AD-HOC ENVIRONMENTAL PLANNING AND PERMITTING WORKGROUP

MARCH 2020





- Previous Action Item Review
- Value Planning Update
- Planning and Permitting Schedule Update
 Risks and Assumptions
- Organizational Assessment
- Upcoming Work and Priorities
- Next Meeting
- New Action Item Review

Previous Action Item Review



- 1. Provide Integration and EPP costs for Phase 1B support. Provide information on who from HDR is supporting Integration. Provide description/definition of Integration to Work Group.
- 2. Provide information on Program costs and accomplishments to date.
 - Note, this will be in the upcoming Annual Report being prepared by the Controls Team and thus, will not be tracked here.
- 3. Provide clarity on critical path schedule items with a focus on what is needed for the January 1, 2022 requirements (graphic is desired). Develop simplified chart of schedule for April package.

- Integration / Program Management
 - Ensures work being performed by consultant team meets the agreed to performance requirements
 - May represent or otherwise stand in place for an Authority Agent but without the ability to bind the Authority
 - Provides all Program / staffing support to keep the Program going
 - Analogous to Program Management function

 Integration budget for Amendment 1B (Jan 2020 thru Aug 2020) for Service Area E & F with staff resources identified

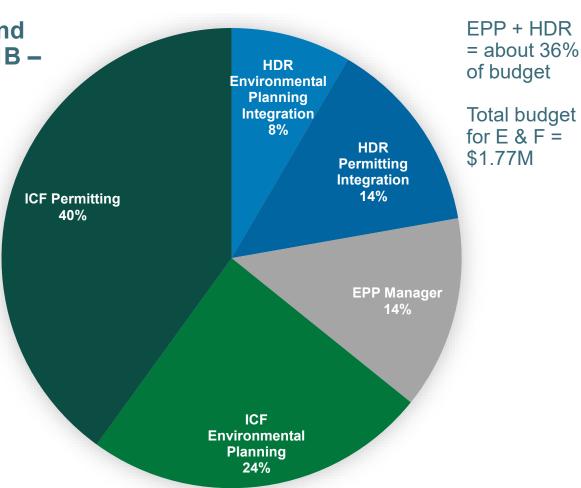
Task	Fee	Budgeted Staff
Environmental Planning Integration	\$149,357	Laurie Warner Herson
		Linda Fisher
Permitting Integration	\$243,884	John Spranza
		Jelica Arsenijevic
		Josh Peabody
Total	\$393,241	



Budget by Consultant for Environmental Planning and Permitting – Amendment 1B – January 2020 thru August 2020

Environmental Planning and Permitting (EPP) Manager budget for Amendment 1B :

\$30,000/month +
 expenses = about
 \$240,000 for 1/2020 to
 8/2020



Value Planning Update



Value Planning Update - Process

- October 2019 Began Value Planning Efforts
- Value Planning Work Group established:
 - Wheeler-Ridge Maricopa Water Storage District
 - o RD 108
 - o Carter Mutual
 - o Colusa County
 - Davis Water District
 - o TCCA
 - Colusa County Water District
 - o GCID
 - o MWD
- Met about 6 times since October 2019

Value Planning Update – Alternatives Considered During Value Planning

	Value Planning Alternatives															
	1	2	3	4a	4b	5a	5b	6a	6b	VP1	VP2	VP3	VP4	VP5	VP6	VP7
Features		2	Ŭ	ти	ты	ou	00	ou	00	VII	VIZ	VIO	VIT	VIO	VIO	VII
Cost (\$billions)	\$4.0	\$4.0	\$3.9	\$3.8	\$3.9	\$3.5	\$3.9	\$3.4	\$3.6	\$3.3	\$2.8	\$3.3	\$3.0	\$2.7	\$2.9	\$2.9
Savings from 1.8 MAF Alternative D	\$1.2	\$1.2	\$1.3	\$1.4	\$1.3	\$1.7	\$1.3	\$1.8	¢1 G	\$1.9	\$2.3	\$1.9	\$2.1	\$2.4	¢0.0	\$2.2
(\$billions)	ΦΙ. Ζ	φ1.Ζ	φ1.5	φ 1.4	φ1.S	φ1./	φI.3	φ1.0	φ 1.0	φ 1.9	φΖ.3	φI.9	⊅∠. Ι	φΖ.4	\$2.2	ΦΖ.Ζ
1.5 MAF Reservoir	٠	•	•	•	•	•	•	•								•
1.3 MAF Reservoir									•	•	•	•	•	•	•	
Funks/Sites PGP	•	•		•	•	•	•									
Funks PGP											•	•	•	•	•	•
TRR and TRR PGP	٠	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
TCRR with Pumping Plant and Pipeline			•					•	•	•						
Delevan Canal/Pipeline Release	٠	•	•	٠	•											
Delevan Pipeline												•				
Dunnigan Pipeline to CBD Release (750						•		•		•	•					
cfs)																
Dunnigan Pipeline to CBD Release (1,000														•		•
cfs)																
Dunnigan to River Release (750 cfs)							•		•							
Dunnigan Pipeline to River Release (1,000 cfs)													•		•	
Bridge (sized for 1.3 MAF)									•		•	•	•			
Bridge (sized for 1.5 MAF)	٠		٠	•	•	•	•	•		•				•	•	•
South Road to Lodoga		•														
South Road to Local Residents	٠		•	•	•	•	•	•	•	•	•	•	•	•	•	•
Rockfill Embankment Dam	٠	•	•			•	•									
Earthfill Dam				•				•	•	•	•	•	•	•	•	•
Hardfill Dam					•											

Value Planning Update - Enviro Appendix

- Value Planning Alternatives Appraisal Report
- Memo ID's key differences of the value planning alternatives when compared to Alternative D as described in the Draft EIR/EIS:
 - Species within the alternatives footprint that could potentially be impacted through construction and operation of the Project;
 - Key permits and approvals required to construct and operate the Project including any additional regulatory requirements beyond those identified in the Draft EIR/EIS;
 - Environmental planning considerations related to CEQA/NEPA analysis;
 - Qualitative change in mitigation cost; and
 - A relative weighting associated with environmentally related criteria (and associated metrics) compared to Alternative D in the Draft EIR/EIS.

Value Planning Update – Relative Permitability of Each Alternative Compared to Alternative D

						-										
								Alterna	tives							
Permits	D (EIR/EIS)	1	2	3	4a and 4b	5a	5b	6a	6b	VP1	VP2	VP3	VP4	VP5	VP6	VP7
						F	ederal									
Clean Water Act (404)	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Section 408	1	2	2	2	2	3	2	3	2	3	3	1	1	3	1	3
Federal ESA (NMFS and USFWS)	1	2	2	2	2	3	2	3	2	3	3	2	2	3	2	3
Section 106	1	2	2	2	2	3	2	3	2	3	3	2	2	3	2	3
							State									
Clean Water Act (401) and Wetland Policy	1	2	2	2	2	2	1	2	1	2	2	2	2	2	1	2
California ESA	1	2	2	2	2	3	2	3	2	3	3	2	2	3	2	3
1602 Lake and/or Streambed Alteration Agreements	1	2	2	2	2	2	1	2	1	2	2	1	2	2	1	2
Water Right(s)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
sum of points	8	15	15	15	15	19	13	19	13	19	19	15	15	19	15	19
Average	1.00	1.88	1.88	1.88	1.88	2.38	1.63	2.38	1.63	2.38	2.38	1.88	1.88	2.38	1.88	2.38
Average 1.00 1.88 1.88 1.88 1.88 2.38 1.03 2.38 1.03 2.38 2.38 Notes: Relative Permeability Scale: 0 = more difficult; 1 = approximately the same; 2 = slightly less difficult; 3 = moderately less difficult higher number - relatively easier to obtain permit/approval from regulatory resource agency compared to Alternative D No Delevan diversion, slightly smaller inundation (smaller size), narrower Delevan easement to river, river outfall No Delevan diversion, slightly smaller inundation (smaller size), no easement to river, shorter conveyance off TCC, northern regulating reservoir facilities (6a) No Delevan diversion, slightly smaller inundation (smaller size), no Delevan easement to river, easement to river off TCC and river outfall, northern regulating reservoir facilities (6b) No Delevan diversion, slightly smaller inundation (smaller size), no Delevan easement to river, easement to river off TCC and river outfall, northern regulating reservoir facilities (6b) No Delevan diversion, slightly smaller inundation (smaller size), no Delevan easement to river, easement to river off TCC and river outfall, northern regulating reservoir facilities removed No Delevan to river, easement to river, easement to river, off TCC and river outfall, northern regulating reservoir facilities removed No Delevan diversion, slightly smaller inundation (smaller size), Delevan canal/pipeline easement to river, easement to river, off TCC and river outfall, northern regulating reservoir faci																

Value Planning Update – CEQA/NEPA Considerations

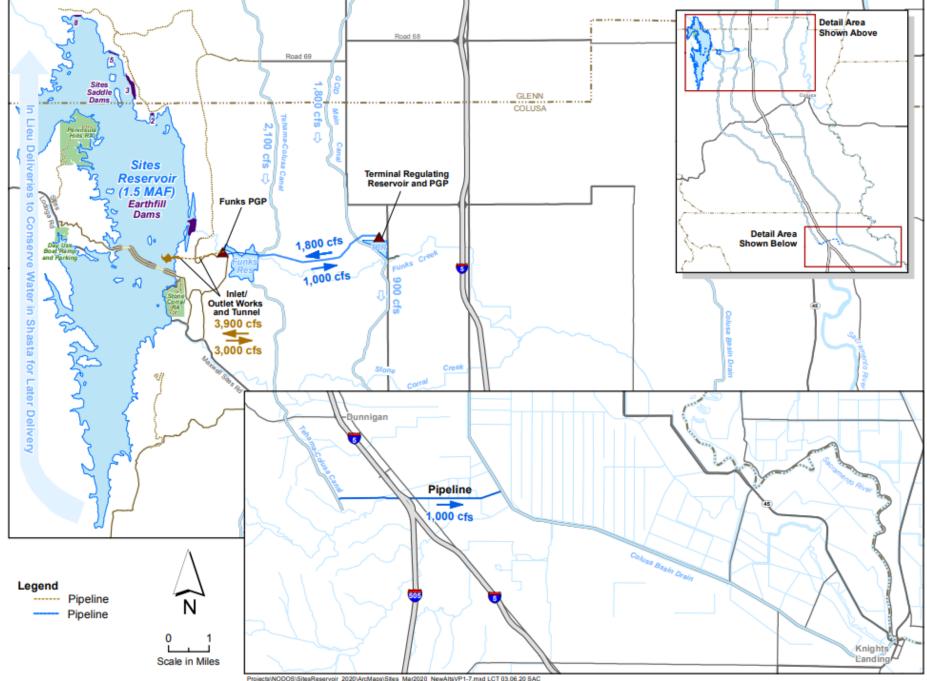
Alternative	CEQA/NEPA Key Considerations
VP5 Alternate 1	 Reduction in reservoir size may reduce effects on cultural, biological, and land use (agriculture) resources, but not to less-than-significant levels. Elimination of the Delevan pipeline or canal would potentially reduce land use (agricultural) effects, but effects would likely still be considered significant and unavoidable for the overall Project. Earthfill dam rather than rockfill dam would need to be analyzed for potential changes in environmental effects. Release from the southern terminus of the T-C Canal to the CBD would require additional study.
VP6 Alternate 1A	 Similar to Alternative VP5, reduction in reservoir size may reduce effects on cultural, biological, and land use (agriculture) resources, but not to less-than-significant levels. Elimination of Delevan pipeline or canal would potentially reduce agricultural effects, but effects would likely still be considered significant and unavoidable for the overall Project. Release from the southern terminus of the T-C Canal would require additional study; the proposed Dunnigan pipeline to Sacramento River may affect federal project levees (though likely less than Alternative D). Earthfill dam rather than rockfill dam would need to be analyzed for potential changes in environmental effects.
VP7 Recommended	Similar to VP5 and VP6, reduction in reservoir size may reduce effects on cultural, biological, and land use (agriculture) resources, but not to less-than-significant levels. Elimination of Delevan pipeline or canal would potentially reduce agricultural effects, but effects would likely still be considered significant and unavoidable for the overall Project. Earthfill dam rather than rockfill dam would need to be analyzed for potential changes in environmental effects. Release from the southern terminus of the T-C Canal to the CBD would require additional study.

Value Planning Update – Recommended Alternative

Major Facilities	VP5 Alternate 1	VP6 Alternate 1A	VP7 Recommended
Reservoir Size	1.3 MAF	1.3 MAF	1.5 MAF
Bridge Size (avoids future traffic Interruption)	1.5 MAF	1.5 MAF	1.5 MAF
South Road to Local Residents	Included	Included	Included
Misc. Local and Project Roads	Included	Included	Included
Diversion Locations	Funks and TRR	Funks and TRR	Funks and TRR
Dunnigan Release	1,000 cfs to CBD	1,000 cfs to River	1,000 cfs to CBD
CBD = Colusa Basin Drain			

MAF = Million Acre-feet

TRR = Terminal Regulating Reservoir



Projects/NODOS/SitesReservoir_2020/ArcMaps/Sites_Mar2020_NewAlts/VP1-7.mxd LCT 03.06.20 SAC

Planning and Permitting Schedule Updates Thru 12/2021



Planning and Permitting Schedule Updates

Sites Reservoir Project

ivity ID	Summan Tasks	y Activity Name	Ori Dur	Start	Finish	Total Predecessors Float	2020 2021 2 JFMAMJJASONDJFMAMJJASONDJ
OP-160	Ops	Delta Water Quality	44	10-Feb-20	09-Apr-20	0 OP-110	
OP-170	Ops	Lower River Mortality	44	10-Feb-20	09-Apr-20	0 OP-110	
OP-180	Ops	Determine Baseline	44	10-Feb-20	09-Apr-20	0 OP-110	
OP-190	Ops	CVP/SWP Integration	44	10-Feb-20	09-Apr-20	0 OP-110	1 🛏
OP-200	Ops	Participation Demands Updated	44	10-Feb-20	09-Apr-20	0 OP-110	
OP-210	Ops	Model Refinements	44	10-Apr-20	11-Jun-20	0 OP-200, OP-110, OP-130, OP-140, OP	
OP-220	Ops	Finalize Operational Criteria	0		12-Jun-20	0 OP-210	
Full Operation	ns Analysis		104	15-Jun-20	09-Nov-20	0	
OP-230	Ops	CalSim	104	15-Jun-20	09-Nov-20	0 OP-210, OP-220	
OP-240	Ops	DSM2-Hydro	104	15-Jun-20	09-Nov-20	0 OP-210, OP-220	
OP-250	Ops	USRWQM	104	15-Jun-20	09-Nov-20	0 OP-210, OP-220	
OP-260	Ops	SALMOD	104	15-Jun-20	09-Nov-20	0 OP-210, OP-220	
OP-270	Ops	IOS	104	15-Jun-20	09-Nov-20	0 OP-220, OP-210	
OP-280	Ops	DSM2-Qual	104	15-Jun-20	09-Nov-20	0 OP-210, OP-220	
OP-290	Ops	OBAN	104	15-Jun-20	09-Nov-20	0 OP-210, OP-220	
OP-300	Ops	Fish Mortality Models	104	15-Jun-20	09-Nov-20	0 OP-220, OP-210	
OP-310	Ops	Power	104	15-Jun-20	09-Nov-20	0 OP-210, OP-220	
OP-315	Ops	Economics	104	15-Jun-20	09-Nov-20	0 OP-210, OP-220	
EIR/EIS			526	11-Feb-20	07-Mar-22	183	· ·
Work Plan &	Outline		122	11-Feb-20	31-Jul-20	30	
EIR-001	Env	EIR/EIS Work Plan	46	11-Feb-20	14-Apr-20	38 WP-020	
EIR-010	Env	Annotated Outline	68	27-Apr-20	31-Jul-20	30 EIR-001, PDE-40	
Draft EIR/EIS	10.650 0	Annotated Oddine	211	15-Sep-20	14-Jul-21	0	
EIR-019	Env	Prepare Revised Draft EIR/S (Construction)	80	15-Sep-20	08-Jan-21	0 PDE-40, PDE-60, PDE-45, PDE-42, EIF	
EIR-020	Env	Prepare Revised Draft EIR (Operations)	65	11-Jan-21	09-Apr-21	0 WP-120, EIR-019, OP-230, OP-315, OF	
EIR-020	Env	Prepare Cumulative and Climate Change Sections	20	10-Feb-21	09-Mar-21	23 OP-340	
EIR-025	Env	Authority/Reclamation/Integration Review of Admin Draft EIR	10	12-Apr-21	23-Apr-21	0 EIR-020, EIR-025, EIR-019, OP-320	
EIR-040	Env	Revise Draft EIR	20	26-Apr-21	21-May-21	0 EIR-030	
EIR-050	Env	Work Group & Legal Review of Revised Draft EIR (Cal Days)	30	22-May-21	20-Jun-21	0 EIR-040	
EIR-060	Env	Resolve Work Group Comments	15	21-Jun-21	12-Jul-21	0 EIR-050	
EIR-070	Env	Authority Approval of Revised Draft EIR	15	13-Jul-21	13-Jul-21	0 EIR-060	
EIR-080	Env	Submit Revised Draft EIR	0	10-001-21	14-Jul-21	0 EIR-070	
Public Review	1		90	15-Jul-21	12-Oct-21	13	
EIR-090	Env	Public Review Period (Cal Days)	90	15-Jul-21	12-Oct-21	13 EIR-080	
Summary Re		T UDIC TREVIEW (Cal Days)	23	26-Oct-21	30-Nov-21	9	
EIR-110	Env	Prepare Summary Report	23	26-Oct-21	29-Nov-21	9 EIR-100	
EIR-110 EIR-120	Env		0	20-001-21	29-INOV-21 30-Nov-21	9 EIR-100	
		Draft EIR Summary Report Submittal to CWC	100	12-Oct-21	30-Nov-21 07-Mar-22		
Response to				State Approximation (1990)		183	
EIR-100	Env	Approach to Response to Comments	10	12-Oct-21	26-Oct-21	9 EIR-090	
EIR-130	Env	Response to Comments	90	26-Oct-21	07-Mar-22	183 EIR-090, EIR-100	
Permitting			852	02-Jan-20	08-May-23	0	
Level of	Effort 💻	Critical Remaining Work • • Critical Milestone	Work		Project Sch	edule	Date Printed: 17-Fe
					1 10/001 3011	GUUIG	
Actual W	Vark	Remaining WBS Summary 🕶 🐨 Summary			-		Page

Planning and Permitting Schedule Updates

Sites Reservoir Project

/ity ID	Tasks	/ Activity Name	Ori Dur	Start	Finish	Total Predecessors Float	202 JFMAMJ			2021 JJASOND
Biological Ass	sessment		369	02-Jan-20	14-Jun-21	44				,
BA-001	Permit	Initial Desktop Analysis	60	29-Sep-20	23-Dec-20	50 PDE-60, WP-130, ENG-220, BA-019				
BA-003	Permit	Strategize with USFWS and Reclamation on Surveys, Impacts & Mitigation	171	02-Jan-20	31-Aug-20	149				
BA-010	Permit	Mitigation Planning	202	15-Apr-20	01-Feb-21	44 VP-095				
BA-015	Permit	Adaptive Management Plan	202	15-Apr-20	01-Feb-21	44 VP-095				
BA-019	Permit	Confirm Federal Scope of Action (ESA)	85	15-Apr-20	13-Aug-20	48 VP-095				
BA-020	Permit	Permitting Construction Project Description	16	14-Aug-20	04-Sep-20	48 BA-019				
BA-022	Permit	Permitting Operations Project Description	20	13-Oct-20	09-Nov-20	40 OP-290, OP-300				
BA-024	Permit	Prepare Construction Analysis	97	14-Sep-20	01-Feb-21	44 VP-070, BA-001, BA-019, PDE-50, BA-(
BA-025	Permit	Prepare Operations Analysis	60	10-Nov-20	05-Feb-21	40 VP-095, BA-022, BA-010, OP-290, OP-:				
BA-030	Permit	Finalize Admin Draft BA	20	08-Feb-21	05-Mar-21	40 BA-010, BA-015, BA-024, BA-003, BA-C				
BA-032	Permit	Submit Finalize Admin Draft BA	0		05-Mar-21	40 BA-030	1		•	
BA-035	Permit	Independent Review Draft BA (Cal Days)	30	06-Mar-21	04-Apr-21	58 BA-030, BA-032	1			
BA-055	Permit	Reclamation, Legal, and Work Group Review (Cal Days)	30	06-Mar-21	04-Apr-21	58 BA-035	1			
BA-057	Permit	Revise Admin Draft BA	30	05-Apr-21	14-May-21	41 BA-055, BA-035	1			
BA-060	Permit	Submit Revised Admin Draft BA	0		14-May-21	41 BA-057	1		•	
BA-075	Permit	Final BOR and Solicitor Office Review (Cal Days)	30	15-May-21	13-Jun-21	61 BA-055, BA-057, BA-060	1			
BA-100	Permit	BOR Submit BA to USFWS & NMFS	0		14-Jun-21	44 BA-075	1		I	
BO Incidental	Take Authoria	zation	135	14-Jun-21	26-Oct-21	63				
BA-1110	Permit	BO Incidental Take Authorization (Cal Days)	135	14-Jun-21	26-Oct-21*	63 BA-075, BA-100				
TP-CESA (Se	c 2081) Oper	ations	292	29-Sep-20	19-Nov-21	370		· · · · · · · · · · · · · · · · · · ·		
CES-180	Permit	Operations Project Description	30	29-Sep-20	09-Nov-20	401 OP-230, OP-290, OP-300				
CES-190	Permit	Prepare Operations Analysis	30	05-Jan-21	15-Feb-21	365 BA-025 CES-180				1 1
CES-200	Permit	Mitigation Planning	30	16-Feb-21	29-Mar-21	365 CES-190				
CES-210	Permit	Prepare Draft ITP Application	60	17-May-21	10-Aug-21	371 VP-095. BA-057				<u>i</u> i i i i i i i i i i i i i i i i i i
CES-220	Permit	Legal Review of Draft ITP App (Cal Days)	30	11-Aug-21	09-Sep-21	535 CES-210				
CES-230	Permit	Work Group Review of Draft ITP App (Cal Days)	30	11-Aug-21	09-Sep-21	535 CES-210				
CES-240	Permit	Revise Draft ITP Application	20	09-Sep-21	07-Oct-21	370 CES-230, CES-220	1			
CES-250	Permit	Authority Board Approval of ITP App	30	07-Oct-21	18-Nov-21	370 CES-240				
CES-260	Permit	Submit ITP Application to CDFW	0		19-Nov-21	370 CES-250				•
TP-CESA (Se	c 2081) Cons		292	29-Sep-20	19-Nov-21	370		÷		
CES-015	Permit	Initial Desktop Analysis	30	29-Sep-20	09-Nov-20	572 ENG-220, VP-095				
CES-020	Permit	Prepare Terrestrial Analysis	30	10-Nov-20	23-Dec-20	572 CES-015				
CES-025	Permit	Mitigation Planning	30	24-Dec-20	05-Feb-21	572 CES-020				
CES-030	Permit	Prepare Draft ITP Application	60	17-May-21	10-Aug-21	371 VP-095, BA-057				<u>i</u> i i i i i i i i i i i i i i i i i i
CES-040	Permit	Legal Review of Draft ITP App (Cal Days)	30	11-Aug-21	09-Sep-21	535 CES-030				
CES-060	Permit	Work Group Review of Draft ITP App (Cal Days)	30	11-Aug-21	09-Sep-21	535 CES-030				
CES-000	Permit	Revise Draft ITP Application	20	09-Sep-21	07-Oct-21	370 CES-060, CES-040				
CES-070	Permit	Authority Board Approval of ITP App	30	07-Oct-21	18-Nov-21	370 CES-070	1 1			
CES-080	Permit	Submit ITP Application to CDFW	0	07-000-21	19-Nov-21	370 CES-080				
Section 106	Fernit		318	28-Aug-20	30-Nov-21	365				
section 106			310	20-Aug-20	30-1100-21					
Level of I		Critical Remaining Work • • Critical Milestone - Work.			Project Sch	edule			Da	ate Printed: 17-F
Actual W	ork	Remaining WBS Summary			~					Page

Schedule Risks and Assumptions – All Service Areas

In development of the project schedule we have identified some risks and methods to mitigate those risks:

- Funding limitations for all three service areas there is some risk that estimated funding is not sufficient to complete work and some tasks would not be completed according to schedule
 - Monitor budget regularly with the controls team and elevate any concerns to the Work Group and others so that we can prioritize activities

Schedule Risks and Assumptions – Planning

- Revised Draft EIR/EIS Due to Reclamation's NEPA process, the joint Draft EIR/EIS may be delayed and could risk missing Prop 1 funding deadline
 - Early and frequent coordination with Reclamation to confirm process and schedule; if necessary, separate EIR from EIS
- EIR Feasibility Summary Report for CWC If the number and substantive content of comments on the Revised Draft EIR are greater than anticipated the report could be delayed and may risk the determination of environmental feasibility
 - Work with CWC to determine their needs; proactive outreach to prior commenters so that comments on the previous Draft EIR/EIS are addressed to the extent possible in the Revised Draft EIR
- EIR/EIS Alternatives An increase in the range or number of alternatives may result in additional costs and schedule delays, also a risk to Prop 1 funding
 - Development of EIR/EIS alternatives will be coordinated with Work
 Group, Reservoir Committee and Board as EIR/EIS approach is developed

Schedule Risks and Assumptions – Permitting

- Activities completed to date to mitigate risks:
 - Extensive agency coordination
 - ✓ Agreed on many species modeled habitats for impact analysis
 - $\checkmark\,$ Site tours and information sharing
 - ✓ Agency workshops
 - ✓ Building relationships with staff
 - Looking to add modeling resources
 - Additional coordination with Reclamation

Schedule Risks and Assumptions – Permitting

- ESA and 106 Compliance Reclamation Not on Same Page
- Modeling Efforts
 - Baseline changes
 - Modeling resources become limited
 - Low projected benefits
 - Criteria acceptance delays

Organizational Assessment



Organizational Assessment Matrix

- See Organizational Assessment Matrix handout (MS Word file)
- Format
 - Helpful?
 - Suggested improvements?
- Content
 - **Responses appropriate?**
 - Additional actions?
 - o Right prioritization levels?
 - Timing for updates on responses / actions?

We're almost to the end...



Upcoming Work and Priorities – March / April Focus

- Project Description Development
 - Project Management Plan and kick off meeting with internal team
 - Key questions / challenges and approach for resolution
 - Approach for addressing comments on the 2017
 Draft EIR/EIS and identification of commenters that Sites may want to meet with
- Schedule
 - Refinements and summary graphic / flow chart
- Organizational Assessment

 Near term items

Upcoming Work and Priorities – May

- Amendment 2 Task Orders (9/2020 to 12/2021) + refined costs for Planning / Permitting
- Continue Project Description Development

Schedule Next Meeting

- Before April Reservoir Committee meeting (April 17)
 - Topics
 - Project Description Alternatives and Baseline
 - Others??

Identify and Assign Action Items