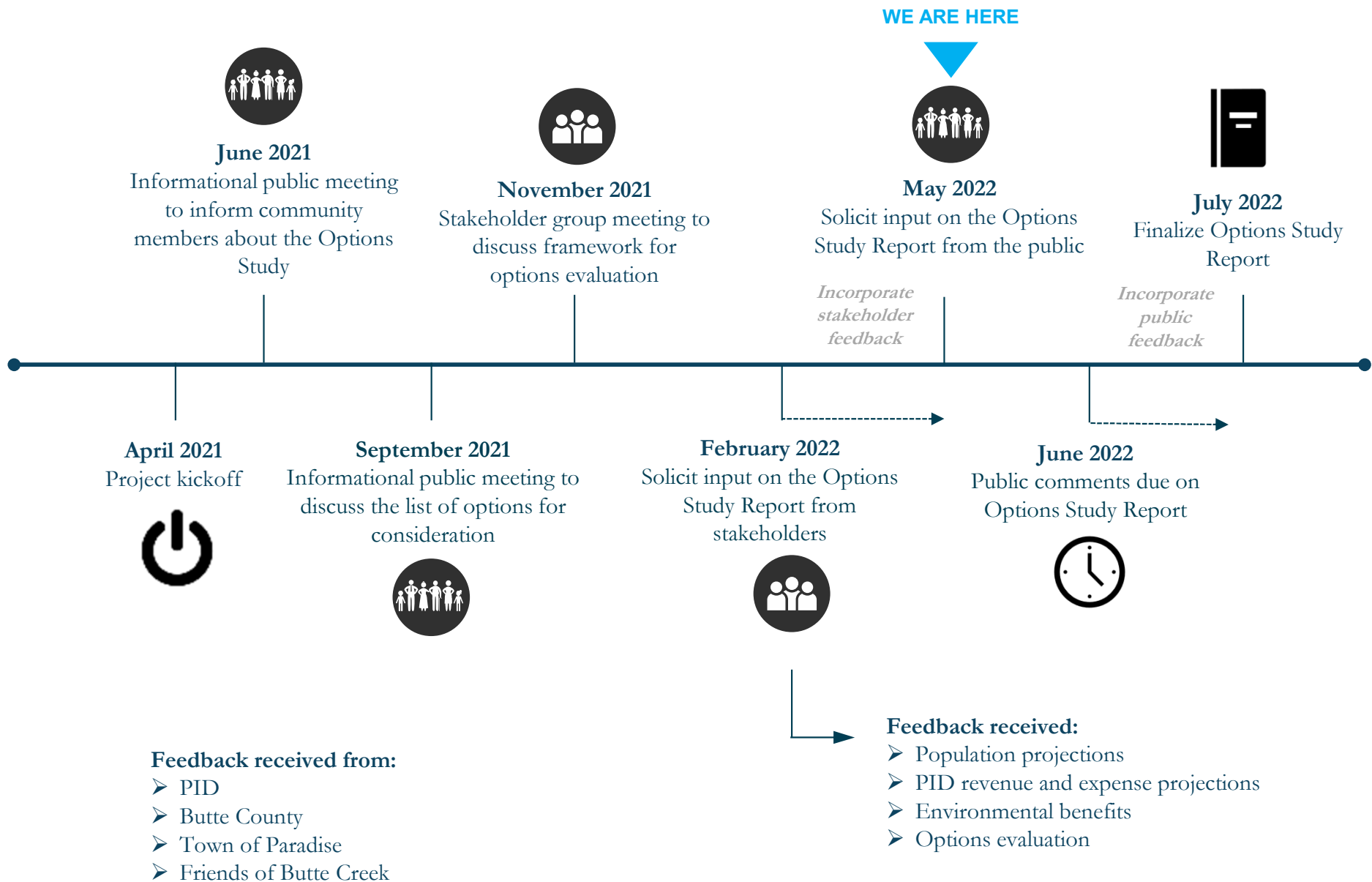




Town of Paradise Options Study Report

05/24/2022



Agenda

- Study Goal and Objectives
- Options Summary
- Preliminary Screening
- Options Prioritization
- Portfolio Formulation
- Evaluation Criteria
- Portfolio Scores and Summary
- Next Steps



Study Goal

- Formulate and evaluate options that provide short-term and long-term sustainability of water supply for the Paradise community



Study Objectives

- Water Supply Reliability
- Safe and Affordable Drinking Water
- Short- and Long-Term Financial Sustainability
- Support Community Redevelopment



Options Summary

Options Category	Option No.	Option Name
No Project	1	Do Nothing
Financial Claims	2	PG&E
	3	FEMA
	4	Insurance
	5	ASADRA
	6	Miocene Canal
Infrastructure	7	Chico Intertie
	8	Magalia Dam retrofit
	9	Butte County
Water Transfer	10	N/O Delta (Not Butte)
	11	S/O Delta
	12	PID into: ToP
Agency Reorg	13	PID into: SFWPA
	14	Into PID: Del Oro
	15	Paradise Sewer
Others	16	Metering
	17	Water Bottling
	18	Voluntary Agreements
	19/20	Rate Increases/Assessments
Funding Augmentation	21	Taxes
	22	Grants and Loans
	23	Backfill Funding Assistance



Preliminary Screening

Options Category	Option No.	Option Name
No Project	1	Do Nothing
Financial Claims	2	PG&E
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	23	Backfill Funding Assistance



Options Prioritization

Options Category	Option No.	Option Name	Priority Ranking
No Project	1	Do Nothing	N
Financial Claims	2	PG&E	A
	3	FEMA	B
	4	Insurance	N
	5	ASADRA	B
Infrastructure	6	Miocene Canal	A
	7	Chico Intertie	A
	8	Magalia Dam retrofit	B
Water Transfer	9	Butte County	N
	10	N/O Delta (Not Butte)	A
	11	S/O Delta	A
Agency Reorg	12	PID into: ToP	A
	13	PID into: SFWPA	A
	14	Into PID: Del Oro	N
Others	15	Paradise Sewer	B
	16	Metering	N
	17	Water Bottling	N
	18	Voluntary Agreements	N
Funding Augmentation	19/20	Rate Increases/Assessments	C
	21	Taxes	C
	22	Grants and Loans	B
	23	Backfill Funding Assistance	B



Portfolio Formulation

➤ Portfolios

- Groups of complimentary Options
- Together achieve the goals and objectives of the study

➤ Six Portfolios



Financial Claims



Miocene Canal



Chico Intertie



Water Transfers








PID reorganization into Town of Paradises



PID reorganization into SFWPA



Options Category	Option No.	Option Name	Priority	Portfolio				
				 Financial Claim	 Miocene Canal	 Chico Intertie	 Water Transfers	 Agency Reorganization
No Project	1	Do Nothing	N					
Financial Claims	2	PG&E	A	✓				
	3	FEMA	B	✓	✓	✓	✓	✓
	4	Insurance	N					
	5	ASADRA	B	✓	✓	✓	✓	✓
Infrastructure	6	Miocene Canal	A		✓			
	7	Chico Intertie	A			✓		
	8	Magalia Dam retrofit	B		✓	✓	✓	
Water Transfers	9	Butte County	N					
	10	N/O Delta (Not Butte)	A		✓	✓	✓	
	11	S/O Delta	A		✓	✓	✓	
Agency Reorganization	12	PID into: ToP	A					✓
	13	PID into: SFWPA	A					✓
	14	Into PID: Del Oro	N					
Others	15	Paradise Sewer	B			✓		
	16	Metering	N					
	17	Water Bottling	N					
	18	Voluntary Agreements	N					
Funding Augmentation	19/20	Rate Increases/Assessments	C	✓	✓	✓	✓	✓
	21	Taxes	N					
	22	Grants and Loans	B	✓	✓	✓	✓	✓
	23	Backfill Funding Assistance	B	✓	✓	✓	✓	✓

Evaluation Criteria

- Technical
- Economical
- Financial
- Regulatory
- Environmental Impacts
- Legal
- Stakeholder/Public Acceptance
- Implementation Timeline



Evaluation Criteria Ranking



Evaluation Criteria Ranking

- **Rank 1** – helps meet most or all the Study objectives
- **Rank 2** – helps meet some of the Study objectives
- **Rank 3** – does not meet most or all the Study objectives



Evaluation Criteria	Factors	Ranking		
		1	2	3
Technical Feasibility	Construction Requirements	New construction with above-average difficulty	New construction & typical level of difficulty	Requires no new construction
	Consistency with PID objectives	Consistent	Consistent but do not support future growth	Inconsistent
	Water Supply Reliability	Neither short- nor long-term water reliability	Short- or long-term water reliability	Short- and long-term water reliability
Economic Feasibility	Capital Cost	High (relative)	Average (relative)	Low (relative)
	Grants	Limited opportunities	Available but no prior evidence	Available with prior evidence
	Loans	Only commercial loans or subsidized loans with limited capacity	Subsidized loans available with sufficient capacity but no prior evidence of issuance for similar projects	Subsidized loans available with sufficient capacity with evidence of issuance for similar projects
Financial Feasibility	Impact to Annual O&M costs	Significant	Minimal	None
	Debt issuance	Long-term debt	Interim debt	No debt
	Impact to water rates	Significant	Moderate	Minimal
Regulatory Feasibility	Regulatory Feasibility	More than 2 years	Between 1 and 2 years	Less than 1 year
Environmental Impacts	Environmental Impacts	Significant	Less than significant	No adverse impacts or provide beneficial impacts
Legal Feasibility	Legal and Institutional Challenges	Substantial	Moderate	Limited
	Changes to PID’s Existing Water Rate Structure	Significant	Minor	No change
Stakeholder/ Public Acceptance	Overall Support	Low	Moderate	High
Implementation	Portfolio Implementation Timeline	2028 or beyond	Between 2024-2027	By 2023
	Implementation risk associated with securing grants/loans	Significant	Moderate	Minimal

Evaluation Criteria	Weight	Factors	Financial Claims	Miocene Canal	Chico Intertie	Water Transfers	PID Reorganization into Town of Paradise	PID Reorganization into SFWPA
Technical	20%	Construction requirements	3	2	1	2	3	3
		Consistency with PID objectives	3	2	3	3	3	1
		Water supply reliability	3	3	3	3	1	1
Economic	15%	Total Estimated Portfolio Capital Cost	3	2	1	2	3	3
		Likelihood of grants	3	1	2	3	1	1
		Likelihood of loans	3	1	3	3	3	1
Financial	10%	Impact to annual O&M costs	3	2	1	2	3	3
		Debt issuance	2	1	1	1	1	1
		Overall impact to water rates	3	1	1	1	1	1
Regulatory	10%	Regulatory Feasibility	3	1	1	2	2	1
Environmental	10%	Environmental Impacts	3	1	1	2	3	3
Legal	10%	Legal and institutional challenges	3	1	1	2	2	2
		Changes required to PID's existing water rate structure	3	1	1	1	2	1
Stakeholder/ Public	15%	Overall support	3	2	2	3	2	1
Implementation Timeline	10%	Overall portfolio implementation timeline	2	2	1	3	2	2
		Implementation risk associated with securing grants/loans	3	2	2	3	2	2



Evaluation Criteria Weightage



Evaluation Criteria Weightage

Evaluation Criteria	Weightage
Technical Feasibility	20%
Economic Feasibility	15%
Financial Feasibility	10%
Regulatory Feasibility	10%
Environmental Impacts	10%
Legal Feasibility	10%
Stakeholder/Public Acceptance	15%
Implementation	10%



Portfolio Scores



Portfolio Scores

Evaluation Criteria	Weight	Factors	Rating	Average Rating	Score (Weight*Avg Rating)
Technical	20%	Construction requirements	2	2.3	0.5
		Consistency with PID objectives	2		
		Water supply reliability	3		
Economic	15%	Total Estimated Portfolio Capital Cost	2	1.3	0.2
		Likelihood of grants	1		
		Likelihood of loans	1		
Financial	10%	Impact to annual O&M costs	2	1.3	0.1
		Debt issuance	1		
		Overall impact to water rates	1		
Regulatory	10%	Regulatory Feasibility	1	1.0	0.1
Environmental	10%	Environmental Impacts	1	1.0	0.1
Legal	10%	Legal and institutional challenges	1	1.0	0.1
		Changes required to PID’s existing water rate structure	1		
Stakeholder/ Public	15%	Overall support	2	2.0	0.3
Implementation	10%	Overall portfolio implementation timeline	2	2.0	0.2
		Implementation risk associated with securing grants/loans	2		
Total					1.6



Portfolio Scores



Financial Claims: **2.9**



Water Transfer: **2.4**



PID reorganization into Town of Paradise: **2.2**



PID reorganization into SFWPA: **1.7**



Chico Intertie: **1.6**



Miocene Canal: **1.6**



Portfolio Summaries

Scoring	Portfolios	Advantages	Disadvantages
High score	Financial Claims	<ul style="list-style-type: none"> Lowest cost of all portfolios Has the potential ability to meet all revenue deficits 	<ul style="list-style-type: none"> Significant unknowns regarding likelihood of success Does not provide additional benefits
Medium score	Water Transfers	<ul style="list-style-type: none"> Limited infrastructure improvements Can quickly begin generating revenue 	<ul style="list-style-type: none"> Water transfer opportunities are limited until Magalia Dam retrofit completed Does not meet short-term funding deficiency alone
	Agency Reorganization into Town of Paradise	<ul style="list-style-type: none"> Provides some technical and managerial cost efficiencies Willingness to provide loans to cover PID's operational deficit 	<ul style="list-style-type: none"> Existing funding deficit will be passed to agency
Low scores	Agency Reorganization into SFWPA	<ul style="list-style-type: none"> Provides some technical and managerial cost efficiencies 	<ul style="list-style-type: none"> Existing funding deficit will be passed to agency
	Chico Intertie	<ul style="list-style-type: none"> Multi-benefit opportunities Provides reliable method to sell water 	<ul style="list-style-type: none"> Highest cost option Longer implementation timeline Water transfer opportunities are restricted until Magalia Dam retrofit completed Does not meet short-term funding deficiency alone
	Miocene Canal	<ul style="list-style-type: none"> Multi-benefit opportunities May provide additional water supplies Hydroelectric power generation potential 	<ul style="list-style-type: none"> Higher cost option Longer implementation timeline Water transfer opportunities are restricted until Magalia Dam retrofit completed Does not meet short-term funding deficiency alone



GEI Next Steps

- **June 7, 2022** – Public Comments Due
- **July 8, 2022** – Finalize Options Report



Questions?

GEI



Consultants

Consulting
Engineers and
Scientists