

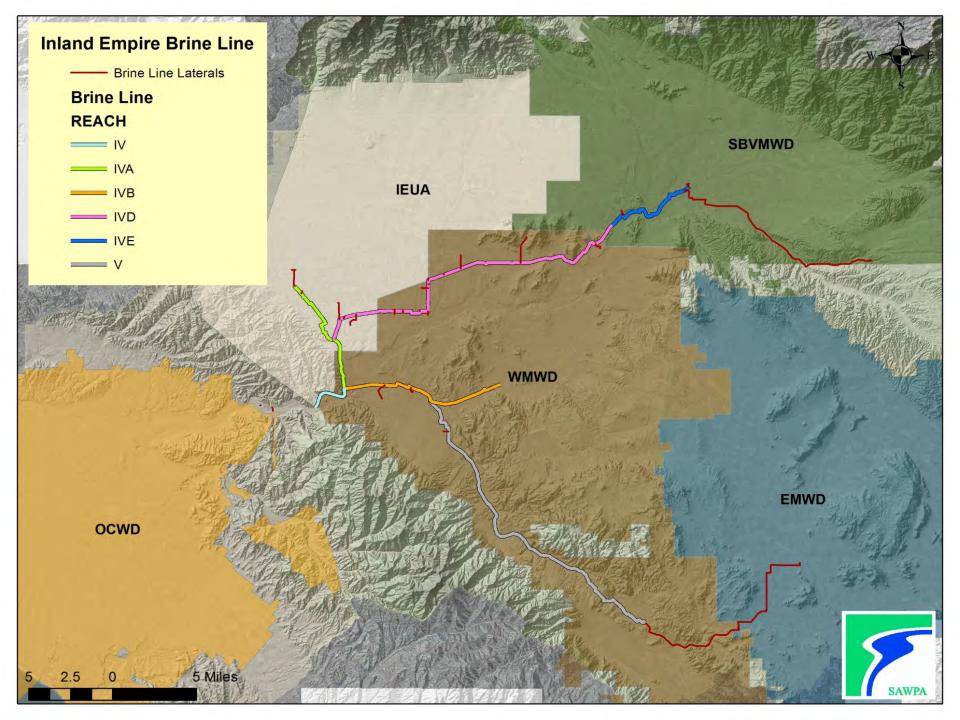
# Brine Line Operations & Capital Budget



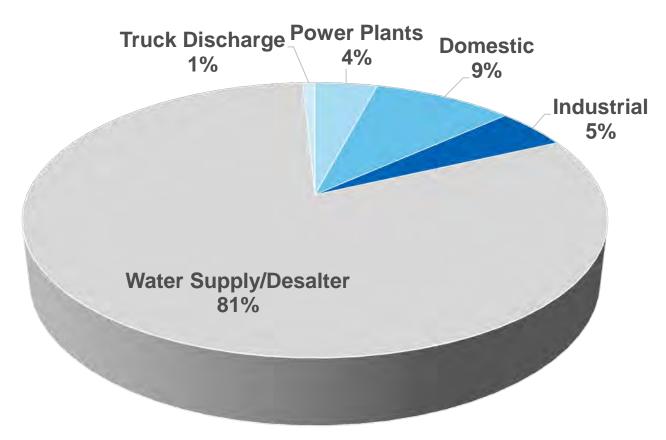


#### What is the Brine Line?

- The Inland Empire Brine Line (IEBL) is a 73 mile-long regional brine line designed to convey 30 million gallons per day of non-reclaimable waste water from the upper Santa Ana River Basin to the Pacific Ocean for disposal after treatment
- It was built as the fundamental method of salt export for the region
- Pipeline ranges in age from 19 to 47 years
  - Reach 4 was constructed in the mid-70's (around1974)
  - Reaches 4A and 4B were constructed in the early 1980's (1982)
  - Reaches 4D and 4E were constructed in the early 1990's (1994)
  - Reach 5 was constructed in the early 2000's (2002). Rehab in 2017
- Pipe diameters range from 16 inch to 48 inch



# Who Uses the Brine Line?



# Historical Revenues & Expenses

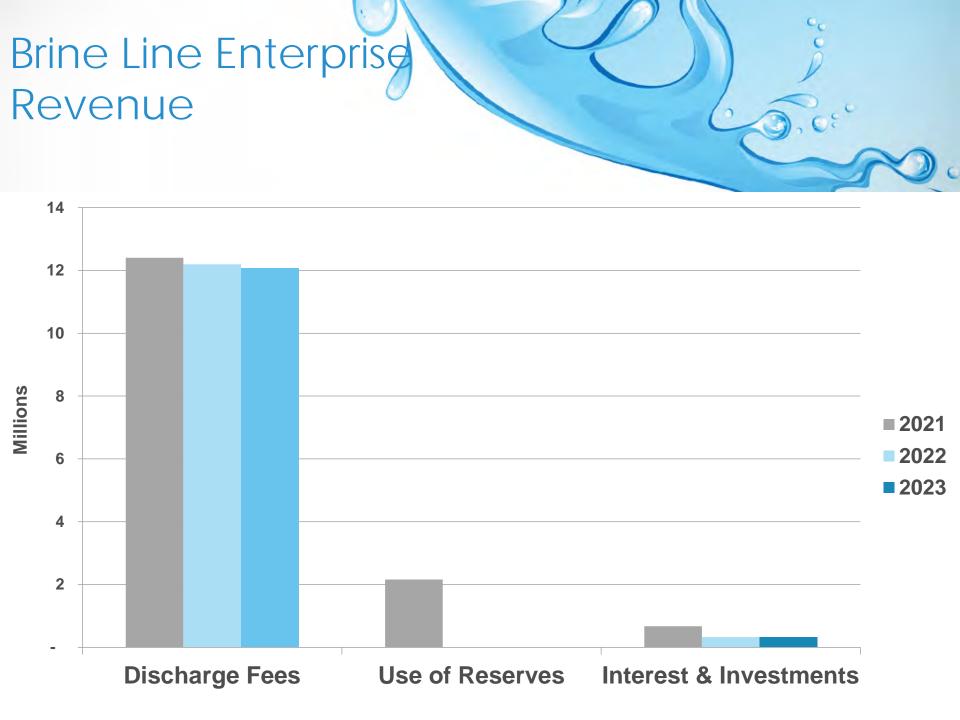
	FYE	Revenues	Expenses	To (From) Reserves
	2018	10,894,643	(10,629,700)	264,943
	2019	11,123,310	(10,032,452)	1,090,858
	2020	11,539,517	(10,000,785)	1,538,732
	2021	12,401,418	(12,401,418)	0
Budget	2022	12,192,272	(12,192,272)	0
	2023	12,071,872	(12,071,872)	0

Numbers listed above are for operating revenues and expenses and do not include non-operating/debt service

### Historical Flows

FYE	Total Flows (MGD)
2018	3,782
2019	3,718
2020	4,025
2021	3,800
2022	3,800
2023	3,700



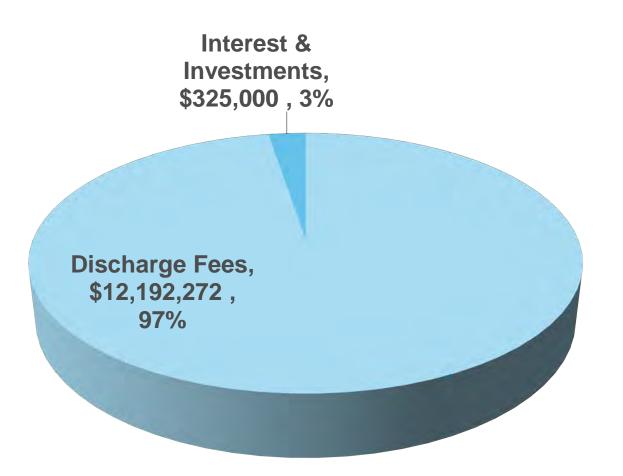


# Brine Line Enterprise Revenues

Revenue	FYE 2021	FYE 2022	FYE 2023
Discharge Fees	\$12,401,418	\$12,192,272	\$12,071,872
Other Income (Use of Reserves)	2,160,027	0	0
Interest & Investments	675,000	325,000	325,000
Total	\$15,236,445	\$12,517,272	\$12,396,872
Flow (MGs)	3,800	3,800	3,700
BOD per 1,000 lbs.	1,300	1,300	1,200
TSS per 1,000 lbs.	4,550	4,550	4,400
Truck Discharge (MGs)	40	19	20

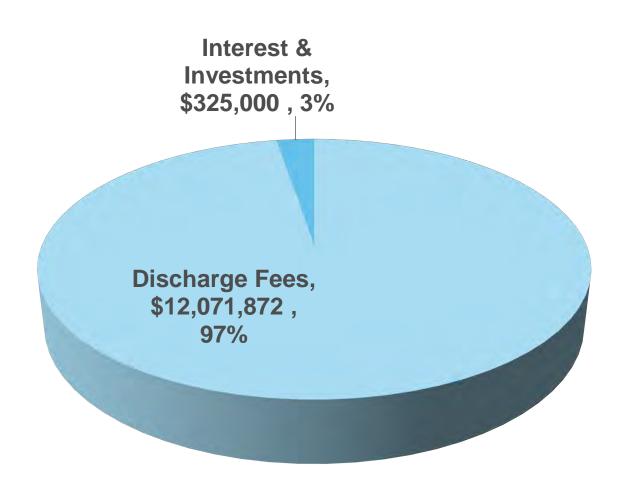


#### **Brine Line Revenues \$12.5 Million**

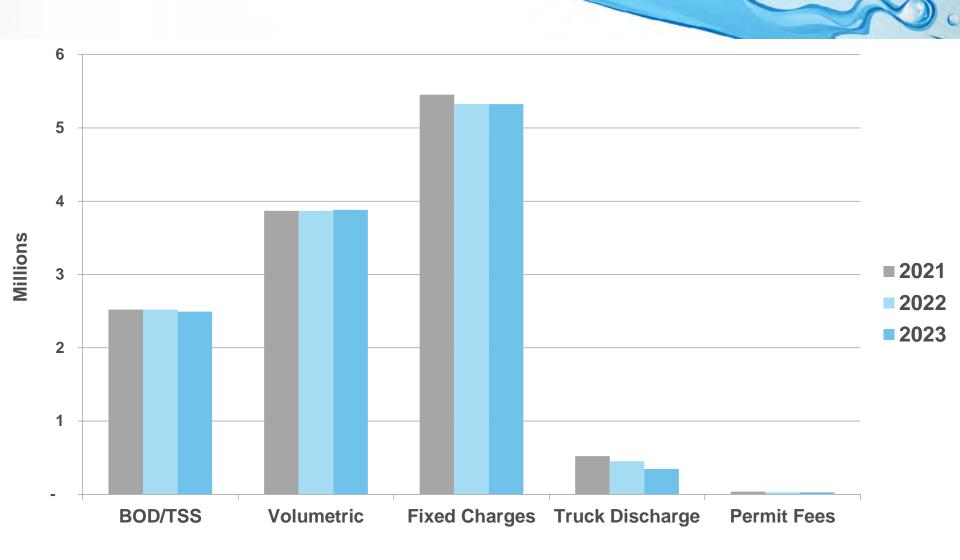




#### **Brine Line Revenues \$12.4 Million**





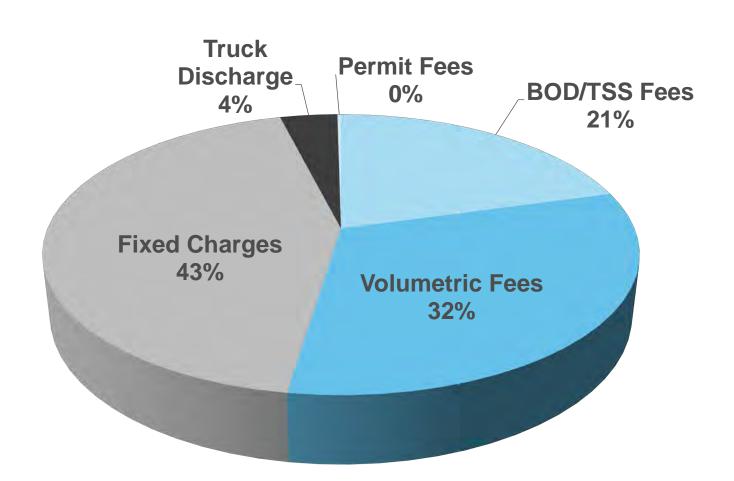


# Brine Line Enterprise Discharge Fees

Expense	FYE 2021	FYE 2022	FYE 2023
BOD/TSS Fees	\$2,520,700	\$2,520,700	\$2,492,400
Volumetric Fees	3,868,400	3,868,400	3,881,300
Fixed Charges	5,453,233	5,323,422	5,323,422
Truck Dump Fees	521,000	451,500	346,500
Permit Fees	38,085	28,250	28,250
Total	\$12,401,418	\$12,192,272	\$12,071,872

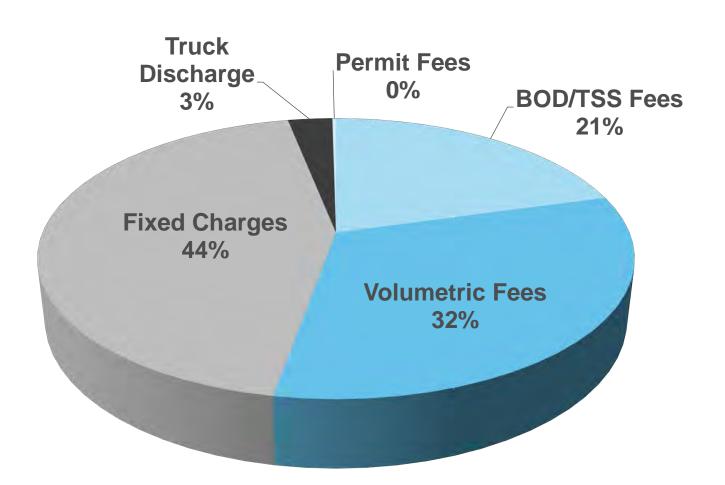


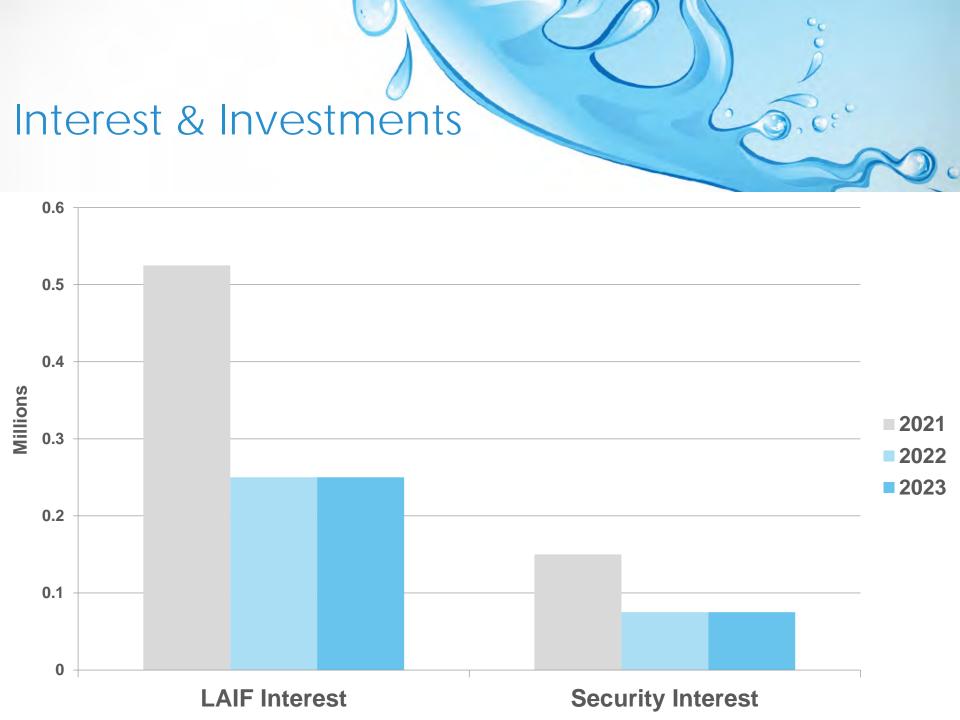
#### **Discharge Fees \$12.2 Million**





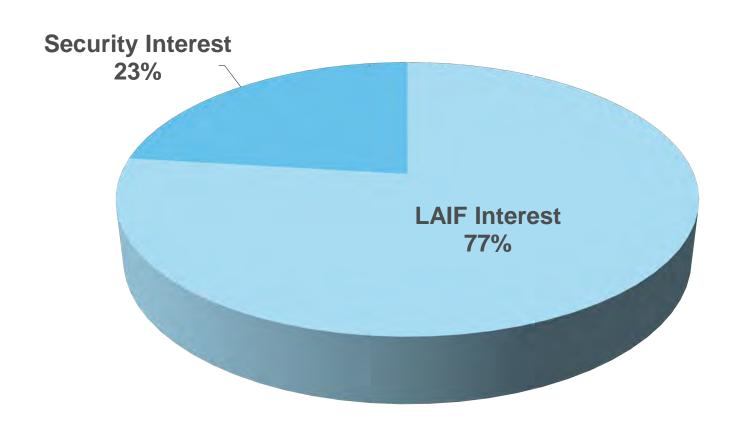
#### **Discharge Fees \$12.1 Million**

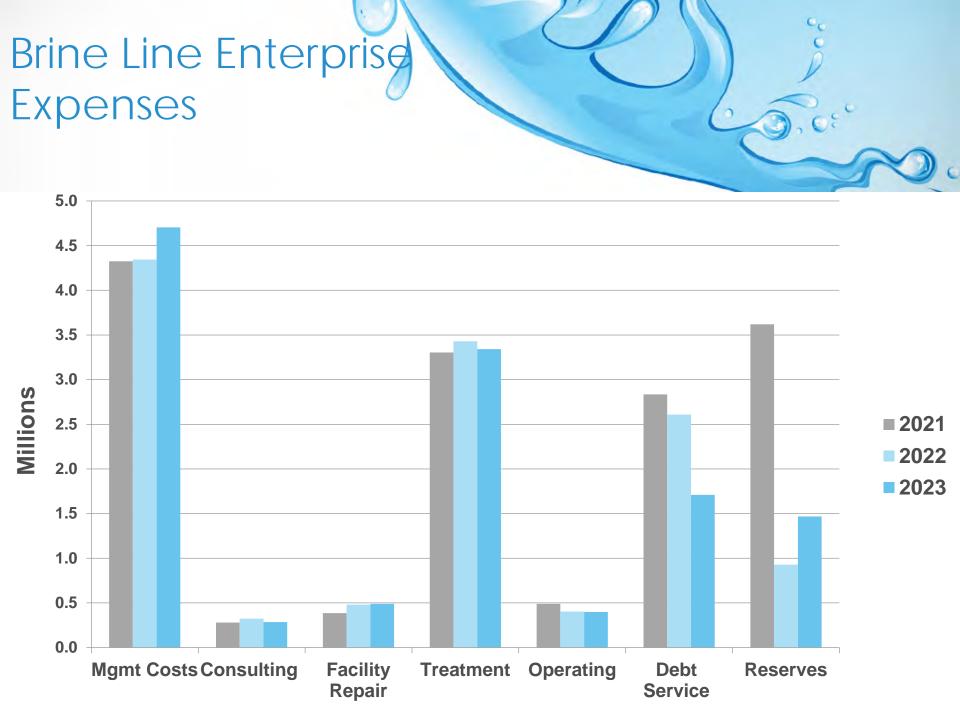






Interest & Investments \$325,000

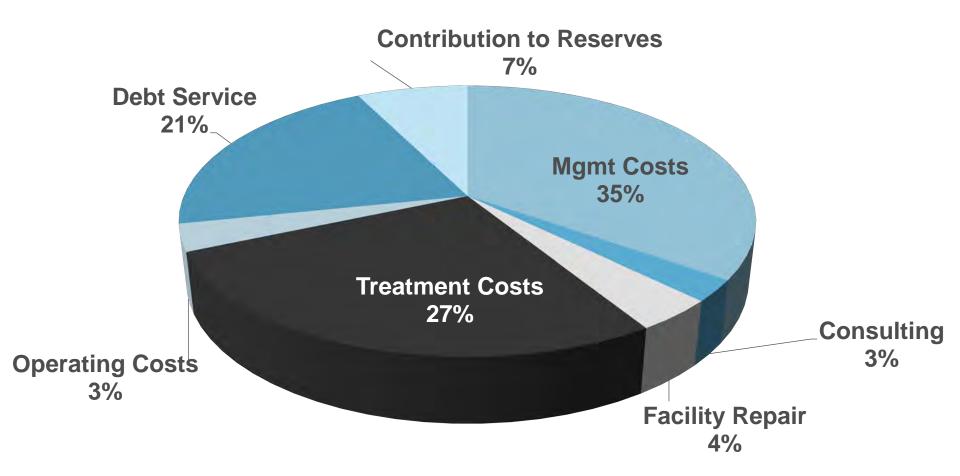




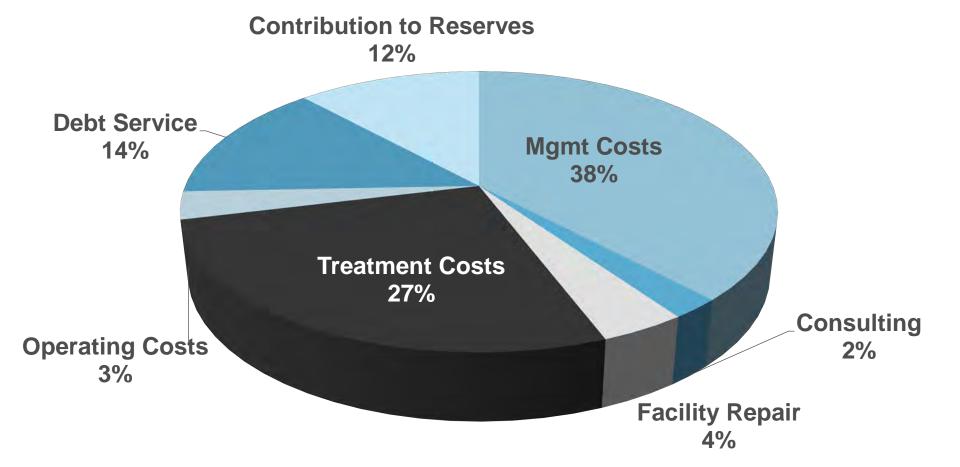
Brine Line Enterprise Expenses

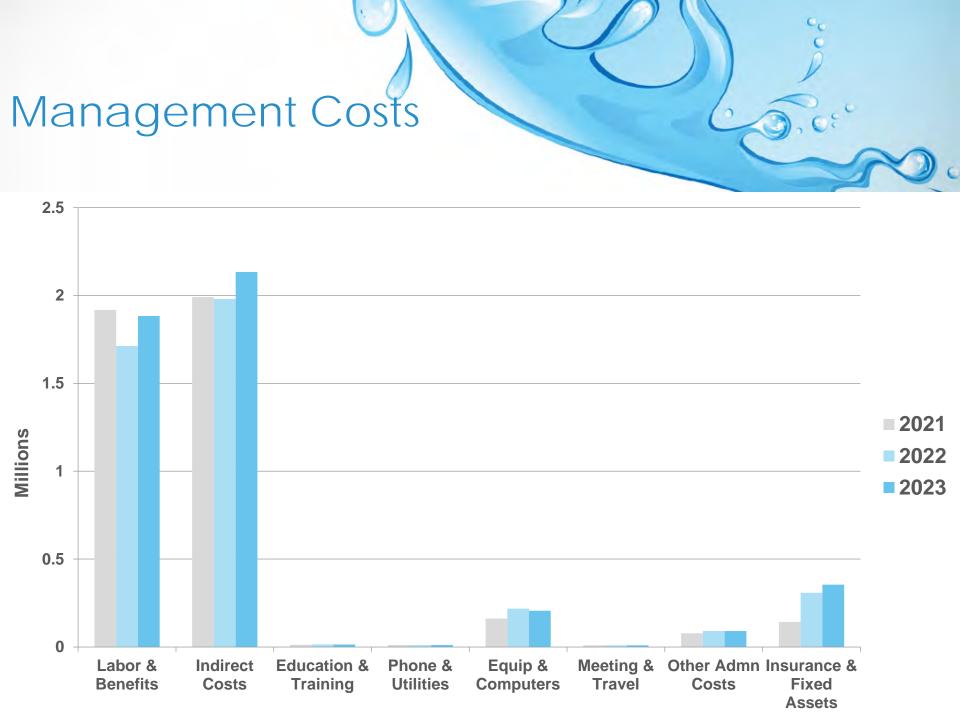
Expense	FYE 2021	FYE 2022	FYE 2023
Management Costs	\$4,324,677	\$4,344,512	\$4,705,203
Consulting	280,000	322,000	285,000
Facility Repair	385,000	480,000	490,000
Treatment Costs	3,303,500	3,430,040	3,342,400
Operating Costs	489,000	403,500	397,250
Debt Service	2,835,027	2,608,439	1,709,476
Reserves	3,619,241	928,781	1,467,543
Total	\$15,236,445	\$12,517,272	\$12,396,872

#### **Brine Line Expenses \$12.5 Million**



#### **Brine Line Expenses \$12.4 Million**



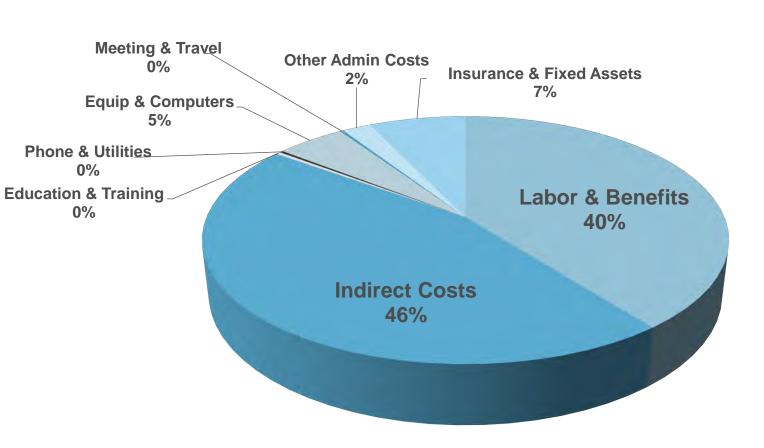


# Management Costs

Expense	FYE 2021	FYE 2022	FYE 2023
Labor & Benefits	\$1,918,081	\$1,712,982	\$1,883,403
Indirect Costs	1,990,646	1,979,458	2,133,400
Education & Training	12,500	14,500	14,500
Phone & Utilities	11,700	10,200	11,500
Equip & Computers	161,500	218,000	206,500
Meeting & Travel	10,000	10,000	10,000
Other Admin Costs	77,900	90,900	90,900
Insurance, Rent, FA	142,350	308,472	355,000
Total	\$4,324,677	\$4,344,512	\$4,705,203



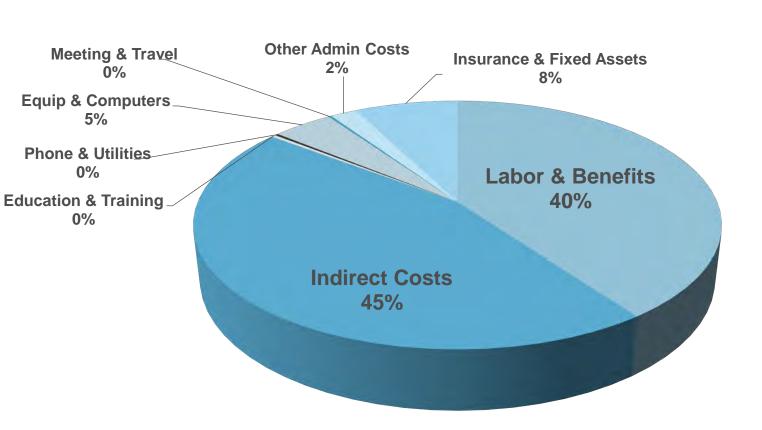
#### **Management Costs \$4.3 Million**







#### **Management Costs \$4.7 Million**



### Fixed Asset Purchase

Truck - \$100.000

- FYE 2022
  - Purchase Dump Truck \$100,000
- FYE 2023
  - Backhoe, trailer, buckets \$140,000

(Staff will look at leasing options as well)

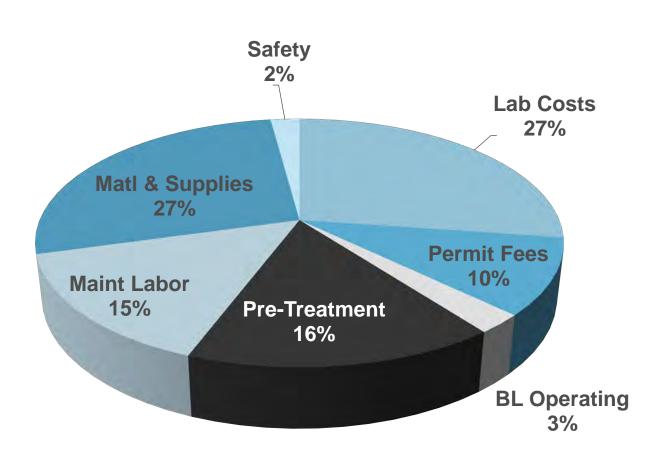


## **Operating Costs**

Expense	FYE 2021	FYE 2022	FYE 2023
Lab Costs	\$110,000	\$110,000	\$115,000
Permit Fees	40,000	40,000	40,000
BL Operating Costs	80,000	10,000	10,000
Permitting/Pre-Treatment	95,000	65,000	55,000
Maintenance Labor	60,000	60,000	60,000
Materials & Supplies	95,000	110,000	108,000
Safety	9,000	8,500	9,250
Total	\$489,000	\$403,500	\$397,250

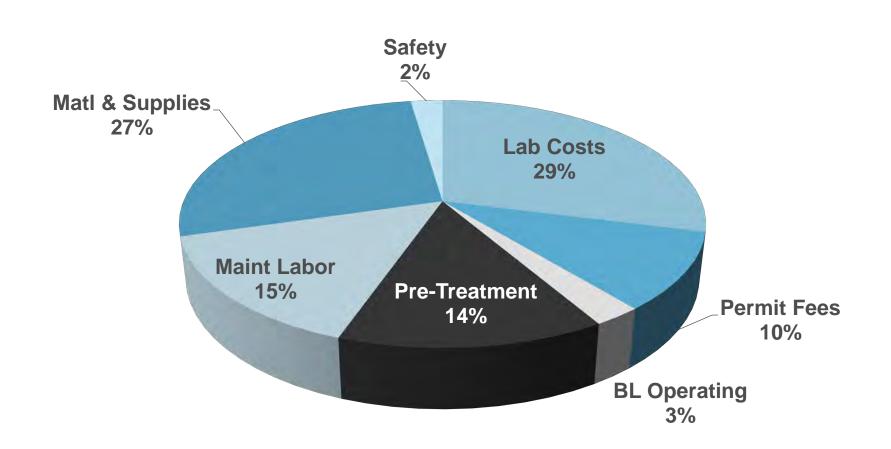


#### **Operating Costs \$403,500**





#### **Operating Costs \$397,250**



### Debt Service Payments



Debt	2021	2022	2023
Reach V Construction – SRF Loan 1 – 4	\$1,126,278	\$898,964	\$0
Reach IV-A & B Capital Repair - SRF Loan	1,044,273	1,044,273	1,044,273
Reach V Capital Repair - SRF Loan	664,476	665,202	665,202
Total Debt Service Payments	\$2,835,027	\$2,608,439	\$1,709,475

### Debt Service Funding



Debt	Interest Rate	Final Payment	Funding Source
Reach V Construction	2.7%	10/05/21	Reserves
Reach IV-A & B Capital Repair	2.6%	12/29/32	Rates
Reach V Capital Repair	1.9%	03/31/48	Rates

### Reserve Contributions



Fund	FYE 2021	FYE 2022	FYE 2023
Pipeline Repair/Replacement	\$1,810,491	\$928,781	\$1,467,543
Self Insurance Reserve	100,000	0	0
Debt Service Reserve	1,708,750	0	0
Total Contribution to Reserves	\$3,619,241	\$928,781	\$1,467,543

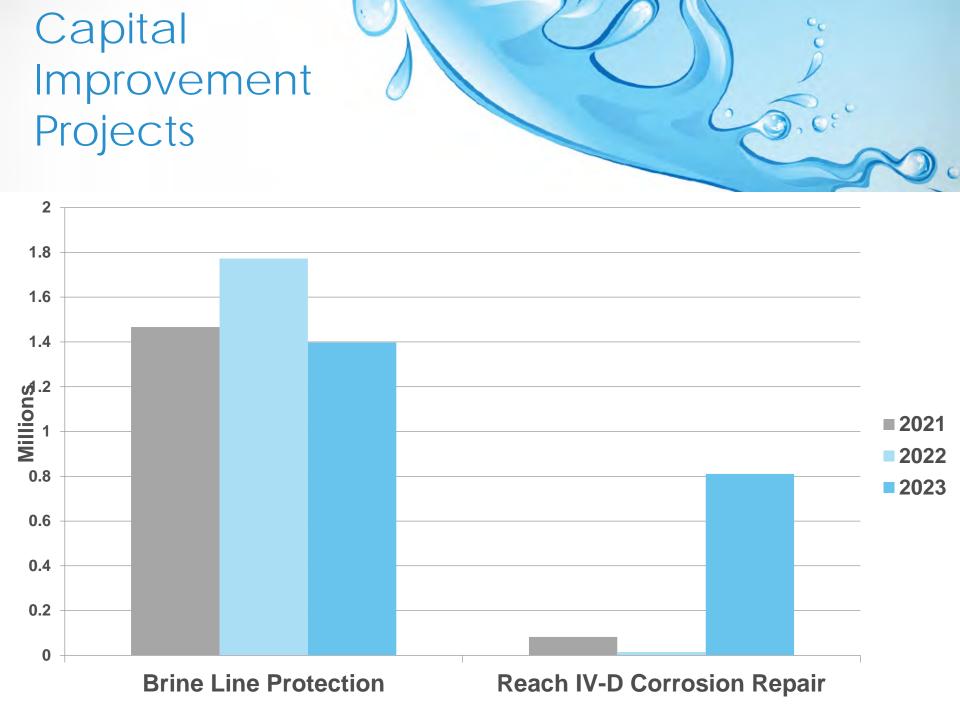
# Proposed Brine Line Rates

Component	Actual FYE 2021	FYE 2022	FYE 2023
Flow	\$1,018	\$1,018	\$1,049
BOD (per 1,000 lbs.)	\$329	\$329	3% \$339
TSS (per 1,000 lbs.)	\$460	\$460	\$474
Fixed Pipeline	\$6,654	\$6,654	\$6,654
Fixed Treatment	\$13,505	\$13,505	\$13,505

3% increase based on OC San estimated increases for 2022 and 2023

# Reserve Balance (EOY)

Reserve	FYE 2022	FYE 2023
Pipeline Repair/Replacement Reserve	\$19,641,899	\$18,901,512
OC San Rehabilitation Reserve	2,374,235	2,374,235
OC San Future Capacity Reserve	1,839,595	1,839,595
Self-Insurance Reserve	4,487,655	4,487,655
Flow Imbalance Reserve	83,555	83,555
Rate Stabilization Reserve	1,025,765	1,025,765
Debt Service Reserve	3,328,129	3,328,129
Capacity Management Reserve	11,956,015	11,956,015
Operating Reserve	3,500,000	3,500,000
Total Reserves	\$48,236,848	\$47,496,460



## Capital Project Funding – Use of Reserves

Project	FYE 2021	FYE 2022	FYE 2023
Brine Line Protection	\$1,466,878	\$1,772,064	\$1,397,185
Reach IV-D Corrosion Repairs	82,151	14,818	810,746
Total	\$1,549,029	\$1,786,882	\$2,207,931

#### Capital Projects

- Fund 320 Brine Line Protection
  - Protection from stormwater/erosion
  - Reach IV-A Upper Pine Avenue siphon/relocation
  - Prado Reservoir MAS modifications
  - Pipeline inspection and condition study
    - Reach IV
    - Reach IV-B DIP
  - Reach V Temescal Canyon Road widening
    - Relocate airvacs
    - Protection/relocation
- Fund 327 Reach IV-D Corrosion Repair
  - Condition assessment of 7 miles of pipeline

Brine Line Statistics

Project	FYE 2021	FYE 2022	FYE 2023
Staff Hours for Operations & Capital	22,980	21,120	21,914
Full Time Equivalents (FTE)	11.0	10.1	10.6
% of Indirect Costs paid	59.53%	64.17%	66.08%
Total of Indirect Costs paid	\$2,117,727	\$2,074,282	\$2,281,014

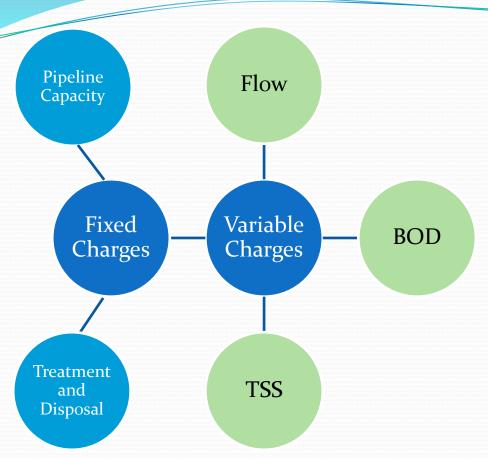


# Inland Empire Brine Line Rate Resolution 2021-04

Carlos Quintero, Operations Manager PA24 Committee | May 4, 2021 Item 5.C.

### Recommendation

• That the Project Agreement 24 Committee recommend approval by the SAWPA Commission of Resolution No. 2021-04 establishing the Fiscal Year 2021-22 Inland Empire Brine Line rates.



#### Brine Line Rate Components:

- Flow
  - Per Million Gallons
- Biochemical Oxygen Demand (BOD)
  - Per 1,000 lbs
- Total Suspended Solids (TSS)
  - Per 1,000 lbs
- Fixed Charges for Pipeline and Treatment and Disposal Capacity Owned
  - Per Million Gallons/Day

## Brine Line Rates Direct Dischargers (FY21-22)

Options	Effective date	Flow (MG)	BOD - 1,000 lbs	TSS – 1,000 lbs	Fixed Pipe	Fixed T&D
Current rates FY20-21	-	1,018	329	460	6,654	13,505
Proposed Rates FY21-22	7/1/2021	1,018	329	460	6,654	13,505

## **Indirect Dischargers**

- Currently using a 2-tier system:
  - Brine ( < 100 mg/L of both BOD or TSS)
  - Non-Brine ( ≥ 100 mg/L of either BOD or TSS)
  - Charges based on a per gallon base for brine tier and a per gallon base plus pounds of BOD and pounds of TSS for non-brine tier.

#### **Indirect Discharger Rates**

Option	Brine <sup>(a)</sup> Tier (< 100 mg/L) / gallon		BOD/lb	TSS/lb
Current (FY19-20)	\$0.016	\$0.016	\$0.78	\$0.745
Proposed (FY21-22)	\$0.016	\$0.016	\$0.78	\$0.745

<sup>\*</sup>Non-brine tier charges the flow component plus any pounds of BOD and TSS.

<sup>(</sup>a) Brine Tier if both BOD and TSS concentrations are less than 100 mg/L

<sup>(</sup>b) Non-Brine Tier if any of the BOD or TSS concentrations are 100 mg/L or greater.

#### **Capacity Pool Lease Rates**

Option	Flow (per gallon)	Additional BOD (per lb)	Additional TSS (per lb)
Current (FY20-21) [250 mg/L BOD/TSS]	\$0.00263	\$0.4080	\$0.2501
Proposed (FY21-22)	\$0.00263	\$0.4080	\$0.2501
Treatment and Disposal Only	\$0.00117	\$0.4080	\$0.2501

#### Treatment & Disposal Surcharge Rates

Option	Flow (per gallon)	BOD (per lb)	TSS (per lb)	
Current (FY20-21)	\$0.0021	\$0.4080	\$0.2501	
Proposed (FY21-22)	\$0.0021	\$0.4080	\$0.2501	

These rates apply to dischargers that exceed their contractually owned capacity in any given month.

## Proposed Permit Fees

Type of Permit	FY20-21 Fee	Proposed FY21-22 Fee
Direct Discharger	\$600	\$600
Indirect Discharger	\$300	\$300
Connection Authorization	\$1,100	\$1,100
Liquid Waste Hauler	\$250	\$250

#### Brine Line Approved Budgeted Expenses

Category	FY20-21	FY21-22*	Change (%)	Change (\$)
TOTAL	11,617,205	11,588,491	-0.25%	-28,714

<sup>\*</sup>Draft Budget

### Recommendation

• That the Project Agreement 24 Committee recommend approval by the SAWPA Commission of Resolution No. 2021-04 establishing the Fiscal Year 2021-22 Inland Empire Brine Line rates.

## Questions??