

TESTIMONY OF RUBEN ROBLES, P.E.

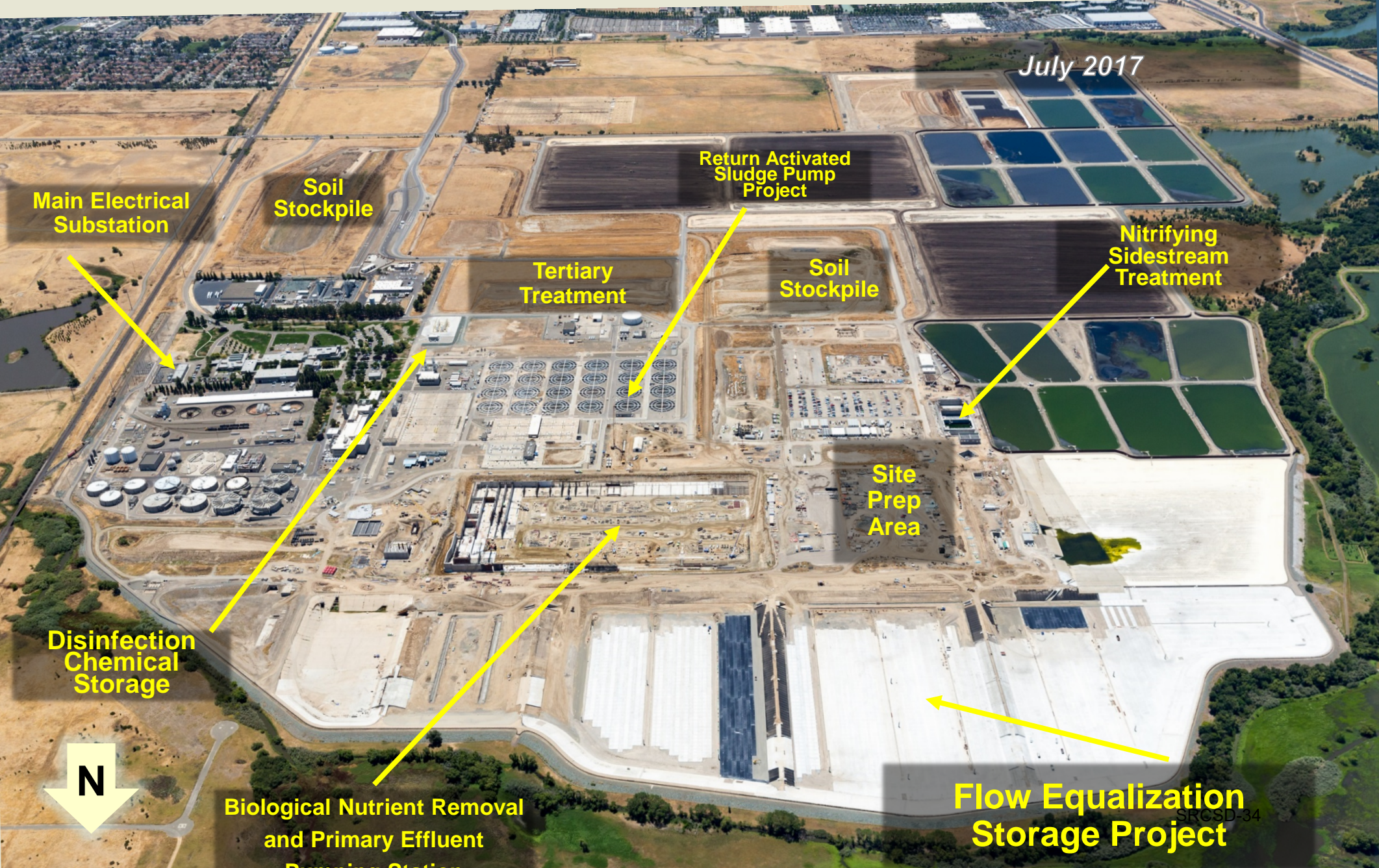
HEARING ON THE MATTER OF
CALIFORNIA DEPARTMENT OF WATER
RESOURCES AND UNITED STATES
BUREAU OF RECLAMATION REQUEST
FOR A CHANGE IN POINT OF DIVERSION
FOR CALIFORNIA WATER FIX.



Sacramento Regional Wastewater Treatment Plant



The EchoWater Project



July 2017

Main Electrical Substation

Soil Stockpile

Return Activated Sludge Pump Project

Tertiary Treatment

Soil Stockpile

Nitrifying Sidestream Treatment

Disinfection Chemical Storage

Site Prep Area

N

Biological Nutrient Removal and Primary Effluent Pumping Station

Flow Equalization Storage Project

ESBs During EchoWater Construction



ESB Improvement Project Essentially Complete



ESB-D Cost Allocation Per Modeling Results

	Alternatives	EBC2	NAA	B1	B2	H3	H4
	Cumulative volume pumped out of ESBs (billion gallons [BG])	64	89	93	93	96	100
	Number of diversions	2704	3571	3930	3901	3982	4189
EBC2	Change in number of diversion events compared with EBC2 (%)		32%	45%	44%	47%	55%
	Diversions resulting from WaterFix as a % of Total ¹			31%	31%	32%	35%
	WaterFix share of ESBD Cost ² , \$M			\$14.4	\$14.1	\$14.8	\$16.3
NAA	Change in number of diversion events compared with NAA (%)			10%	9%	12%	17%
	Diversions resulting from WaterFix as a % of Total ¹			9%	8%	10%	15%
	WaterFix share of ESBD Cost ² , \$M			\$4.2	\$3.9	\$4.7	\$6.8

1 – Diversions resulting from WaterFix as a % calculated as (Increase in Diversions by WaterFix/Total number of diversions), e.g. B1 versus EBC2 = $(3930-2704)/(3930)=31\%$

2 – WaterFix share of ESBD Cost calculated as Total ESBD cost x Diversions resulting from WaterFix as % of Total e.g. B1 vs SRCSD-34 EBC2 = \$46 million x 31% = \$14.4 million

Estimated ESB–D Pumping Electrical Cost per Modeling Results

WaterFix Modeled Scenarios	Cum Vol pumped out of ESB-D (from modeling efforts), MG	Total Pumping Cost, \$ (based on current year electrical costs)	Cost/year, \$
EBC2	63,928	\$997,916	\$62,370
NAA	89,034	\$1,389,821	\$86,864
Boundary 1	93,087	\$1,453,088	\$90,818
Boundary 2	92,643	\$1,446,157	\$90,385
H3	95,590	\$1,492,160	\$93,260
H4	100,046	\$1,561,718	\$97,607

Estimated ESB-D Cleaning Cost per Modeling Results

WaterFix Modeled Scenarios	# of Diversions in 16 years	# of wash-downs in 16 years	Cost/year, \$
EBC2	2704	1352	\$30,843
NAA	3571	1786	\$40,743
Boundary 1	3930	1965	\$44,827
Boundary 2	3901	1951	\$44,507
H3	3982	1991	\$45,420
H4	4189	2095	\$47,792

Questions?

