

Supplemental Information
for

**Simulation of flow and salinity in a large seasonally
managed wetland complex**

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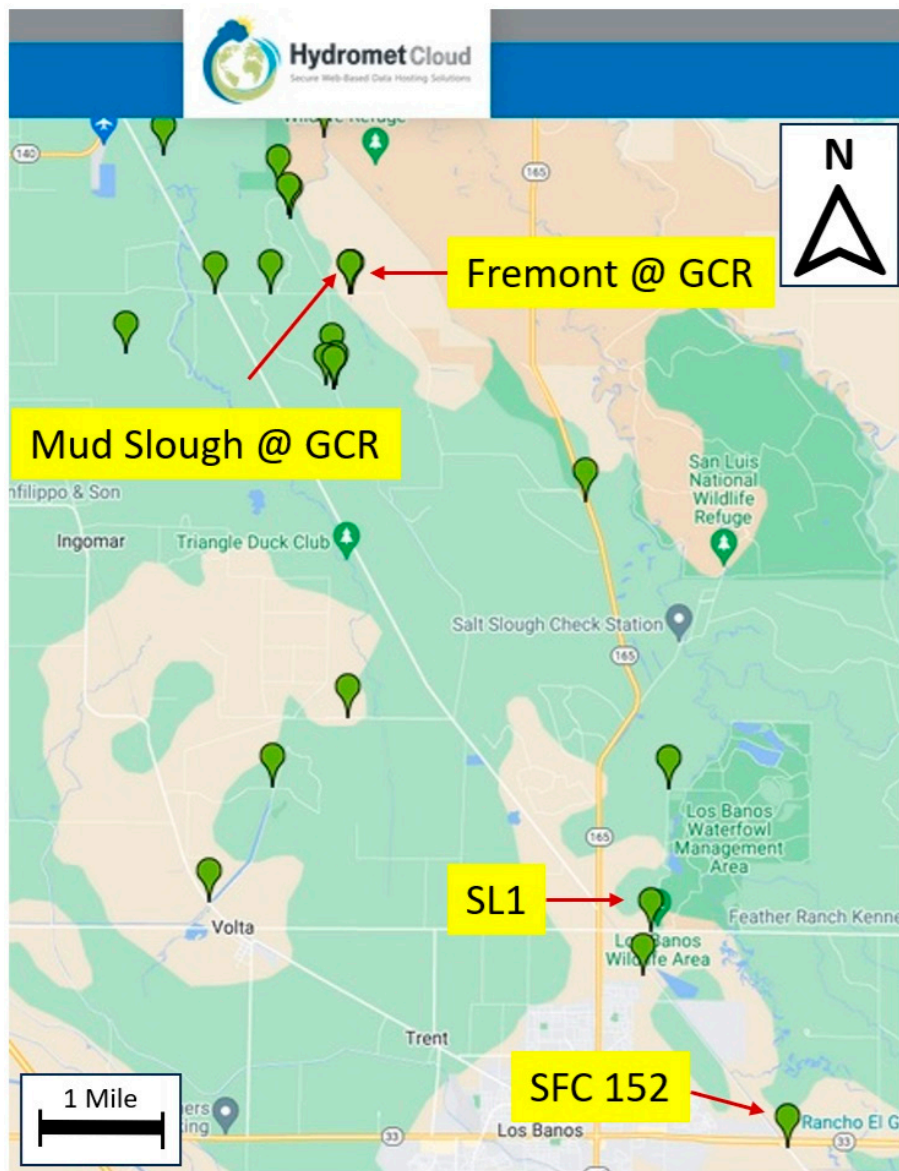


Figure S1: Grassland Water District real-time monitoring station. The four stations that supplied data for simulations are marked.

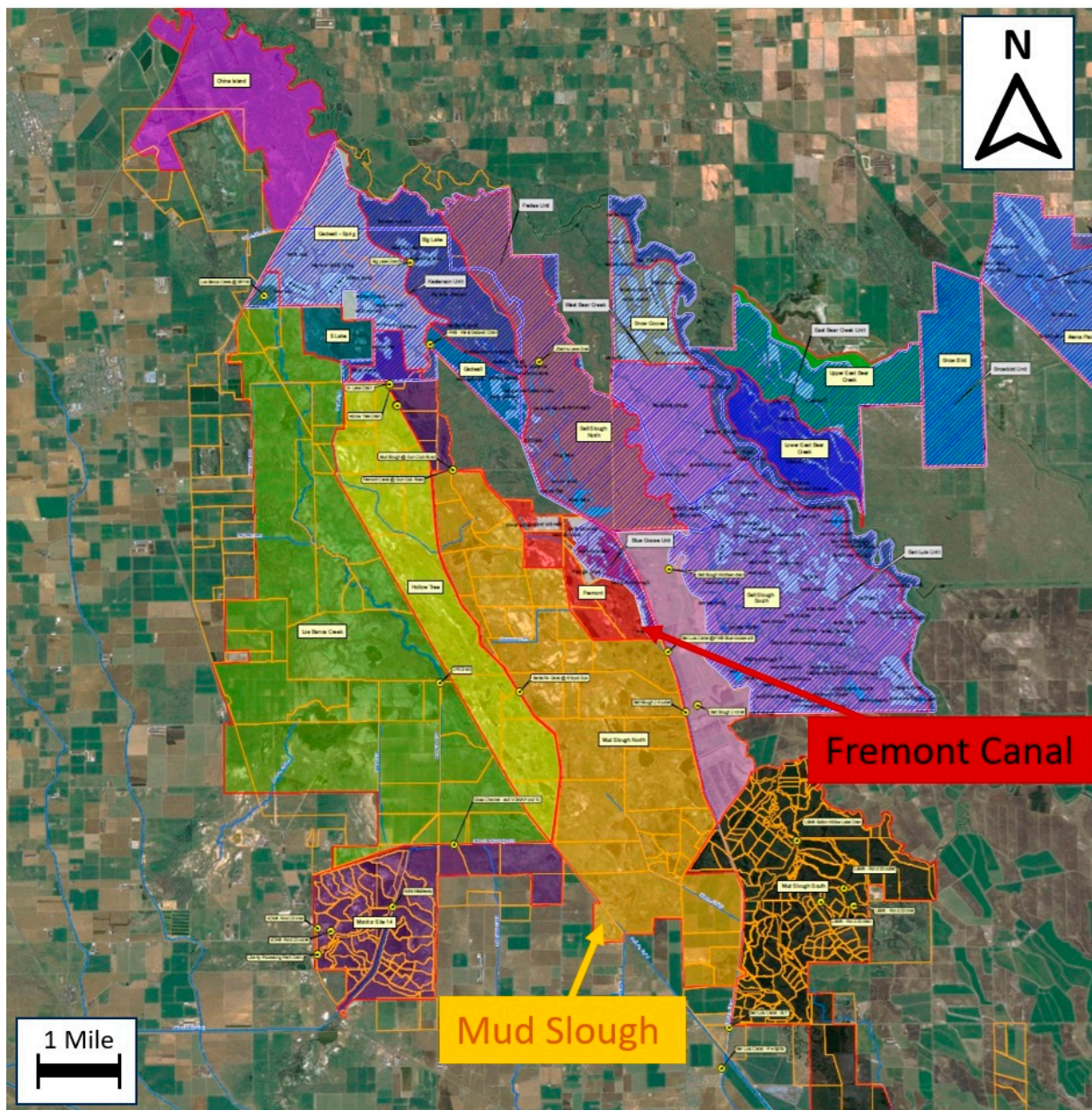


Figure S2: Drainage map showing area draining towards monitoring station Mud Slough at GCR highlighted as orange and area draining towards monitoring station Fremont at GCR highlighted in red.

Table S1: Statistical measures for large model compartment simulations from July 2019 to June 2020.

Approach	Variable	MAPE (%)	MSE ((units) ²)	RMSE (units)
1	Flow (cfs)	77	748	27
	EC (µmho/cm)	105	1995326	1412
	Salt Load (t/day)	63	1420	38
2	Flow (cfs)	62	586	24
	EC (µmho/cm)	45	577769	760
	Salt Load (t/day)	44	792	28
2 + 12 % recirculation	Flow (cfs)	62	586	24
	EC (µmho/cm)	41	497843	706
	Salt Load (t/day)	43	937	31
2 + 23 % recirculation	Flow (cfs)	62	586	24
	EC (µmho/cm)	38	435034	660
	Salt Load (t/day)	44	1101	33

Table S2: Statistical measures for small model compartment simulations from July 2018 to June 2019.

Approach	Variable	MAPE (%)	MSE ((units) ²)	RMSE (units)
1	Flow (cfs)	419	44	7
	EC (µmho/cm)	17	78430	280
	Salt Load (t/day)	340	221	15
2	Flow (cfs)	227	35	6
	EC (µmho/cm)	36	438418	662
	Salt Load (t/day)	266	148	12

Table S3: Statistical measures for small model compartment simulations from July 2019 to June 2020.

Approach	Variable	MAPE (%)	MSE ((units) ²)	RMSE (units)
1	Flow (cfs)	72	144	12
	EC (µmho/cm)	102	1107915	1053
	Salt Load (t/day)	57	330	18
2	Flow (cfs)	48	57	8
	EC (µmho/cm)	46	369520	608
	Salt Load (t/day)	52	157	13



Tulare Basin 6-Station

Precipitation Index for Water Year 2019 - Updated on September 30, 2019 02:48 PM

Note: Monthly totals may not add up to seasonal total because of rounding

Water Year Monthly totals are calculated based on Daily precipitation data from 12am to 12am PST

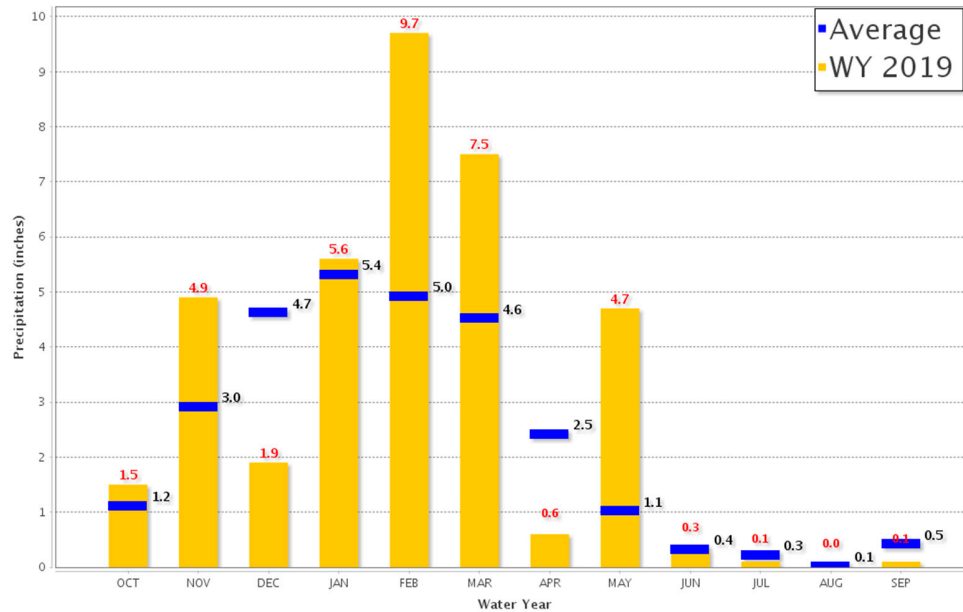


Figure S3: Monthly precipitation in water year 2019 compared to 30 year average of each calendar month. Source: https://cdec.water.ca.gov/images/WYPrecip/BAR_TSI_2019.PNG