of water held in Sites Reservoir under a Participant's Storage Allocation are at the discretion of the Participant. Sales terms must not negatively impact other Participants' proportional share of first priority allocated benefits. In addition, the terms of wheeling and cost of wheeling the water, if not made within the Participant's first priority allocated capacity, will be determined and assessed by the Sites Authority. Any sale of water held in a Storage Allocation will be coordinated with the Sites Authority so that proper Project operations and water accounting can be maintained. A Participant may not transfer or assign any of its rights or obligations as part of any sale of water. The receiving entity must either have sufficient available Storage Allocation to store the water, release the water upon purchase, or utilize that Participant's Storage Allocation until the sold water is released.

6. Minimum Contract Term, Successor Agreements, and Changes

6.1 The parties agree that the initial term for the Contract will, at a minimum, coincide with the length of the financing agreement, and that the Contract will contain provisions for extensions of the Contract term to reflect the long term nature of the Sites Project.

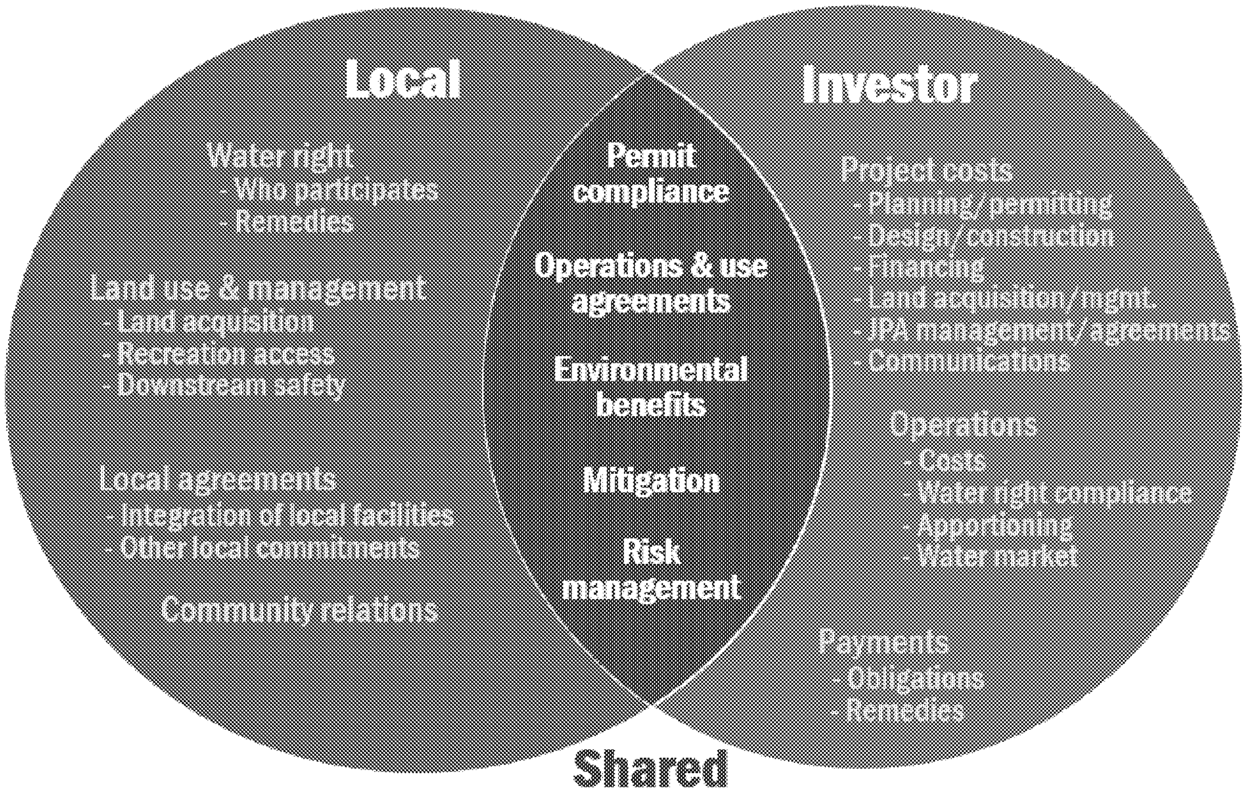
6.2 The parties agree that it is the intent of the Sites Authority to enter into a Contract with a given Participant that is substantially the same as the Contracts entered into with the other Participants. Nonetheless, because Participants will employ various means of funding their participation in the Project, specific appendices to the Contract will be developed to address terms that are uniquely applicable to a group of Participants based on their selected method of funding.

6.3 The parties further acknowledge that it will be necessary to develop successor agreements and that the Contract will detail the process and timeline for developing, negotiating and agreeing to such successor agreements.

6.4 The parties agree that Participants will be provided the ability to opt out of the Project, with an associated rebalancing of storage before financing.

6.5 The parties acknowledge that future regulatory changes and permit conditions may affect Project obligations (i.e., costs, storage, financing, operations etc.) although such changes are currently unknown. The parties agree to cooperate with one another and the Sites Authority to allocate the impact of such changes. Agreements with State agencies and the federal government must also address allocation of the impacts of any such future changes.

Exhibit 1: Governance Interests



REDLINED GUIDING PRINCIPLES AND PRELIMINARY TERMS

(indicating edits between the October 2021 Endorsed Draft and the version distributed as part of the 10/28/2022 Plan of Finance: Credit and Reserves Workshop)

Sites Reservoir Benefits and Obligations Contract Guiding Principles and Preliminary Terms ~~2021 Draft~~ (updated to support Indicative Credit Rating)

Preamble

The Sites Reservoir Project (the Project) is a proposed 1.3-1.5 million acre-foot off-stream reservoir located approximately 10 miles West of the town of Maxwell, California. The Project includes the development and operation of infrastructure including necessary dams, pipelines, pump stations, power transmission lines, and other facilities needed to provide new water supply and storage. The Project will utilize existing and new conveyance facilities to divert water from the Sacramento River for storage in the reservoir and for releases. The Project will provide public benefits including environmental water supply, recreation, and regional flood control benefits. The Project also will provide water storage and water supply benefits to participating water agencies.

The Project is being developed by the Sites Project Authority (the **Sites Authority** ~~JPA~~), a public agency formed in 2010 through the execution of a Joint Exercise of Powers Agreement (the JPA Agreement) whose members are public agencies in the Sacramento River Watershed. The JPA Agreement and associated Bylaws identify requirements and obligations for membership in the **Sites Authority** ~~JPA~~ and allow for Project Agreements to govern funding and participation in any project the **Sites Authority** ~~JPA~~ undertakes. The **Sites Authority** ~~JPA~~ has created a Reservoir Committee consisting of certain **Sites Authority** ~~JPA~~ members and other municipal entities and special districts that will pay to participate in and receive benefits from the Project ("Participants"). The **Sites Authority** ~~JPA~~ may also enter into agreements with other agencies for the purposes of developing the Project (see Related Agreements).

The Project is being developed in phases including Phase 1 (*complete*) — formation of the JPA and state funding award, Phase 2 (*in progress*) — certification of environmental impact report and statement and acquisition of key permits, Phase 3 — final design and right-of-way acquisition, Phase 4 — construction and commissioning, and Phase 5 — construction close-out and operations.

The **Sites Authority** ~~JPA~~ has entered into Project funding agreements for the development of the Project through Phase 2 with Participants, and with State agencies and the federal government. **The JPA has also received acknowledgment from the United States Environmental Protection Agency ("EPA") that the Project is eligible to apply for a $2.2B WIFIA loan. The Sites Authority** ~~JPA~~ **is taking the steps needed to secure an indicative credit rating and develop other documents required to apply for the WIFIA loan in the spring of 2023.**

It is anticipated that beginning in Phase 3 and/or upon the initiation of long-term or short-term Project financing, the Sites Authority ~~JPA~~ will enter into a Sites Reservoir Benefits and Obligations Contract (the Contract) with Participants. The purpose of this document is to establish guiding principles and preliminary terms to help guide development of the Contract between the Sites Authority ~~JPA~~ and the Participants (where the Sites Authority ~~JPA~~ and Participants are collectively referred to as "the parties").

Several details still need to be finalized for a full and complete Contract to be reached; however, the parties believe this document represents their mutual understanding of the allocation of Project benefits, costs, risks, financing obligations, and ownership obligations. The parties agree to take this document to their agency management and governing bodies to receive their feedback and input and then will work cooperatively and in good faith to consider the feedback and input and work to resolve issues identified and to establish the Contract by approximately ~~Summer~~ Fall 2023, prior to initiating Project financing.

Addressed principles include:

- Roles and Responsibilities
- Project Assets and Ownership
- Beneficiary Pays
- Financing and Funding by Participants
- Leasing or Sale of Storage and Sales of Water
- Minimum Contract Term, Successor Agreements, and Changes

Related Agreements

The Participants acknowledge that the Sites Authority ~~JPA~~ intends to enter into Agreements for the Administration of Public Benefits with various agencies of the State of California and to enter into an agreement with the Bureau of Reclamation for federal government funding a portion of the Project in exchange for agreed upon Project benefits. The Sites Authority ~~JPA~~ is currently in discussions with the State of California and the Bureau of Reclamation regarding these Agreements. While these state and federal agencies are not Participants and will not be party to the Contract, they have crucial roles in providing some Project funding, in administering public benefits and in coordinating Project operations with the State Water Project (SWP) and federal Central Valley Project (CVP) operations. Through future agreements between the Sites Authority ~~JPA~~ and the State of California agencies and between the Sites Authority ~~JPA~~ and the federal government, the Sites Authority ~~JPA~~ intends to share Project risks, obligations, and costs in a manner that is proportional to the public benefits that these entities will receive from the Project. As a result, Project obligations, costs and risks will be borne by the Participants, various State agencies, and the federal government although the allocation of costs, risks, obligations and benefits will require a number of separate agreements.

The Participants also acknowledge that the Project relies on existing conveyance facilities to receive and transmit water in and out of the Reservoir and the **Sites Authority** ~~JPA~~ is working cooperatively to negotiate Facilities Use Agreements **and Facility Partner Design and Construction Agreements for use of and, where applicable improvements to** the Glenn-Colusa Irrigation District (GCID) Main Canal, fish screen and pump station; the Tehama Colusa Canal, and associated fish screen and pump station, operated by the Tehama Colusa Canal Authority (TCCA); and the Colusa Basin Drain and associated facilities (altogether referred to as "Partner Facilities"). **The Sites Authority** ~~JPA~~ **is currently negotiating a memorandum of understanding (MOU) with GCID and TCCA and will subsequently be negotiating planning agreements to help guide activities by these parties and the Sites Authority** ~~JPA~~ **prior to execution of the** ~~**Facility**~~ **Facilities Use Agreements and Facility Partner Design and Construction Agreements**. The **Sites Authority** ~~JPA~~ ~~b~~Bylaws Section 2.5 requires that written consent be secured from GCID and TCCA prior to certain actions being taken by the **Sites Authority** ~~JPA~~ which carries an added limitation on the **Sites Authority** ~~JPA~~'s independent activities.

In addition to the agreements described above, the Sites Authority ~~**JPA**~~ **entered into a MOU with Colusa County regarding the storage and use of water from Funks Creek and Stone Corral Creek and the relationship of these waters to the Sites Authority** ~~**JPA**~~**'s** ~~water rights~~ **Water Right application and Colusa County's Area of Origin** ~~water rights~~ **Water Right claims.**

Definitions

Throughout this document, a number of defined terms are used. These terms are defined below and their relationship to other definitions used in various Project Agreements and other Project documents are explained.

Cost Allocation Framework: approach to be developed by the Sites Authority ~~JPA~~ to account for which Participants use which Project facilities and Partner Facilities based on input provided by the Participants. The Cost Allocation Framework distinguishes between Base Facilities and Downstream Facilities and also accounts for the use of Project and Partner Facilities by State of California agencies and the federal government.

> **Base Facilities:** Project facilities and Partner Facilities that are used and paid for by all Participants, the State of California, and the federal government. Examples include Sites Reservoir, Funks Reservoir, the Terminal Regulating Reservoir, portion of the Tehama Colusa Canal upstream of the Sites Reservoir Project, and the portion of the Glenn Colusa Irrigation District Main Canal upstream of the Sites Reservoir Project.

> **Downstream Facilities:** Project facilities and Partner Facilities that are used and paid for by certain Participants, the State of California, and the federal government. Examples include the Dunnigan Pipeline and Colusa Basin Drain.

Fiscal Year: the period beginning on January 1 of each year and ending on the last day of December of such year, or any other accounting period hereafter selected and designated by the Sites Authority as the Fiscal Year of the Sites Authority.

Participants: Also referred to as Reservoir Committee members, Participants are the entities that pay to participate and receive benefits in the Sites Reservoir Project including certain Sites Authority ~~JPA~~ members and other municipal entities and special districts. Participants are not the same as Storage Partners.

Partner Facilities: existing conveyance facilities owned and operated by other entities that have excess capacity that can be used by Project Participants to access benefits from the Project.

Plan of Finance: the plan identifying and evaluating feasible funding options, including financing and pay-go options, and describing the requirements for funding the non-public cost share of all project costs.

~~**Principles for the Storage, Delivery and Sale of Sites Reservoir Project Water (Storage Principles):** reviewed by the Reservoir Committee and adopted by the JPA in April 2021, the Storage Principles serve as the basic framework for development, adoption, and/or execution of additional or more formal agreements, policies, and procedures related to the storage, delivery, and sale of Sites Project water, as needed.~~

Project Water Right (Water Right): The water right obtained and owned by the Sites Authority ~~JPA~~ for the Sites Reservoir Project.

Reservoir Committee: A Sites Authority ~~JPA~~ authorized committee consisting of certain Sites Authority ~~JPA~~ members and other municipal entities and special districts to fulfill certain obligations under the Joint Exercise of Powers Agreement.

Reservoir Project Agreement: the agreement in which Participants indicate their individual participation levels (percentage of non-public benefits to be invested in) and commitment to project funding based on authorization by the respective home agency. The Reservoir Project Agreement is also referred to as the Participation Agreement.

Sites Reservoir Benefits and Obligations Contract (Contract): **water supply and water storage contracts entered into by the Sites Authority with Participants that provide for the allocation of Project benefits, costs, risks, financing obligations, and ownership obligations.**

Sites Reservoir Project (Project): Sites dams, reservoirs, certain associated diversion and conveyance facilities, and other associated facilities, mitigation lands, and Water Right.

Sites Project Authority (Sites Authority ~~JPA~~**):** an independent joint powers authority established to exercise powers common to the Authority Members to, among other things, effectively study, promote, develop, design, finance, acquire, construct, manage, and operate Sites Reservoir and related facilities such as recreation and power generation.

Sites Storage Principles: **The document entitled "*Principles for the Storage, Delivery, and Sale of Sites Reservoir Project Water*" adopted by the Sites Authority ~~JPA~~ in 2021 and hereunder referred to as the Sites Storage Principles. The Sites Storage Principles are adopted by reference into these *Guiding Principles and Preliminary Terms*.**

Storage Allocation: the amount of storage space (storage volume) in Sites Reservoir allocated to a Storage Partner, as agreed upon in that Storage Partner's Contract. Dead storage is not allocated to any Storage Partner.

Storage Partners: as defined in the Storage Principles, the governmental agencies, water organizations, and others who have funded and received a Storage Allocation in Sites Reservoir and the resulting water supply or water supply related environmental benefits from the Project. Storage Partners include the Participants, the State of California, and the federal government.

WIFIA Reserve Policy: **Establishes and defines certain financial reserves which are intended to ensure that the Sites Authority always has sufficient funds on hand to pay its operating, capital, and debt service cost obligations on time.**

Principles and Preliminary Terms

1. Roles and Responsibilities

1.1 The **Sites Authority** ~~JPA~~, as currently defined by its governing documents and agreements, will act as the developer and operator of the Project and is responsible for obtaining input from the Participants to help guide its decisions.

1.1.1 As the developer, the **Sites Authority** ~~JPA~~ is responsible for obtaining the required Project Water Right, securing the Project site and any required property rights, acting as the lead agency with regard to complying with CEQA requirements, obtaining Project permits, evaluating funding options, obtaining financing for a portion of Project capital costs, collecting funds for administration and payment of financing costs, payment of Project capital costs during construction (including debt service and reserves), entering into agreements needed to support development of the Project, and overseeing Project design and construction.

1.1.2 As the operator, the **Sites Authority** ~~JPA~~ will be responsible for: allocating water to and from storage in accordance with the Storage Principles (or its successor) and requests from individual Participants, the terms of the Contract and other agreements, and with the Project Water Right; operating, maintaining, and replacing Project Facilities; permit and agreement compliance; collecting funds for administering financing and payment of Project capital costs (including debt service and reserves); operations, maintenance, replacement and administrative / management costs; and all other functions related to administration of the Project and the Project Agreements. The **Sites Authority** ~~JPA~~ and Participant roles in Project financing are further described in Section 4, Financing.

1.2 The Participants (Reservoir Committee members), as currently defined by the **Sites Authority** ~~JPA~~'s Bylaws and Reservoir Project Agreement, as amended, are responsible for: implementing responsibilities under the authorities delegated to the Reservoir Committee by the **Sites Authority** ~~JPA~~; covering Project costs (except for those obligations covered by grants, by Agreements for the Administration of Public Benefits with various agencies of the State of California, or by federal agreements); assuming certain Project risks and obligations as will be described in the Contract; and providing input to the **Sites Authority** ~~JPA~~ regarding Project funding, governance, and risk management.

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1.2.2 As it relates to assuming certain Project risks and obligations, the parties agree that the Participants must have the opportunity for meaningful input into the definition and management of those risks and obligations. For clarity, risk management decisions that will materially affect Project costs and / or Participant's risk exposure ~~should~~ **shall** be made by the **Sites Authority** ~~JPA~~ consistent with duly authorized recommendations of the Reservoir Committee. For example, any decision to expand the Project scope to include significant purchase of property downstream of the dam as a means of mitigating flooding or dam failure risk would fall into this category.

1.2.3 As it relates to providing input to the **Sites Authority** ~~JPA~~ more broadly, the Participants are all individual members of the Sites Reservoir Committee (and its workgroups) established by the **Sites Authority** ~~JPA~~ to undertake specific work activities for the development of the Sites Reservoir Project.

1.3 Future Changes to Roles and Responsibilities. The parties acknowledge that future changes in the roles and responsibilities (governance and decision making) between the **Sites Authority** ~~JPA~~ and Participants will need to be considered as the Project progresses. Such changes will be considered prior to initiation of each subsequent Project phase 3, 4, and 5. The parties acknowledge that Sacramento Valley leadership and Project participants from outside of the Sacramento Valley are both equally essential for Project success and have governance needs that must be met. The parties have agreed that the attached diagram (see **Exhibit 1** ~~page 12~~) represents an accurate representation of these interests. Any changes to the existing governance and decision making would require approval of the **Sites Authority** ~~JPA~~ via a change to the **Sites Authority** ~~JPA~~ governing documents and ~~b~~Bylaws. Loan agreements and borrowing agreements executed by the **Sites Authority** ~~JPA~~ may also limit the type of governance changes that may be made.

2. Project Assets and Ownership

2.1 Project Infrastructure. Project infrastructure, including the land on which Project facilities are sited, including buffer and mitigation lands and physical features of the Project (excluding Partner Facilities) will be owned by the **Sites Authority** ~~JPA~~.

2.2 Other Assets. Other assets as described below, will be owned by the **Sites Authority** ~~JPA~~ and/or by Participants.

2.2.1 Water Right. The Project Water Right will be owned by the **Sites Authority** ~~JPA~~ .

2.2.2 Storage. A Participant's Storage Allocation will be an asset owned and controlled by the Participant consistent with certain operating limits established by the **Sites Authority** ~~JPA~~ and the Contract. Storage Allocations and the associated rights to Sites water will be considered saleable and leasable assets, subject to certain terms to be determined in the Contract. (See Section 5 below). A preliminary schedule of Storage Allocations among the Participants is included in Amendment 3 to the Reservoir Project Agreement.

2.2.3 Stored Water. Water stored in Sites Reservoir and allocated to individual Participants in accordance with the Contract will be owned by said Participants.

2.2.4 Conveyance. Capacity ownership, priority, use, and ability to sell or lease capacity rights in Project conveyance ~~is to be determined in a subsequent draft of the Guiding Principles and Preliminary Terms~~ **will be established by the Contract.**

2.2.5 Power Generation. Power sales will be managed by the Sites Authority ~~JPA~~**. Allocation of revenues from power generated upon releases of stored water will be established by the Contract.**

2.2.6 Demand exceeds availability. Allocation of water and capacity when demand exceeds availability will be established by the Contract.

3. Beneficiary Pays

3.1 The parties agree that, in principle, Project costs should be allocated consistent with the flow of Project benefits and obligations. For clarity, this means that a Participant receiving benefits from the Project or from a Partner Facility agrees to pay a pro-rated share of fixed and variable Project costs (minus those costs covered by State agencies and the federal government under separate agreements) and, if applicable, wheeling charges assessed by the **Sites Authority** ~~JPA~~ to cover the cost of use of Partner Facilities. **The parties also agree that the levels of reserves held by the Sites Authority** ~~JPA~~ **will reflect those payment and funding risks that are applicable to all Participants as provided for in the WIFIA Reserve Policy.** The **Sites Authority** ~~JPA~~ will develop a Cost Allocation Framework to account for which Participants use which Sites Facilities and Partner Facilities, with input from the Participants. The Cost Allocation Framework will also account for use of the Sites Reservoir and Partner Facilities by State of California Agencies and the federal government.

3.2 Project Costs include actual costs of Project development (i.e., land, Water Right, permits, mitigation), design, construction, debt service, operation and maintenance, major renewals and replacements, and administrative costs. Project development costs to date have been funded on a pay-as-you-go basis.

3.2.1 Project fixed costs (excluding fixed costs associated with Partner Facilities) will include debt service (finance participants only), administrative and general costs of the **Sites Authority** ~~JPA~~, operations and maintenance costs (including any ongoing mitigation and monitoring costs), costs of replacements and renewals, and costs to develop and maintain financial sufficiency reserves. Project fixed costs (excluding fixed costs associated with Partner Facilities) will be allocated between all Participants based on their Storage Allocation (excluding any storage allocated to federal and California state agencies whose fixed costs will be allocated based on their percent shares, under separate agreements).

3.2.2 Project variable costs generally include power consumption (pumping) net any revenues from power generation and wheeling costs to account for use of Partner Facilities. Variable costs will be allocated based on the estimated annual amount of water moved into and out of storage by each Participant as a percent share of the total annual amount of water moved into and out of storage by all Participants. At the end of the **Fiscal** ~~y~~Year a true-up process will be used to align estimated and actual quantities of water moved. State agency and federal government allocation of Project variable costs will be defined in separate agreements with those entities.

3.3 Partner Facility Costs. The parties recognize that certain Partner Facilities are needed to realize Project benefits but that not all Participants need to use all the Partner Facilities. Partner Facility costs will be allocated to Participants based on actual use and wheeling rates established in the respective Facilities Use Agreements.

3.4 Preliminary allocation of Project costs among Participants are attached to the Plan of Finance; these allocations are subject to change.

4. Financing

4.1 The parties agree that the **Sites Authority** ~~JPA~~ will issue debt to fund all or a portion of the Project capital costs at such time that the **Sites Authority** ~~JPA~~ has obtained the water right and has otherwise made sufficient progress such that the **Sites Authority** ~~JPA~~ as advised by the Reservoir Committee, has determined that debt issuance is warranted. **The Sites Authority will use its best efforts to obtain cost-effective financing with due consideration of terms and conditions. The Sites Authority, in consultation with its Municipal Advisor and Bond Counsel, will comply with all applicable federal and state law.**

4.2 The parties further recognize that benefits to the Project as a whole would result from group financing (i.e., lower interest rates, ability of all Participants to fund their obligations) and that financing entities that lend to the Project may impose conditions on the financing that will likely impact each of the Participants. The parties agree to continue to evaluate group financing along with other financing methods beneficial to the Project.

4.2.1 Group Financing and Ratings of Individual Participants

4.2.1.1 Group financing will depend on the shared risk of default among all Participants, not only on those Participants participating in the group financing. Participants' ability to lease or sell their Storage Allocation and/ or to sell Sites water will help serve as a backstop to default for those Participants included in the group financing. In addition, the Participants agree to explore and develop other risk management approaches to support the group financing.

4.2.1.2 Not all of the Participants that may wish to participate in group financing are rated by recognized credit rating agencies and are therefore unable to lend their credit rating to a group financing. Therefore, for group financing to be viable, the financing will need to be based on the credit ratings of a significant subset of those Participants that are rated. To the extent that an unrated Participant **wishes to be rated and is likely able** ~~may be able~~ to obtain a rating of "A" or better, the parties agree that such Participants are encouraged to inquire into the process for obtaining an individual credit rating.

4.2.1.3 The parties acknowledge that those Participants lending their rating to a group financing are taking additional risk and the parties agree to explore means to offset this risk, including those measures described in 4.2.1.1.

4.2.2 Obligations of "pay-go" Participants to Support Project Financing

4.2.2.1 The parties recognize that some Participants may wish to obtain their own financing or to pay Project costs as they are incurred out of their own available revenues ("pay-go").

4.2.2.2 "Pay-go" Participants recognize that they will receive an indirect benefit from Project group financing in that it provides a greater assurance there will be a sufficient number of Participants committed to a long-term investment in the Project which assures viability of the Project.

4.2.2.3 "Pay-go" will be allowed as long as it does not materially adversely affect the ability to obtain group financing for the Project.

4.2.2.4 "Pay-go" Participants also recognize the **Sites Authority** ~~JPA~~'s need for reliable cash-flow to fund Project design and construction. Therefore each "pay-go" Participant will commit to fund reserves through early payment to reliably meet the **Sites Authority** ~~JPA~~'s funding obligations.

4.2.3 For group financing to be viable, financing entities have indicated they will require any financing agreement to include a "Project Sufficiency Pledge" or other means for all Participants to share the risk of default. All Participants will need to agree to these obligations, even if they select a "pay-go" option.

4.3 JPA Credit Rating. The parties support the Sites Authority ~~JPA~~'s efforts to obtain an investment grade credit rating as part of its efforts to obtain the WIFIA loan and other project financing and agree in principle to the following terms:

4.4 Payment of Project Costs. In order to better allow the Sites ~~Project~~ Authority and Participants to minimize Participant paid reserves levels at the Sites ~~Project~~ Authority and to minimize borrowed (debt service) reserves, amounts payable under the Contract ~~benefits and obligation contracts~~ are proposed be paid by each Participant ~~as set forth below~~ as set forth in the WIFIA Reserve Policy:

4.4.1.1 Fixed Project Costs- Each Participant will agree to pay the Sites ~~Project~~ Authority semi-annually one year in advance 100% of the projected fixed project costs (debt service and repair and replacement costs) and Fixed Operation and Maintenance Costs allocated to such Participant for the ~~f~~Fiscal ~~y~~Year. At the end of the Fiscal Year, a true-up process will be used to compare estimated and actual fixed project costs with any overpayment by a given Participant credited to that Participant.

4.4.1.2 Variable Operation and Maintenance Costs – Each Participant will agree to pay the Sites ~~Project~~ Authority the variable operation and maintenance costs allocated to such Participant semi-annually six months ~~quarterly~~ in advance. At the end of the Fiscal Year a true-up process will be used to compare estimated and actual variable project costs with any overpayment by a given Participant credited to that Participant.

4.4.2 Supplemental Billing. Amounts invoiced to the Participants are expected to be based on budget estimates. In the event that amounts billed by the Sites ~~Project~~ Authority are insufficient to pay the actual fixed project costs and fixed operation and maintenance costs or variable operation and maintenance costs for a Fiscal Year, the Sites ~~Project~~ Authority will have authority to send out supplemental bills due and payable during such ~~f~~Fiscal ~~y~~Year for any short fall.

4.4.3 Nature of Payments Obligation. Each Participant will agree to pay all costs due and payable under its Contract ~~benefits and obligation contract~~ for both water supply and water storage as an operation and maintenance expenses of such Participant and will be irrevocable, whether or not water is delivered or storage provided and whether or not the Project is completed or operable.

4.4.4 Cure for Payment Defaults. For failure to make payments by the date due, a default "waterfall" process will be utilized, as defined in the Plan of Finance.

5. Leasing or Sale of Storage and Sales of Water

5.1 **Storage.** Participants may share, lease, or sell their Storage Allocation with other Participants and with other entities. The terms of storage sharing, leasing, or sale are at the discretion of the Participant who is a party to the storage or lease agreement but must not negatively impact other Participants' proportional share of first priority allocated benefits. Any sharing, leasing, or sale of a Storage Allocation must be consistent with the Project Water Right and Project permits. Any sharing, leasing or sale will be coordinated with the Sites Authority ~~JPA~~ so that proper Project operations and water accounting can be maintained. A Participant may not transfer or assign any of its rights or obligations to the Sites Authority ~~JPA~~ as part of any sharing or leasing agreement; the Participant will be ultimately responsible for meeting any such obligations to the Sites Authority ~~JPA~~.

Any lease of a Storage Allocation must specify rights to stored water at the beginning and end of the lease period, which would likely cover a multi-year term. Leasing of a Storage Allocation may provide a Participant with a means to generate revenue to help cover Project costs.

Any sale or lease agreement for a Storage Allocation must specify how conveyance constraints will limit withdrawals from storage and how reservoir losses will be accounted for; these provisions shall be consistent with any procedures and policies established by the Sites Authority ~~JPA~~ including provisions in the Storage Principles that indicate losses will be allocated proportionately to each Storage Partner based on the amount of water in storage. The Sites Authority ~~JPA~~ will develop a methodology for determining and allocating losses that take into account losses associated with diversions, losses due to reservoir evaporation and seepage, deliveries to Participants located north of the Sacramento River Delta (i.e., Participants not required to use the Dunnigan Pipeline), deliveries to Participants located south of the Sacramento River Delta (i.e., Participants making use of the Dunnigan Pipeline), and deliveries to the Yolo Bypass. The methodology will also account for monthly and/or seasonal variations and may be updated by the Sites Authority ~~JPA~~ from time to time to reflect changes in climate or other factors affecting the amount of losses.

Any sale of a Participant's Storage Allocation cannot result in a change to the Project's bond rating, violate any agreed-to financing covenants, or otherwise pose any risk to Project financing, and may be subject to the approval of the financing entity(ies) depending on the terms of any financing agreement. The sale of a Participant's Storage Allocation will require approval by the Sites Authority ~~JPA~~ regardless of whether or not the sale is to another Participant or to a non-Participant because, in addition to affecting financing, sales could affect the allocation of water north and south of the Sacramento River Delta which in turn could affect access to conveyance because of capacity constraints of the conveyance infrastructure. Such approval shall not be unreasonably withheld by the Sites Authority ~~JPA~~.

Any Participant selling or leasing its Storage Allocation must first pay any money due to the Sites Authority ~~JPA~~ and thus receive payment "net" of any payments owed to the Sites Authority ~~JPA~~.

Participants will be given "right of first refusal" with respect to the sale or lease of a Storage Allocation by another Participant. While the Sites Authority ~~JPA~~ may act in an administrative role with respect to such sales or leases, the Sites Authority ~~JPA~~ will not act to set the price for water at the Sites ~~r~~Reservoir. The Sites Authority ~~JPA~~ will, however, set charges for wheeling water from the Sites ~~r~~Reservoir to the point where conveyed water exits the Sites system.

5.2 Water Sales. Participants may sell water held in their Storage Allocation to other Participants or other entities. The terms of sales of water held in Sites Reservoir under a Participant's Storage Allocation are at the discretion of the Participant. Sales terms must not negatively impact other Participants' proportional share of first priority allocated benefits. In addition, the terms of wheeling and cost of wheeling the water, if not made within the Participant's first priority allocated capacity, will be determined and assessed by the Sites Authority ~~JPA~~. Any sale of water held in a Storage Allocation will be coordinated with the Sites Authority ~~JPA~~ so that proper Project operations and water accounting can be maintained. A Participant may not transfer or assign any of its rights or obligations as part of any sale of water. The receiving entity must either have sufficient available Storage Allocation to store the water, release the water upon purchase, or utilize that Participant's Storage Allocation until the sold water is released.

6. Minimum Contract Term, Successor Agreements, and Changes

6.1 The parties agree that the initial term for the Contract will, at a minimum, coincide with the length of the financing agreement, and that the Contract ~~and~~ will contain provisions for extensions of the Contract term to reflect the long term nature of the Sites Project.

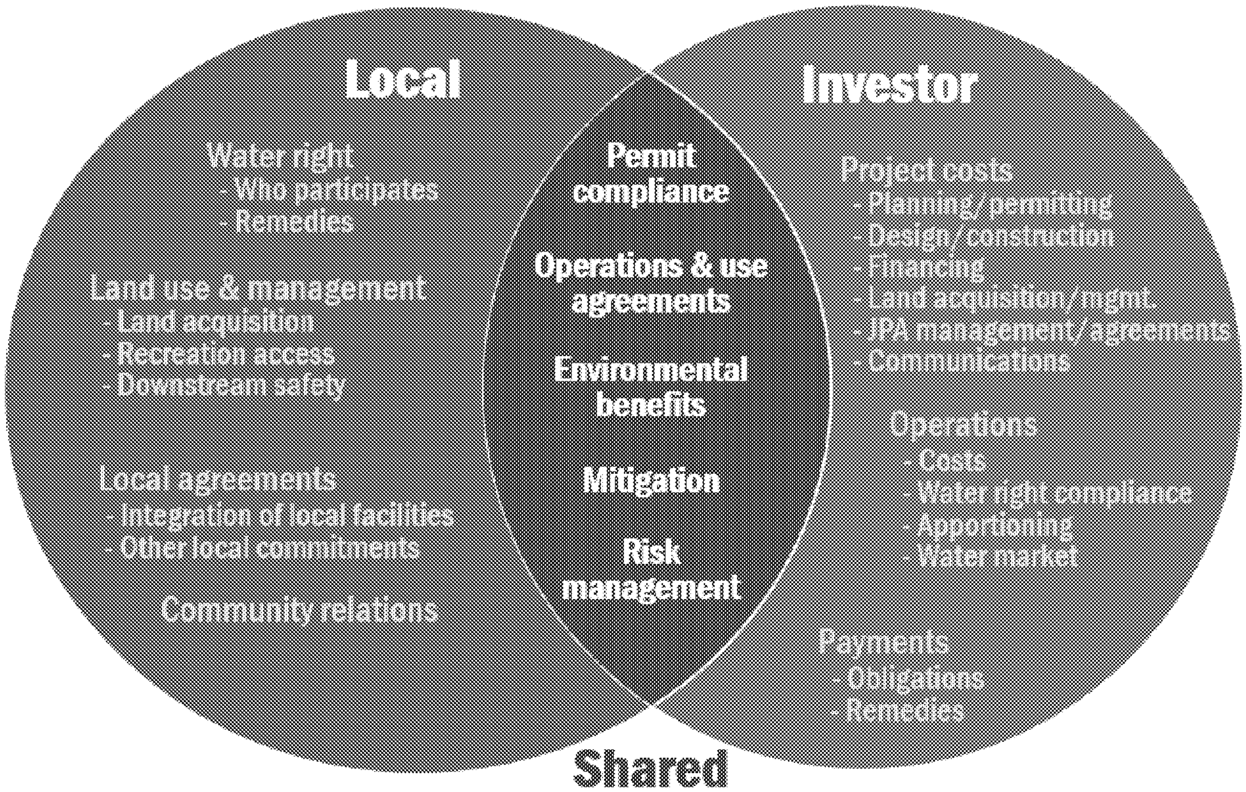
6.2 The parties agree that it is the intent of the Sites Authority ~~JPA~~ to enter into a Contract with a given Participant that is substantially the same as the Contracts entered into with the other Participants. Nonetheless, because Participants will employ various means of funding their participation in the Project, specific appendices to the Contract will be developed to address terms that are uniquely applicable to a group of Participants based on their selected method of funding. ~~At this time, it is anticipated that such appendices will be developed for groups of Participants that elect to fund their participation as follows: 1) via amounts collected through Department of Water Resources State Water Project Annual Statement of Charges; 2) via Water Rates and Charges (Proposition 218 compliance required); 3) via Water Rates and Charges (Proposition 218 compliance not required); 4) via Districtwide Special Benefits Assessments; 5) Special Benefits Assessments levied on certain Lands; 6) via Land-Based Charges within an Improvement District; or 7) via "Pay Go".~~

6.3 The parties further acknowledge that it will be necessary to develop successor agreements and that the Contract will detail the process and timeline for developing, negotiating and agreeing to such successor agreements.

6.4 The parties agree that Participants will be provided the ability to opt out of the Project, with an associated rebalancing of storage before financing.

6.5 The parties acknowledge that future regulatory changes and permit conditions may affect Project obligations (i.e., costs, storage, financing, operations etc.) although such changes are currently unknown. The parties agree to cooperate with one another and the Sites Authority ~~JPA~~ to allocate the impact of such changes. Agreements with State agencies and the federal government must also address allocation of the impacts of any such future changes.

Exhibit 1: Governance Interests



From: Angela Bezzone [bezzone@mbkengineers.com]
Sent: 10/25/2022 7:37:42 AM
To: Alicia Forsythe [aforsythe@sitesproject.org]; Spranza, John [john.spranza@hdrinc.com]; steve.micko@jacobs.com
Subject: RE: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Hi Ali,

I can make any of those times work, but I would prefer it not be on 11/2. I have an internal MBK meeting that day from 11-12 that I would like to attend, but can skip if that's the only time that works for others.

Angela

From: Alicia Forsythe <aforsythe@sitesproject.org>
Sent: Monday, October 24, 2022 6:30 PM
To: Spranza, John <john.spranza@hdrinc.com>; steve.micko@jacobs.com; Angela Bezzone <bezzone@mbkengineers.com>
Subject: FW: Sites Project - Without Exchanges Trend Reporting Spreadsheet

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Hi John, Steve and Angela – Does the following dates/times work for you for a meeting with CDFW on the "without exchanges" modeling? I'd like to get 1.5 hours with CDFW.

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10/31: 2:30-4
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John, can you also check in with the ICF team? I think Sophie, Rick and Mike were the critical players – if I remember correctly.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Davis-Fadtke, Kristal@Wildlife <Kristal.Davis-Fadtke@wildlife.ca.gov>
Sent: Monday, October 24, 2022 4:29 PM
To: Alicia Forsythe <aforsythe@sitesproject.org>; Uttley, Paige@Wildlife <Paige.Uttley@wildlife.ca.gov>; Williams, Jonathan@Wildlife <Jonathan.Williams@wildlife.ca.gov>
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Thanks,

Kristal

From: Alicia Forsythe <aforsythe@sitesproject.org>
Sent: Friday, October 14, 2022 10:57 AM
To: Davis-Fadtke, Kristal@Wildlife <Kristal.Davis-Fadtke@wildlife.ca.gov>; Uttley, Paige@Wildlife <Paige.Uttley@wildlife.ca.gov>; Williams, Jonathan@Wildlife <Jonathan.Williams@wildlife.ca.gov>
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Thanks all!

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From: Alicia Forsythe
Sent: Wednesday, September 28, 2022 9:47 PM
To: Angela Bezzone <bezzone@mbkengineers.com>; Davis-Fadtke, Kristal@Wildlife <Kristal.Davis-Fadtke@wildlife.ca.gov>; Uttley, Paige@Wildlife <Paige.Uttley@wildlife.ca.gov>; Spranza, John <john.spranza@hdrinc.com>; Williams, Jonathan@Wildlife <Jonathan.Williams@wildlife.ca.gov>; steve.micko@jacobs.com; Rob Leaf <Rob.Leaf@jacobs.com>; Hendrick, Mike <Mike.Hendrick@icf.com>; Wilder, Rick <Rick.Wilder@icf.com>
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The attached trend reporting spreadsheet contains the following modeled results:

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It is important to note that the Authority has not changed its project description – the Project continues to include exchanges. Exchanges are voluntary and any party can choose to not conduct an exchange in a given year. We completed the attached CALSIM II sensitivity analysis to have a more informed dialogue around environmental changes that may occur in the event that exchanges are not implemented in any given year or in a series of years. As its difficult to "turn off" exchanges in only some years, the attached CALSIM II analysis was completed without exchanges in all years. This represents more of a bookend, because as noted above, exchange are part of the Project and would likely only not be implemented on a more year-by-year basis (for example, if there was too much risk that exchanged water would spill as flood water from Shasta, the Authority may elect to not participate in a given year).

Also important to note is that the modeling was completed with Alternative 3A, which includes up to 25% Reclamation investment in Sites (modeling assumed 25%). Thus, there continues to be interaction of Sites and the CVP operations due to Reclamation's investment.

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From: Micko, Steve [Steve.Micko@jacobs.com]
Sent: 10/25/2022 8:41:20 AM
To: Spranza, John [john.spranza@hdrinc.com]; Angela Bezzone [bezzone@mbkengineers.com]; Alicia Forsythe [aforsythe@sitesproject.org]
CC: Leaf, Rob [Rob.Leaf@jacobs.com]
Subject: RE: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Hi Ali – I can make those times work.

Best,
Steve

From: Spranza, John <John.Spranza@hdrinc.com>
Sent: Tuesday, October 25, 2022 7:41 AM
To: Angela Bezzone <bezzone@mbkengineers.com>; Alicia Forsythe <aforsythe@sitesproject.org>; Micko, Steve <Steve.Micko@jacobs.com>
Subject: [EXTERNAL] RE: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Hi,
I can move stuff around and make those times work.

John Spranza

D 916.679.8858 M 818.640.2487

From: Angela Bezzone <bezzone@mbkengineers.com>
Sent: Tuesday, October 25, 2022 7:38 AM
To: Alicia Forsythe <aforsythe@sitesproject.org>; Spranza, John <john.spranza@hdrinc.com>; steve.micko@jacobs.com
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To: Alicia Forsythe [aforsythe@sitesproject.org]
CC: Angela Bezzone [bezzone@mbkengineers.com]; Leaf, Rob [Rob.Leaf@jacobs.com]
Subject: RE: Sites Project - Summary Table of Reclamation Investment & Exchanges
Attachments: SPJPA_Sites_FederalInvestmentAndExchanges_rev02_20221025.docx

Hi Ali,

The attached Word doc contains two tables:

- Sites model assumptions for Reclamation investment and Shasta exchanges, and
- model results for Alternatives 1A, 3A and 3B (all at 2035CT).

To maintain consistency with modeling for the BA, these results are presented at 2035CT, not historical climate.

For results that are influenced by federal investment (CVP OpFlex) and exchanges, the table delineates the source of the change.
For example, under Alt 3A, long-term average end of April Shasta storage increases by 124 TAF, of which 119 TAF are due to federal investment and 5 TAF are due to exchanges.

The significant majority of delivery and storage benefits are due to federal investment
Fall flow stability and spring pulse releases are improved due to federal investment and exchanges with Sites participants

For B/C ratios, Jeff and I spoke on Friday.
He planned to confirm approach and alternatives of interest with Reclamation and get back to me.
I'll check-in with him tomorrow morning if I don't hear anything from him by then.

Please let me know if you have any questions.

Best,
Steve

From: Micko, Steve
Sent: Friday, October 21, 2022 8:41 AM
To: Alicia Forsythe <aforsythe@sitesproject.org>
Cc: Angela Bezzone <bezzone@mbkengineers.com>; Leaf, Rob <Rob.Leaf@jacobs.com>
Subject: RE: Sites Project - Summary Table of Reclamation Investment & Exchanges

Hi Ali,

Sure thing!

We'll get going on the table of alternatives.

Regarding B/C ratio, on it! I left Jeff a voicemail and will keep you posted.
Per attached thread, we may already have benefit values for Alt 3A and 3B. I'll confirm this with Jeff.

Best,
Steve

From: Alicia Forsythe <aforsythe@sitesproject.org>
Sent: Friday, October 21, 2022 8:17 AM
To: Micko, Steve <Steve.Micko@jacobs.com>
Cc: Angela Bezzone <bezzone@mbkengineers.com>
Subject: [EXTERNAL] Sites Project - Summary Table of Reclamation Investment & Exchanges

Hi Steve –

Jerry just mentioned that he chatted with you about this last night, but two things that I was hoping you can help us out on –

1. Can you draft a table of the Alternatives and the amount of Reclamation Investment and Exchanges in each? Lets just focus on Alt 1, Alt 3A and Alt 3B. We'd like to get a nice summary to the Commissioner as Reclamation considers possible investment in Sites. For the exchanges, we'd like to see how much reliance there is on other members water for the exchanges. Not sure how to represent this – but trying to get a sense for each alternative how much the exchanges are just moving "Reclamation" investment water around versus using member water for exchanges.

2. Can you call Jeff Herrin? Reclamation wants to do some analysis on the B/C ratio of Alt 1, Alt 3A, and Alt 3B. So I think Jeff needs some more information/data to do this. Can you reach out to Jeff to coordinate this? I think they want to move quickly on this.

Thanks much Steve!

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

Model assumptions	Alternative 1A	Alternative 3A	Alternative 3B
Reclamation Investment (% of Active Storage)	0%	25%	16%
Reclamation Investment (TAF)	0	360	230
Shasta Exchange: Cold Water Pool Mgmt	Sites may release water in April through June of Dry and Critically Dry water years in lieu of Shasta. In August through November, Shasta may release water for delivery to Sites Storage Partners.	Same as Alt 1A	Same as Alt 1A
Shasta Exchange: Sac R Spring Pulse	None	Sites exchange water may be released in May to support the spring pulse flow action (described in Minimum flow below Keswick Dam). Exchange water may be released in Wet and Above Normal years when end of April Shasta storage is greater than 4.1 MAF and Sites storage is greater than 80% of total active storage volume.	Same as Alt 3A
Shasta Exchange: Sac R Fall Flow Stability	Exchange water may be released for Fall Flow Stability when end of May Sites storage is greater than 80% of total active capacity, previous month Shasta storage is greater than 3.2 MAF, and the Fall Flow Stability action is already active.	Same as Alt 1A	Same as Alt 1A

Model results (TAF)	Alternative 1A (ALT 1A 062222 2035CT)		Alternative 3A (ALT 3A 041122 2035CT)		Alternative 3B (ALT 3B 041122 2035CT)	
	Average	Dry and Critical	Average	Dry and Critical	Average	Dry and Critical
Increase to CVP Deliveries	**1**	**0**	**19**	**23**	**7**	**3**
Additional End of Apr Shasta Storage	**8**	**18**	**55**	**123**	**42**	**96**
CVP OpFlex	5	12	54	120	43	93
Exchange	2	6	1	3	0	2
Additional End of Sep Shasta Storage	**14**	**14**	**124**	**184**	**92**	**136**
CVP OpFlex	1	6	119	179	85	131
Exchange	13	8	5	5	7	5
Additional FFS Release	**-2**	**-5**	**26**	**13**	**20**	**7**
CVP OpFlex	-4	-6	10	6	8	3
Exchange	2	0	16	8	12	4
Additional Spring Pulse Release	**0**	**5**	**26**	**5**	**26**	**5**
CVP OpFlex	0	5	-2	5	-2	5
Exchange	0	0	28	0	28	0

From: Cheyanne Harris [CHarris@BrwnCald.com]
Sent: 10/25/2022 3:06:51 PM
To: JP Robinette [jrobinette@sitesproject.org]

i'm assuming you're already aware, but feedback on the 'To Phase 3' flowchart. i pulled up the one 'with contingencies' during the meeting (maybe erroneously), not realizing there are two versions so take it or leave it depending on which one is getting shown at Friday's workshop:

- when we say Water Right what are we actually referring to (e.g., paper water right in hand OR action by Water Board to adopt the Water Right (with the actual paper water right to follow 3-4 months later)?
- confirming that we're expecting to have the Final EIR prior to homeboard execution of the Benefits and Obligations Contract
- (maybe only applicable to the 'with contingencies' version) - updated costs feed both the financial model and Proforma 3.0 (& consider identifying starting points)

From: Alicia Forsythe [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=A6CDF06A7E904B65BAA21702A82AD329-AFORSYTHE]
Sent: 10/26/2022 10:57:32 AM
To: Thad Bettner [tbettner@gcid.net]
Subject: RE: Sites Project - Initial Winter-Run Life Cycle Model Results

Sure. We'd be happy to do a call. Would just John and I be good? If we want to dive deeper into the model, then we would pull in Marin from ICF and Steve from Jacobs. Let me know and I'll get you some possible dates/times.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Thad Bettner <tbettner@gcid.net>
Sent: Tuesday, October 25, 2022 10:47 AM
To: Alicia Forsythe <aforsythe@sitesproject.org>
Subject: Re: Sites Project - Initial Winter-Run Life Cycle Model Results

Yes would you be willing to do a call with me and Lewis Bair. We can set up a Teams if you want to share online or if you email it would be just for us.

We can also share our concerns about the BiOp process.

____
Thaddeus L Bettner, General Manager
Glenn-Colusa Irrigation District
PO Box 150
Willows, CA 95988
530.934.8881 (office)
530.588.3450 (cell)

On Oct 25, 2022, at 10:37 AM, Alicia Forsythe <aforsythe@sitesproject.org> wrote:

Yes. There was a no project run. It was based on our CALSIM, temperature, and DSM II results, but we do have a no project run. Let me know if you'd like the results. I don't really want them shared widely as I think we're going to modify the model and re-run, but happy to share them with you.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Thad Bettner <tbettner@gcid.net>
Sent: Tuesday, October 25, 2022 10:28 AM
To: Alicia Forsythe <aforsythe@sitesproject.org>
Subject: Re: Sites Project - Initial Winter-Run Life Cycle Model Results

Any chance they provided a no project run?

Thank You,
Thaddeus Bettner
530.588.3450

On Oct 25, 2022, at 10:19 AM, Alicia Forsythe <aforsythe@sitesproject.org> wrote:

Hi all – I am going to postpone our meeting. We have been working with NMFS and UC Santa Cruz and believe that the Winter-run Life Cycle Model may not be fully accounting for the effects of the Project. We're working on some minor model modifications and then would like to have UC Santa Cruz do some re-runs. I'd like to hold off on sharing results until we can complete the re-runs.

As an initial sneak peak, I will share that our initial results showed a positive cohort replacement (increasing populations of winter-run due to the Project). So, this isn't modifying as we didn't like the results. This is a close look and modifications to make sure we have the most accurate picture of the Project considering the model framework.

I'll circle back when we have re-runs and we'll get this rescheduled.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

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From: Alicia Forsythe
Sent: Tuesday, October 18, 2022 1:09 PM
To: Thad Bettner (tbettner@gcid.net) <tbettner@gcid.net>; Robert J. Kunde (rkunde@wrmwsd.com) <rkunde@wrmwsd.com>; 'Jeffrey P Sutton (jsutton@tccanal.com)' <jsutton@tccanal.com>; 'Neudeck, Randall D (rneudeck@mwdh2o.com)' <rneudeck@mwdh2o.com>; 'WVanderwaal@rd108.org' <wvanderwaal@rd108.org>;

Spranza, John <john.spranza@hdrinc.com>; Jerry Brown <jbrown@sitesproject.org>
Subject: Sites Project - Initial Winter-Run Life Cycle Model Results

Hi all – The Authority has the initial results of the Winter-run Life Cycle Model that we'd like to share. We'd like to walk through these with a small group of members that have previously expressed interest in the model or the results. Our purpose in doing this is to share the initial results and get your feedback on our next set of model runs (we have 2 more sets under contract).

Below is a doodle poll to schedule this call. Please respond to the poll by COB, Thursday, October 20.

https://doodle.com/meeting/participate/id/aKZ0JDRe

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Alicia Forsythe [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=A6CDF06A7E904B65BAA21702A82AD329-AFORSYTHE]
Sent: 10/26/2022 12:14:13 PM
To: Thad Bettner [tbettner@gcid.net]; Spranza, John [john.spranza@hdrinc.com]
Subject: RE: Sites Project - Initial Winter-Run Life Cycle Model Results

Sure thing. Here's some dates/times that work for John and I. I've assumed an hour, so all of these are start times.

10/31 – 10 am, noon, 4 pm
11/2 – 11 am, noon, 2 pm, 4 pm
11/3 – 11 am, 3 pm, 4 pm

Roping in John to this email so he's in the loop.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Thad Bettner <tbettner@gcid.net>
Sent: Wednesday, October 26, 2022 11:03 AM
To: Alicia Forsythe <aforsythe@sitesproject.org>
Subject: RE: Sites Project - Initial Winter-Run Life Cycle Model Results

Yes high level initially would be fine and we can go from there. Next week would be great.

Thaddeus L. Bettner, PE
General Manager

GCID

OFFICE: 530.934.8881 | **CELL:** 530.588.3450
EMAIL: tbettner@gcid.net

Glenn-Colusa Irrigation District
Post Office Box 150, Willows, California 95988

Follow us:

From: Alicia Forsythe <aforsythe@sitesproject.org>
Sent: Wednesday, October 26, 2022 10:58 AM
To: Thad Bettner <tbettner@gcid.net>
Subject: RE: Sites Project - Initial Winter-Run Life Cycle Model Results

Sure. We'd be happy to do a call. Would just John and I be good? If we want to dive deeper into the model, then we would pull in Marin from ICF and Steve from Jacobs. Let me know and I'll get you some possible dates/times.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Thad Bettner <tbettner@gcid.net>
Sent: Tuesday, October 25, 2022 10:47 AM
To: Alicia Forsythe <aforsythe@sitesproject.org>
Subject: Re: Sites Project - Initial Winter-Run Life Cycle Model Results

Yes would you be willing to do a call with me and Lewis Bair. We can set up a Teams if you want to share online or if you email it would be just for us.

We can also share our concerns about the BiOp process.

____

Thaddeus L Bettner, General Manager
Glenn-Colusa Irrigation District
PO Box 150
Willows, CA 95988
530.934.8881 (office)
530.588.3450 (cell)

On Oct 25, 2022, at 10:37 AM, Alicia Forsythe <aforsythe@sitesproject.org> wrote:

Yes. There was a no project run. It was based on our CALSIM, temperature, and DSM II results, but we do have a no project run. Let me know if you'd like the results. I don't really want them shared widely as I think we're going to modify the model and re-run, but happy to share them with you.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

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From: Thad Bettner <tbettner@gcid.net>
Sent: Tuesday, October 25, 2022 10:28 AM
To: Alicia Forsythe <aforsythe@sitesproject.org>
Subject: Re: Sites Project - Initial Winter-Run Life Cycle Model Results

Any chance they provided a no project run?

Thank You,
Thaddeus Bettner
530.588.3450

On Oct 25, 2022, at 10:19 AM, Alicia Forsythe <aforsythe@sitesproject.org> wrote:

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I'll circle back when we have re-runs and we'll get this rescheduled.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Alicia Forsythe
Sent: Tuesday, October 18, 2022 1:09 PM
To: Thad Bettner (tbettner@gcid.net) <tbettner@gcid.net>; Robert J. Kunde (rkunde@wrmwsd.com) <rkunde@wrmwsd.com>; 'Jeffrey P Sutton (jsutton@tccanal.com)' <jsutton@tccanal.com>; 'Neudeck, Randall D (rneudeck@mwdh2o.com)' <rneudeck@mwdh2o.com>; 'WVanderwaal@rd108.org' <wvanderwaal@rd108.org>; Spranza, John <john.spranza@hdrinc.com>; Jerry Brown <jbrown@sitesproject.org>
Subject: Sites Project - Initial Winter-Run Life Cycle Model Results

Hi all – The Authority has the initial results of the Winter-run Life Cycle Model that we'd like to share. We'd like to walk through these with a small group of members that have previously expressed interest in the model or the results. Our purpose in doing this is to share the initial results and get your feedback on our next set of model runs (we have 2 more sets under contract).

Below is a doodle poll to schedule this call. Please respond to the poll by COB, Thursday, October 20.

https://doodle.com/meeting/participate/id/aKZ0JDRe

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Spranza, John [John.Spranza@hdrinc.com]
Sent: 10/26/2022 1:23:05 PM
To: Alicia Forsythe [aforsythe@sitesproject.org]
Subject: FW: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Here you go.
10/31: 2:30-4 – 1ST
11/2: 10-12:30 – 2ND
11/4:12-4 – 3RD

John Spranza

D 916.679.8858 M 818.640.2487

From: Greenwood, Marin <Marin.Greenwood@icf.com>
Sent: Wednesday, October 26, 2022 1:11 PM
To: Pitts, Adrian <Adrian.Pitts@icf.com>; Hendrick, Mike <Mike.Hendrick@icf.com>; Wilder, Rick <Rick.Wilder@icf.com>; Spranza, John <John.Spranza@hdrinc.com>; Unger, Sophie <Sophie.Unger@icf.com>
Cc: Briard, Monique <Monique.Briard@icf.com>
Subject: RE: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Running out of colors, mine in *italics* below.

MARIN GREENWOOD | **ICF** | marin.greenwood@icf.com | **+1.530.400.8081 mobile**

From: Pitts, Adrian <Adrian.Pitts@icf.com>
Sent: Wednesday, October 26, 2022 13:04
To: Hendrick, Mike <Mike.Hendrick@icf.com>; Wilder, Rick <Rick.Wilder@icf.com>; Spranza, John <John.Spranza@hdrinc.com>; Unger, Sophie <Sophie.Unger@icf.com>; Greenwood, Marin <Marin.Greenwood@icf.com>
Cc: Briard, Monique <Monique.Briard@icf.com>
Subject: RE: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Mine are in blue.

ADRIAN PITTS
916.501.3199 mobile
icf.com | LinkedIn

From: Hendrick, Mike <Mike.Hendrick@icf.com>
Sent: Wednesday, October 26, 2022 1:00 PM
To: Wilder, Rick <Rick.Wilder@icf.com>; Spranza, John <John.Spranza@hdrinc.com>; Unger, Sophie

<Sophie.Unger@icf.com>; Greenwood, Marin <Marin.Greenwood@icf.com>; Pitts, Adrian <Adrian.Pitts@icf.com>
Cc: Briard, Monique <Monique.Briard@icf.com>
Subject: RE: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Mine on top of Rick's message...in orange

Mike H

From: Wilder, Rick <Rick.Wilder@icf.com>
Sent: Wednesday, October 26, 2022 12:55 PM
To: Spranza, John <John.Spranza@hdrinc.com>; Unger, Sophie <Sophie.Unger@icf.com>; Greenwood, Marin <Marin.Greenwood@icf.com>; Pitts, Adrian <Adrian.Pitts@icf.com>; Hendrick, Mike <Mike.Hendrick@icf.com>
Cc: Briard, Monique <Monique.Briard@icf.com>
Subject: RE: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Hi John, please see below...

From: Spranza, John <John.Spranza@hdrinc.com>
Sent: Wednesday, October 26, 2022 12:49 PM
To: Unger, Sophie <Sophie.Unger@icf.com>; Wilder, Rick <Rick.Wilder@icf.com>; Greenwood, Marin <Marin.Greenwood@icf.com>; Pitts, Adrian <Adrian.Pitts@icf.com>; Hendrick, Mike <Mike.Hendrick@icf.com>
Cc: Briard, Monique <Monique.Briard@icf.com>
Subject: FW: Sites Project - Without Exchanges Trend Reporting Spreadsheet
Importance: High

Can you please provide your availability.

John Spranza

D 916.679.8858 M 818.640.2487

From: Alicia Forsythe <aforsythe@sitesproject.org>
Sent: Monday, October 24, 2022 6:30 PM
To: Spranza, John <john.spranza@hdrinc.com>; steve.micko@jacobs.com; Angela Bezzone <bezzone@mbkengineers.com>
Subject: FW: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Hi John, Steve and Angela – Does the following dates/times work for you for a meeting with CDFW on the "without exchanges" modeling? I'd like to get 1.5 hours with CDFW.

10/28: 10-noon – not available not preferred available *not available*
10/31: 2:30-4 – available 2:30-4 yes available *available*
11/2: 10-12:30 – available 10-12 available 11-1230 available *available 11-12:30*
11/4:12-4 – available 12-3 available 1:30-4 available 1:30 – 3 *available 1:30-4*

John, can you also check in with the ICF team? I think Sophie, Rick and Mike were the critical players – if I remember correctly.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Davis-Fadtke, Kristal@Wildlife <Kristal.Davis-Fadtke@wildlife.ca.gov>
Sent: Monday, October 24, 2022 4:29 PM
To: Alicia Forsythe <aforsythe@sitesproject.org>; Uttley, Paige@Wildlife <Paige.Uttley@wildlife.ca.gov>; Williams, Jonathan@Wildlife <Jonathan.Williams@wildlife.ca.gov>
Subject: RE: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Hi Ali,

My apologies for the delay in getting back to you. We are available during the following times:
10/28: 10-1:30
10/31: 1-4
11/2: 10-12:30
11/4:12-4

Thanks,

Kristal

From: Alicia Forsythe <aforsythe@sitesproject.org>
Sent: Friday, October 14, 2022 10:57 AM
To: Davis-Fadtke, Kristal@Wildlife <Kristal.Davis-Fadtke@wildlife.ca.gov>; Uttley, Paige@Wildlife <Paige.Uttley@wildlife.ca.gov>; Williams, Jonathan@Wildlife <Jonathan.Williams@wildlife.ca.gov>
Subject: RE: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Hello CDFW Team – We'd like to schedule a call with you all to review and discuss the "no exchanges" modeling. Would it be possible if you all provide a few dates and times that work for the CDFW team for a 1.5 hour meeting on this topic?

Thanks all!

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Alicia Forsythe
Sent: Wednesday, September 28, 2022 9:47 PM
To: Angela Bezzone <bezzone@mbkengineers.com>; Davis-Fadtke, Kristal@Wildlife <Kristal.Davis-Fadtke@wildlife.ca.gov>; Uttley, Paige@Wildlife <Paige.Uttley@wildlife.ca.gov>; Spranza, John <john.spranza@hdrinc.com>; Williams, Jonathan@Wildlife <Jonathan.Williams@wildlife.ca.gov>; steve.micko@jacobs.com; Rob Leaf <Rob.Leaf@jacobs.com>; Hendrick, Mike <Mike.Hendrick@icf.com>; Wilder, Rick <Rick.Wilder@icf.com>
Subject: Sites Project - Without Exchanges Trend Reporting Spreadsheet

Hello all – Earlier this month, we had a call to discuss the possibility of what the Project may look like if exchanges with Shasta Lake and Lake Oroville were not implemented in any given year. We have completed a CALSIM II sensitivity analysis of this and the results are attached in the trend reporting spreadsheet.

The attached trend reporting spreadsheet contains the following modeled results:

- NAA 041122 2035CT – No Action Alternative, 2035 CT climate change hydrology
- ALT 3A 041122 2035CT – Alternative 3A (including current diversion criteria which includes 10,700 cfs Oct-June at Wilkins Slough), 2035 CT climate change hydrology
- ALT 3A 041122 2035CT without Shasta, nor Oroville Exchanges sensitivity analysis – Same Alternative 3A as above but without exchanges with both the CVP and SWP

It is important to note that the Authority has not changed its project description – the Project continues to include exchanges. Exchanges are voluntary and any party can choose to not conduct an exchange in a given year. We completed the attached CALSIM II sensitivity analysis to have a more informed dialogue around environmental changes that may occur in the event that exchanges are not implemented in any given year or in a series of years. As its difficult to "turn off" exchanges in only some years, the attached CALSIM II analysis was completed without exchanges in all years. This represents more of a bookend, because as noted above, exchange are part of the Project and would likely only not be implemented on a more year-by-year basis (for example, if there was too much risk that exchanged water would spill as flood water from Shasta, the Authority may elect to not participate in a given year).

Also important to note is that the modeling was completed with Alternative 3A, which includes up to 25% Reclamation investment in Sites (modeling assumed 25%). Thus, there continues to be interaction of Sites and the CVP operations due to Reclamation's investment.

We haven't yet summarized these runs. They are hot off the press. We thought we would get these out for review so folks can begin to look at the information.

Kristal, Paige and Jon – I'll let you all distribute to your staff as you see appropriate.

I'll reach back out shortly and we can get a call scheduled in 2 to 3 weeks to review the results and talk about next steps.

Thanks all!

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

WUA Concerns Discussion

The use of WUA analysis to evaluate effects of flow on fish populations has received some criticism from instream flow analysis practitioners and others since procedures for quantifying WUA were developed and standardized by the U.S. Fish and Wildlife Service in the 1970s (e.g., Bourgeois et al. 1996; Beecher 2010; Railsback 2016; Naman et al. 2020). Many conclusions in this appendix and Chapter 11 regarding effects on fish of changes in flow resulting from Sites project operations are based on WUA analyses. Therefore, it is important to understand and evaluate the criticisms of WUA analysis and consider any potential limitations for assessing flow-related project effects of the Sites project.

Two frequent criticisms of the WUA analysis that are most potentially relevant with regard to the results and conclusions of the Sites environmental documents are: 1) WUA analysis fails to directly evaluate many factors that are known to be important to fish population production, including water quality (especially temperature), predation, competition, and food supply (Beecher 2010; Railsback 2016; Naman et al. 2019; Naman et al. 2020), and 2) the models employed to develop the WUA curves (especially PHABSIM) are antiquated, the field observations and measurements used to run the models are not sufficiently fine-grained to capture important highly localized factors, and the models do not adequately capture many dynamic properties of fish habitat use (Railsback 2016; Reiser et al. 2018).

With regard to the first criticism, PHABSIM and the WUA curves they produce were never meant to address all factors affecting fish populations. As noted in a recent paper rebutting many of the criticisms of PHABSIM (Stalnaker et al, 2017): "PHABSIM is a component of instream flow incremental methodology (IFIM), which is a multifaceted decision support system that looks at riverine ecology for the purpose of making water management decisions". The IFIM uses a suite of evaluation tools (including PHABSIM) and investigates water quality factors and other factors that affect fish in addition to the hydraulic-related habitat conditions analyzed using PHABSIM or other hydraulic habitat models (Beecher 2017). Analysis methods other than PHABSIM are used to evaluate the other factors, which may or may not be affected by flow. For the Sites project effects analyses, in addition to the spawning and rearing WUA analyses, evaluation tools include analyses of water temperatures, redd dewatering, juvenile stranding, adult migration passage, inundated floodplain and side-channel habitat availability, floodplain access opportunity for juvenile salmonids, migrating adult passage, emigrating juvenile salmonid flow-survival, water diversion entrainment, and other factors. Conclusions regarding effects of the Sites project on a species are based on evaluations of the results for all the factors analyzed.

The second criticism is more specific to the modeling tools used for WUA analyses. Many of the limitations of PHABSIM cited by critics are acknowledged by its defenders (Beecher 2017; Stalnaker et al. 2017; Reiser et al. 2018). Some of the cited shortcomings are common to any model that attempts to simulate complex ecological systems. Others reflect that PHABSIM is antiquated; newer, more powerful procedures have been incorporated into new models. In fact, many studies have replaced PHABSIM with more powerful tools in recent years, including the RIVER2D hydraulic and habitat model that was used by USFWS to develop the Sacramento River WUA curves used for the Sites project WUA analyses (USFWS 2005). The field data used for the hydraulic/habitat modeling has also been refined and improved. For instance, improvements have been made in the flow velocity data used to represent the full range of flow velocity conditions impacting drift-feeding juvenile salmonids (Naman et al. 2019). The USFWS studies of Sacramento River rearing WUA include such a modification to represent flow velocities (USFWS 2005). In addition, improvements have been developed to include a broader range of factors in the modeling, including some of those mentioned in the previous paragraph. One of these includes modeling of bioenergetic factors (Naman et al 2020). Such methods are promising, but they are not currently available for use in analyzing flow effects on fish populations in the Sacramento River system. Some of the shortcomings of WUA analysis are more difficult to remedy. For instance, competition within a cohort of juvenile salmonids may affect habitat use such that dominant fish exclude sub-dominants from optimal habitat locations, resulting in the highest densities of fish occupying sub-optimal habitat (Beecher 2010; Beecher et al. 2017). Some such biases are inevitable in any effort to model fish populations, but improvements in sampling and modeling techniques can be expected to lead to more accurate models in the future. PHABSIM and similar models, despite their shortcomings, continue to be among the most used and useful analytical tools for assessing instream-flow related issues (Reiser et al. 2018).

Sites Project IL4 refuges deliveries (in TAF) by region (spatial level of detail in CalSim II) are tabulated below. The table contains long-term and water year type min, max and average IL4 refuges delivery results for the Sac Valley, San Joaquin, and Tulare Lake regions. The refuges associated with each region are listed below the table.

CVP Refuge Incremental Level 4 Deliveries									
WY Type	Sacramento Valley			San Joaquin			Tulare Lake		
	Average TAF	Min TAF	Max TAF	Average TAF	Min TAF	Max TAF	Average TAF	Min TAF	Max TAF
LT	4.15	0.00	9.79	9.26	0.00	48.54	2.84	0.00	14.39
D&CD	5.40	0.00	8.98	17.52	0.00	48.54	5.16	0.00	14.39
W	0.00	0.00	0.00	0.12	0.00	3.22	0.72	0.00	4.68
AN	7.53	4.73	8.88	1.61	0.00	12.66	0.63	0.00	3.64
BN	6.50	0.00	9.79	14.54	0.00	40.14	3.55	0.00	9.71
D	6.31	0.00	8.88	22.15	0.00	48.54	6.28	0.00	14.39
CD	4.05	0.00	8.98	10.58	0.00	48.54	3.48	0.00	14.39

Sacramento Valley Hydrologic Region
Colusa NWR
Delevan NWR
Sacramento NWR

San Joaquin Hydrologic Region
China Island Unit
East Bear Creek Unit
Freitas Unit
Grasslands RCD
Kesterson Unit
Los Banos WA
Mendota WA
Merced Unit
North Grasslands WA
Salt Slough Unit
San Luis Unit
Volta WA
West Bear Creek Unit

Tulare Lake Hydrologic Region
Kern NWR
Pixley NWR

DSOD Engagement Approach Technical Memorandum

To:	JP Robinette
CC:	-
Date:	October 26, 2022
From:	Christopher Krivanec / Henry Luu
Quality Review:	Mike Cadei
Authority Agent Review:	-
Subject:	Recommendation for DSOD Engagement Approach

1.0 Purpose

The purpose of this memorandum is to provide an overview of recommended guiding principles that the Sites Project Authority (Authority) and the California Division of Safety of Dams (DSOD) can implement to efficiently complete design, construction, and operation of the Sites Reservoir Project. This document describes an engagement plan goals, specific actions, and other considerations that should help facilitate effective coordination between the Authority and DSOD. The strategy identified within this document is for the Authority and Sites project team use only. A similar, but separate document will be prepared and provided to DSOD for establishing a mutual understanding.

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The overall goals for DSOD engagement are the following:

1. Develop a partnering relationship and trust.
2. Establish and maintain clear communications at all levels of the organizations.
3. Identify key issues early.
4. Coordinate resources and schedules to efficiently and thoroughly review and process project approvals.
5. Collaboratively work towards construction completion and operation of the Sites Reservoir to recognize ecosystem, water supply, flood control, and recreation public benefits.

3.0 Financial Obligations

The Authority is solely responsible for financing project costs including the DSOD application fee, which supports "*a wide variety of activities, including…application review and construction inspection work; engineering studies that include hydrologic, structural, and seismic stability re-evaluations; emergency response; and review and approval of mandated flood inundation maps of dams and critical appurtenant structures for emergency preparedness.*" This fee is based upon the estimated project cost of DSOD jurisdictional features (main dams, saddle dams/dikes, spillway and inlet/outlet appurtenances necessary to accommodate a potential emergency event that would necessitate drawdown of the Sites Reservoir) and may be paid in installments commensurate with the design phase.

An agreement between the Authority and DSOD on staged fee installments has not been established. It is recommended that this is one of the first items that should be addressed with DSOD to ensure adequate funding is available for required resources. A payment schedule may be established based on the traditional 30%, 60%, 90%, and final submittals.

It is noted that a minimum of 20% of the total application fee is non-refundable, and there is potential for an additional fee that is assessed by DSOD in the event the actual cost exceeds the estimated cost by more than 15 percent.

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The following communication plan is recommended:

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2. Regular project management team meetings
3. Project briefings on key deliverables

One-on-one leadership meetings are intended to be informal discussions between the Sites Engineering & Construction (E&C) Manager and the DSOD Division Manager that occurs monthly. Regular bi-monthly project management team meetings to facilitate high-level project status updates are encouraged between the Sites Project Engineering Management Team (E&C Manager, Engineering Integration Lead, and technical advisor[s], which includes consultant Project Managers, if focus on a particular topic is required) and DSOD managers. Project briefings on key deliverables will be attended by larger groups as needed and will occur just prior to DSOD reviews of those deliverables (e.g., design criteria, the GIWP, Basis of Designs, 30% Design).

Any issues or concerns that may arise are to be coordinated starting at the lowest level, during development or briefings of key deliverables, and will be escalated to the project management team if a resolution cannot be determined without management input. In a rare scenario where the management team is unable to resolve an item, the Authority's Executive Director may elect to work directly with the California Department of Water Resources Director and/or the California Secretary for Natural Resources to formulate an acceptable path forward. The Authority will work collaboratively with DSOD to identify and resolve any potential support for resources as needed. The Sites Engineering Integration team will be the point of contact for coordinating and facilitating resolution.

5.0 DSOD Evaluations and Schedule

Recognizing project benefits as soon as possible is a shared goal for both the Authority and the State. The Authority will prepare and share a detailed design schedule with DSOD including the timing and assumed duration of DSOD reviews. However, as this schedule is being prepared, the Authority requests input and/or validation of the following assumptions:

1. Noting that there are common elements that would overlap all project features (e.g., hydrologic setting, seismic loading), the nine separate dam design packages can be submitted independently for DSOD review.

2. A phased approach for design, review, and construction of the major dam elements (such as foundation excavation, foundation treatment/preparations, and embankment placement) is acceptable.
3. DSOD review and evaluations periods for each design submittal may take up to 6-months to complete, except review of the final plans & specifications which is anticipated to take up to 6-weeks.

Additional schedule efficiencies may be recognized by implementing an over-the-shoulder review concept similar to what was implemented during the 2017 Oroville incident. It should be noted that the Oroville incident was an emergency action initiated by the State and DSOD may not view the criticality of advancing the Authority's Project in similar light. It is assumed that DSOD will not be supportive of this approach, however the topic may be broached within the one-on-one leadership meetings to probe viability. The Authority can also work with DSOD to streamline reviews during the design process with inclusion of DSOD staff in other project briefings such as those for an independent board of consultants.

The Sites Project team will coordinate with DSOD to engage the department in a process-driven approach that commits to a planned submittal and review schedule of the deliverables (i.e., design criteria, site investigations, engineering analyses, preliminary designs, etc.). The Sites Project team will ensure deliverables are submitted on time and are complete in order to facilitate efficient DSOD reviews.

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This Project is a monumental effort that will challenge DSOD current process and resources – the project is on a scale that has not been overseen by the department in decades. DSOD's mission to ensure dam safety aligns with the Authority's values and vision in building and operating a safe, 21st century, water storage system. It is imperative for the Authority to work collaboratively with the department to meet expectations by identifying potential support for resources and approaching project design focused on risk management to supplement the traditional standards-based criteria.

6.1 DSOD Workload and Resources

The Sites Project will have a significant impact on DSOD resources, which we assume is already stretched under current and forecasted workloads. It is recommended that discussion of DSOD's staff availability for project deliverable reviews and independent evaluations be prioritized and tracked as part of the leadership conversations. The project team will discuss with DSOD the possibility of drawing from other partner agencies (e.g., DWR, USACE or USBR) to supplement resource needs. The Authority may also explore with DSOD the possibility of funding additional DSOD resources to prioritize reviews and meet schedule goals.

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DSOD has indicated to their jurisdictional dam owners that they are transitioning to a RIDM approach to their evaluations of dam projects. DSOD now also requires dam owners to submit dam breach inundation maps, which are published on DSOD's website. The Sites Project team will discuss how RIDM may affect the design criteria, loading conditions and designs for project, and if it may lead to modification of project requirements. RIDM may result in an optimized project that balances risk vs. costs.

Model assumptions	Alternative 1B	Alternative 3A	Alternative 3B
Reclamation Investment (% of Active Storage)	7%	25%	16%
Reclamation Investment (TAF)	101	360	230
Shasta Exchange: Cold Water Pool Mgmt	Sites may release water in April through June of Dry and Critically Dry water years in lieu of Shasta. In August through November, Shasta may release water for delivery to Sites Storage Partners.	Same as Alternative 1B	Same as Alternative 1B
Shasta Exchange: Sac R Spring Pulse	Sites exchange water may be released in May to support the spring pulse flow action (described in Minimum flow below Keswick Dam). Exchange water may be released in Wet and Above Normal years when end of April Shasta storage is greater than 4.1 MAF and Sites storage is greater than 80% of total active storage volume.	Same as Alternative 1B	Same as Alternative 1B
Shasta Exchange: Sac R Fall Flow Stability	Exchange water may be released for Fall Flow Stability when end of May Sites storage is greater than 80% of total active capacity, previous month Shasta storage is greater than 3.2 MAF, and the Fall Flow Stability action is already active.	Same as Alternative 1B	Same as Alternative 1B

Model results (TAF)	Alternative 1B (ALT 1B 062222 2035CT)		Alternative 3A (ALT 3A 041122 2035CT)		Alternative 3B (ALT 3B 041122 2035CT)	
	Average	Dry and Critical	Average	Dry and Critical	Average	Dry and Critical
Increase to CVP Deliveries	**1**	**0**	**19**	**23**	**7**	**3**
Additional End of Apr Shasta Storage	**23**	**49**	**55**	**123**	**42**	**96**
CVP OpFlex	22	44	54	120	43	93
Exchange	2	5	1	3	0	2
Additional End of Sep Shasta Storage	**42**	**62**	**124**	**184**	**92**	**136**
CVP OpFlex	38	55	119	179	85	131
Exchange	4	7	5	5	7	5
Additional FFS Release	**8**	**1**	**26**	**13**	**20**	**7**
CVP OpFlex	1	-2	10	6	8	3
Exchange	6	3	16	8	12	4
Additional Spring Pulse Release	**25**	**5**	**26**	**5**	**26**	**5**
CVP OpFlex	-1	5	-2	5	-2	5
Exchange	27	0	28	0	28	0

DSOD Engagement Approach Technical Memorandum

To:	JP Robinette
CC:	-
Date:	October 26, 2022
From:	Christopher Krivanec / Henry Luu
Quality Review:	Mike Cadei
Authority Agent Review:	-
Subject:	Recommendation for DSOD Engagement Approach

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From: Thad Bettner [tbettner@gcid.net]
Sent: 10/27/2022 10:40:36 AM
To: Alicia Forsythe [aforsythe@sitesproject.org]; Spranza, John [john.spranza@hdrinc.com]
Subject: RE: Sites Project - Initial Winter-Run Life Cycle Model Results

10/31 4 PM
11/3, 3 pm

Thaddeus L. Bettner, PE
General Manager

OFFICE: 530.934.8881 | **CELL:** 530.588.3450
EMAIL: tbettner@gcid.net

GCID

Glenn-Colusa Irrigation District
Post Office Box 150, Willows, California 95988

Follow us:

From: Alicia Forsythe <aforsythe@sitesproject.org>
Sent: Wednesday, October 26, 2022 12:14 PM
To: Thad Bettner <tbettner@gcid.net>; Spranza, John <john.spranza@hdrinc.com>
Subject: RE: Sites Project - Initial Winter-Run Life Cycle Model Results

Sure thing. Here's some dates/times that work for John and I. I've assumed an hour, so all of these are start times.

10/31 – 10 am, noon, 4 pm
11/2 – 11 am, noon, 2 pm, 4 pm
11/3 – 11 am, 3 pm, 4 pm

Roping in John to this email so he's in the loop.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Thad Bettner <tbettner@gcid.net>
Sent: Wednesday, October 26, 2022 11:03 AM
To: Alicia Forsythe <aforsythe@sitesproject.org>
Subject: RE: Sites Project - Initial Winter-Run Life Cycle Model Results

Yes high level initially would be fine and we can go from there. Next week would be great.

Thaddeus L. Bettner, PE
General Manager

OFFICE: 530.934.8881 | **CELL:** 530.588.3450
EMAIL: tbettner@gcid.net

Glenn-Colusa Irrigation District
Post Office Box 150, Willows, California 95988

Follow us:

From: Alicia Forsythe <aforsythe@sitesproject.org>
Sent: Wednesday, October 26, 2022 10:58 AM
To: Thad Bettner <tbettner@gcid.net>
Subject: RE: Sites Project - Initial Winter-Run Life Cycle Model Results

Sure. We'd be happy to do a call. Would just John and I be good? If we want to dive deeper into the model, then we would pull in Marin from ICF and Steve from Jacobs. Let me know and I'll get you some possible dates/times.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

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From: Thad Bettner <tbettner@gcid.net>
Sent: Tuesday, October 25, 2022 10:47 AM
To: Alicia Forsythe <aforsythe@sitesproject.org>
Subject: Re: Sites Project - Initial Winter-Run Life Cycle Model Results

Yes would you be willing to do a call with me and Lewis Bair. We can set up a Teams if you want to share online or if you email it would be just for us.

We can also share our concerns about the BiOp process.

Thaddeus L Bettner, General Manager
Glenn-Colusa Irrigation District
PO Box 150
Willows, CA 95988
530.934.8881 (office)
530.588.3450 (cell)

On Oct 25, 2022, at 10:37 AM, Alicia Forsythe <aforsythe@sitesproject.org> wrote:

Yes. There was a no project run. It was based on our CALSIM, temperature, and DSM II results, but we do have a no project run. Let me know if you'd like the results. I don't really want them shared widely as I think we're going to modify the model and re-run, but happy to share them with you.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Thad Bettner <tbettner@gcid.net>
Sent: Tuesday, October 25, 2022 10:28 AM
To: Alicia Forsythe <aforsythe@sitesproject.org>
Subject: Re: Sites Project - Initial Winter-Run Life Cycle Model Results

Any chance they provided a no project run?

Thank You,
Thaddeus Bettner
530.588.3450

On Oct 25, 2022, at 10:19 AM, Alicia Forsythe <aforsythe@sitesproject.org> wrote:

Hi all – I am going to postpone our meeting. We have been working with NMFS and UC Santa Cruz and believe that the Winter-run Life Cycle Model may not be fully accounting for the effects of the Project. We're working on some minor model modifications and then would like to have UC Santa Cruz do some re-runs. I'd like to hold off on sharing results until we can complete the re-runs.

As an initial sneak peak, I will share that our initial results showed a positive cohort replacement (increasing populations of winter-run due to the Project). So, this isn't modifying as we didn't like the results. This is a close look and modifications to make sure we have the most accurate picture of the Project considering the model framework.

I'll circle back when we have re-runs and we'll get this rescheduled.

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Alicia Forsythe
Sent: Tuesday, October 18, 2022 1:09 PM
To: Thad Bettner (tbettner@gcid.net) <tbettner@gcid.net>; Robert J. Kunde (rkunde@wrmwsd.com) <rkunde@wrmwsd.com>; 'Jeffrey P Sutton (jsutton@tccanal.com)' <jsutton@tccanal.com>; 'Neudeck, Randall D (rneudeck@mwdh2o.com)' <rneudeck@mwdh2o.com>; 'WVanderwaal@rd108.org' <wvanderwaal@rd108.org>; Spranza, John <john.spranza@hdrinc.com>; Jerry Brown <jbrown@sitesproject.org>
Subject: Sites Project - Initial Winter-Run Life Cycle Model Results

Hi all – The Authority has the initial results of the Winter-run Life Cycle Model that we'd like to share. We'd like to walk through these with a small group of members that have previously expressed interest in the model or the results. Our purpose in doing this is to share the initial results and get your feedback on our next set of model runs (we have 2 more sets under contract).

Below is a doodle poll to schedule this call. Please respond to the poll by COB, Thursday, October 20.

https://doodle.com/meeting/participate/id/aKZ0JDRe

Ali

Alicia Forsythe | Environmental Planning and Permitting Manager | Sites Project Authority | 916.880.0676 | aforsythe@sitesproject.org | www.SitesProject.org

From: Luu, Henry [Henry.Luu@hdrinc.com]
Sent: 10/27/2022 4:30:16 PM
To: Jerry Brown [jbrown@sitesproject.org]
CC: JP Robinette [jrobinette@sitesproject.org]; Marcia Kivett [MKivett@sitesproject.org]
Subject: RE: Risk Analysis
Attachments: Sites Reservoir Project Final Draft Report 2018-05-01 Rev.2 Ver.1.pdf; Sites Risk Register Compiled HR&HC.xlsx

Hi Jerry,

The risk effort in 2021 involved the engineering service area providers updating the project risk register that was developed and used in the 2018 risk assessment (the updated risk register reflects the Feasibility Design 1.5MAF reservoir) – attached is the 2018 risk assessment and the updated risk register. The A3 Engineering work plan includes activities for further refinement of the risk register and an updated risk assessment for the program through construction. The risk assessment is currently envisioned to be completed towards the end of A3 (within the second half of 2024).

Henry H. Luu, PE
D 916.679.8857 M 916.754.7566

hdrinc.com/follow-us

From: Jerry Brown <jbrown@sitesproject.org>
Sent: Thursday, October 27, 2022 7:49 AM
To: Luu, Henry <Henry.Luu@hdrinc.com>
Cc: JP Robinette <jrobinette@sitesproject.org>; Marcia Kivett <MKivett@sitesproject.org>
Subject: Risk Analysis

I recall last year around the time of the cost estimate update that HDR conducted some meetings around risks during design and construction.

1. Do you have a tech memo or table or any other material that you can share that we might use to discuss risk in the context of our governance ad hoc charge?
2. Is there anything in the A3 work plan for further refinement of risk analysis for Phase 3, 4, and 5?

Let me know

Thanks
Jerry

File Provided Natively

From: Spranza, John [John.Spranza@hdrinc.com]
Sent: 10/28/2022 9:24:16 AM
To: Alicia Forsythe [aforsythe@sitesproject.org]; Edwards, Dawn [Dawn.Edwards@hdrinc.com]
Subject: FW: Operations ITP Application Funding Chapter
Attachments: DRAFT_2081_impacts_aquatics_10272022.xlsx

Attached is the initial thinking for required operations mitigation. 178 acers of rearing habitat is going to be a challenge to mitigate for but it's about 1/3rd of what we were showing in 2021. Let me know if you would like to join a Monday call from 10-11 where ICF and I are going to walk through this.
John

John Spranza

D 916.679.8858 M 818.640.2487

From: Greenwood, Marin <Marin.Greenwood@icf.com>
Sent: Thursday, October 27, 2022 5:33 PM
To: Spranza, John <John.Spranza@hdrinc.com>; Pitts, Adrian <Adrian.Pitts@icf.com>
Cc: Hendrick, Mike <Mike.Hendrick@icf.com>; Lecky, Jim <Jim.Lecky@icf.com>; Briard, Monique <Monique.Briard@icf.com>
Subject: RE: Operations ITP Application Funding Chapter

Hello John: we have some updated numbers for consideration attached. Adrian will follow up with an email to see if we can set up a call to discuss.

MARIN GREENWOOD | ICF | marin.greenwood@icf.com **| +1.530.400.8081 mobile**

From: Spranza, John <John.Spranza@hdrinc.com>
Sent: Monday, October 24, 2022 09:46
To: Pitts, Adrian <Adrian.Pitts@icf.com>
Cc: Hendrick, Mike <Mike.Hendrick@icf.com>; Greenwood, Marin <Marin.Greenwood@icf.com>
Subject: RE: Operations ITP Application Funding Chapter

Adrian,
Attached are two estimates that were done in 2021.

John Spranza

D 916.679.8858 M 818.640.2487

From: Pitts, Adrian <Adrian.Pitts@icf.com>
Sent: Monday, October 24, 2022 9:17 AM
To: Spranza, John <John.Spranza@hdrinc.com>

Cc: Hendrick, Mike <Mike.Hendrick@icf.com>; Greenwood, Marin <Marin.Greenwood@icf.com>
Subject: RE: Operations ITP Application Funding Chapter

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi John,
We are working on getting something for you.

In the meantime, there are no impacts to Delta Smelt that require mitigation acreage. Also, I understand that you may have received similar information from us in the past and may have an excel workbook tallying things up. If that is true, it might be good for us to take a look at it, so we update it rather than reinventing the wheel.

Thanks
Adrian

ADRIAN PITTS
916.501.3199 mobile
icf.com | LinkedIn

From: Spranza, John <John.Spranza@hdrinc.com>
Sent: Monday, October 24, 2022 8:16 AM
To: Pitts, Adrian <Adrian.Pitts@icf.com>
Cc: Hendrick, Mike <Mike.Hendrick@icf.com>
Subject: RE: Operations ITP Application Funding Chapter

Adrian,

I need the acers impacted for each type of habitat.

John Spranza

D 916.679.8858 M 818.640.2487

From: Pitts, Adrian <Adrian.Pitts@icf.com>
Sent: Friday, October 21, 2022 4:44 PM
To: Spranza, John <John.Spranza@hdrinc.com>
Cc: Hendrick, Mike <Mike.Hendrick@icf.com>; Edwards, Dawn <Dawn.Edwards@hdrinc.com>; Brian Grubbs <grubbs@montaguederose.com>
Subject: RE: Operations ITP Application Funding Chapter

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thanks John.

ADRIAN PITTS
916.501.3199 mobile
icf.com | LinkedIn

From: Spranza, John <John.Spranza@hdrinc.com>
Sent: Friday, October 21, 2022 3:49 PM
To: Pitts, Adrian <Adrian.Pitts@icf.com>
Cc: Hendrick, Mike <Mike.Hendrick@icf.com>; Edwards, Dawn <Dawn.Edwards@hdrinc.com>; Brian Grubbs <grubbs@montaguederose.com>
Subject: RE: Operations ITP Application Funding Chapter

Hi Adrian,
I will get to work on this early next week. We are working right now on updating the management costs and associated items.

John Spranza

D 916.679.8858 M 818.640.2487

From: Pitts, Adrian <Adrian.Pitts@icf.com>
Sent: Thursday, October 20, 2022 3:43 PM
To: Spranza, John <John.Spranza@hdrinc.com>
Cc: Hendrick, Mike <Mike.Hendrick@icf.com>
Subject: Operations ITP Application Funding Chapter

Hi John,
Thank you for putting the meat in the funding chapter for the Operations ITP application and continuing to work with the funding folks to populate the cost table.

I made some edits to the text to remove or modify the text that did not pertain to fish or construction. It is attached in case you'd like to see it.

However, the main reason for this email is to keep the outstanding costs for the cost table on your radar. Do you know when those will be available?

Thanks
Adrian

ADRIAN PITTS
916.501.3199 mobile
980 9th Street, Suite 1200, Sacramento, CA 95814 USA
icf.com | LinkedIn

File Provided Natively

From: Jerry Brown [jbrown@sitesproject.org]
Sent: 10/29/2022 6:14:25 AM
To: Alicia Forsythe [aforsythe@sitesproject.org]; bezzone@mbkengineers.com
Subject: Re: Final Documents

Correcting Angela's email and will forward the original email sent by Dave.

From: Jerry Brown <jbrown@sitesproject.org>
Date: Saturday, October 29, 2022 at 6:09 AM
To: Alicia Forsythe <aforsythe@sitesproject.org>, Angela Bezzone <no-reply@sharepointonline.com>
Subject: FW: Final Documents

Please verify that the table on page 7 of the DWR report is correct for the delta exports. I believe the average annual amount of 80TAF shown is low and should be closer to 160TAF (~120taf for SOD Participants + ~40taf for P1 ecosystem water).

If 80taf is correct please explain what I'm missing and if it is incorrect please ask DWR to make a correction.

thanks

From: "Okita, David@DWR" <David.Okita@water.ca.gov>
Date: Friday, October 28, 2022 at 7:02 AM
To: Alicia Forsythe <aforsythe@sitesproject.org>, Andrew Garcia <AndrewGarcia@valleywater.org>, Angela Bezzone <bezzone@mbkengineers.com>, "Boland-Brien, Samuel@Waterboards" <Samuel.Boland-Brien@waterboards.ca.gov>, Cindy Kao <ckao@valleywater.org>, Dana Jacobson <DJacobson@valleywater.org>, Dave Richardson <drichardson@woodardcurran.com>, Jerry Brown <jbrown@sitesproject.org>, Marguerite Patil <mpatil@ccwater.com>, Maureen Martin <mmartin@ccwater.com>, Michael Martin <MichaelMartin@valleywater.org>, "Riddle, Diane@Waterboards" <Diane.Riddle@waterboards.ca.gov>, "Sugar, Sarah@Waterboards" <Sarah.Sugar@Waterboards.ca.gov>, Terrie Mitchell <mitchellt@sacsewer.com>, "Young, Amy@DWR" <Amy.Young@water.ca.gov>
Subject: Final Documents

Attached are the final version of the WSIP Cumulative Flow Study. They are the Stantec Report and the DWR prepared Narrative. These have been revised based on comment received and some editorial updates. The main addition is a new section on Delta Outflow.

Note that the 3 WSIP Pulse Flow projects (and CDFW) are on a separate mailing list.

David Okita, PE
Department of Water Resources
530 902-7588

From: Janis Offermann [janis@horizonh2o.com]
Sent: 10/31/2022 10:15:23 AM
To: Laverne Bill [LBill@yochadehe.gov]; SReyes-Gutierrez@yochadehe.gov; EHernandez@yochadehe.gov
CC: Alicia Forsythe [aforsythe@sitesproject.org]; Laurie Warner Herson [laurie.warner.herson@phenixenv.com]; Kevin Spesert [kspesert@sitesproject.org]
Subject: Agenda for today's meeting
Attachments: 20221031_Sites-Yocha Dehe AB52_Meeting-Agenda (002).docx

Good morning, Laverne
Attached please find an agenda for today's meeting.
Looking forward to seeing you soon.
thanks
janis

Janis Offermann, MA, RPA
Cultural Resources Practice Lead
Horizon Water and Environment
1801 7th Street, Suite 100
Sacramento, CA 95811
530.220.4918