Status of Water Banking Programs

Board of Directors September 4, 2018 Item 8

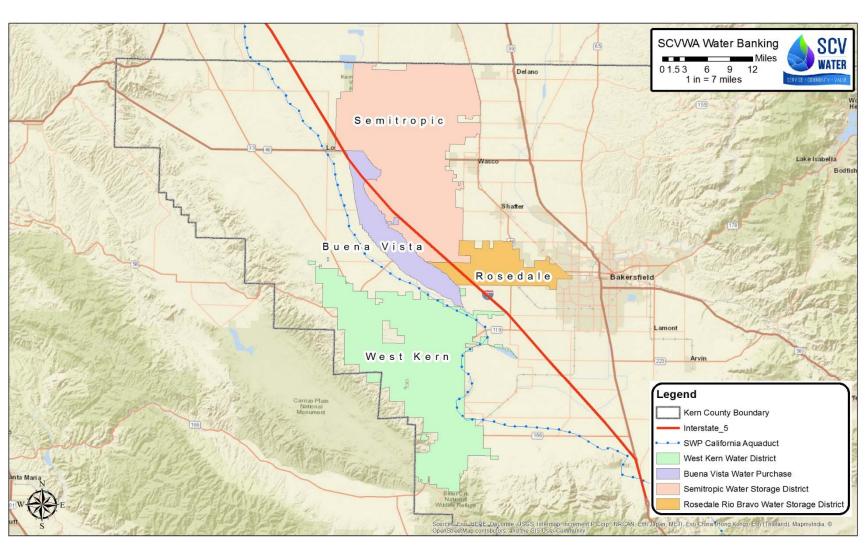
Banking/Exchange Programs

- Banking Programs
 - Rosedale-Rio Bravo Water District
 - Semitropic Water Storage District (Stored Water Recovery Unit)
- Exchange Programs
 - Rosedale-Rio Bravo Water District 2:1
 - West Kern Water District 2:1
 - Central Coast Water Agency 2:1
 - State Water Project Article 56 Carryover Program

Banking Locations



Location Map



Storage Capacity

- 200,000 AF cycled through program
 - Maximum storage at any given time 100,000 AF
 - 100,000 AF current balance

SF1 Sarah Fleury, 7/10/2018

- Delivery Capacity Rate (put) 20,000 AFY
- Extraction Capacity (take) 20,000 AFY (contractual maximum)
 - Combination of Agency financed wells (7,000 AF (2018)) and 1st right to unused well capacity (3,000 AF minimum)
 - Annual assessment of additional unused well capacity

- Costs
 - Negotiation Fee \$600,000
 - Capital
 - \$6,000,000 (initial capital)
 - \$9,736,000 (firm extraction capacity)
 - Extraction facilities (grant funding & 1% property tax)
 - Annual None
 - Usage Fees (operations budget)
 - Recharge Fees Prepaid (\$30 per AF for 200 TAF)
 - Recharge O/M & Transportation Fee \$9 per AF
 - Extraction Fee \$30 per AF from RRB wells
 - Extraction Fee \$7 per AF from SCVWA wells
 - All power costs associated with extractions
 - Cross Valley Canal costs

- Term of Contract
 - 2005 to 2035
 - Automatic extensions concurrent with SWP contract
 - 2035 annual payment agreements and charges may be adjusted
- 11% recharge loss
- Exchange of Table A

Operating Challenges:

- Location between Kern Water Bank and Semitropic Water Storage District
- Sustainable Groundwater Management Act (SGMA) may mitigate

- Part of a Larger Water Bank
 - 1.65 MAF of storage capacity
 - 15 participants (6 Original; 9 SWRU)
 - Total Extraction 2013-2016 = 410,000 AF
 - Successfully dealt with Water Quality Issues
- Storage Capacity
 - 15,000 AF plus 35,000 AF surcharge
 - 40,775 AF current balance
- Delivery Capacity (put) 5,000 AF minimum
- Extraction Capacity (take) 5,000 AFY firm; plus exchange rights

- Costs
 - Capital \$8,450,000 (5,000 shares)
 - 75% funded through Prop 84 grant
 - Annual Payments
 - Funding capital planning, studies and administration
 - Management Fee \$30,850 (\$6.17/share)
 - Maintenance Fee \$40,000 (\$8.00/share)
 - Usage Fees
 - Funded through operating budget
 - \$12.33 per AF stored
 - \$86.33 per AF recovered
 - Average unit power cost for pumping recovery (~\$120/AF)

- Term of Contract
 - 2015 through 2035
 - Option for two 10-year term extensions
- 10% evaporative and aquifer losses
- Exchange of Table A
- Pump back returned in off-peak irrigation season

Operating Challenges

- Extractions may be limited (15-Foot/3 Year Rule)
- Sustainable Groundwater Management Act (SGMA) may mitigate
- Recovery of water in spring and fall

Rosedale-Rio Bravo 2:1 Exchange

- Quantity Delivered 19,570 AF (2011/2012)
- Return Obligation 9,440 AF by 2021

<u>Operating Constraints</u>: Returned when RRB exchange capacity is available

West Kern Water District 2:1 Exchange

- Quantity Delivered –5,000 AF (2011)
 - 2,500 AF Return Obligation
- 2014 Return 2,000 AF
- Existing Return Obligation 500 AF by 2021

<u>Operating Constraints</u>: Returned when exchange capacity is available

Central Coast Water Agency 2:1 Exchange

- Delivered 1,500 AF and received \$250/AF (\$375,000) to offset costs (2016)
- Existing Return Obligation 750 AF by 2026

Operating Constraints: Returned when exchange capacity is available

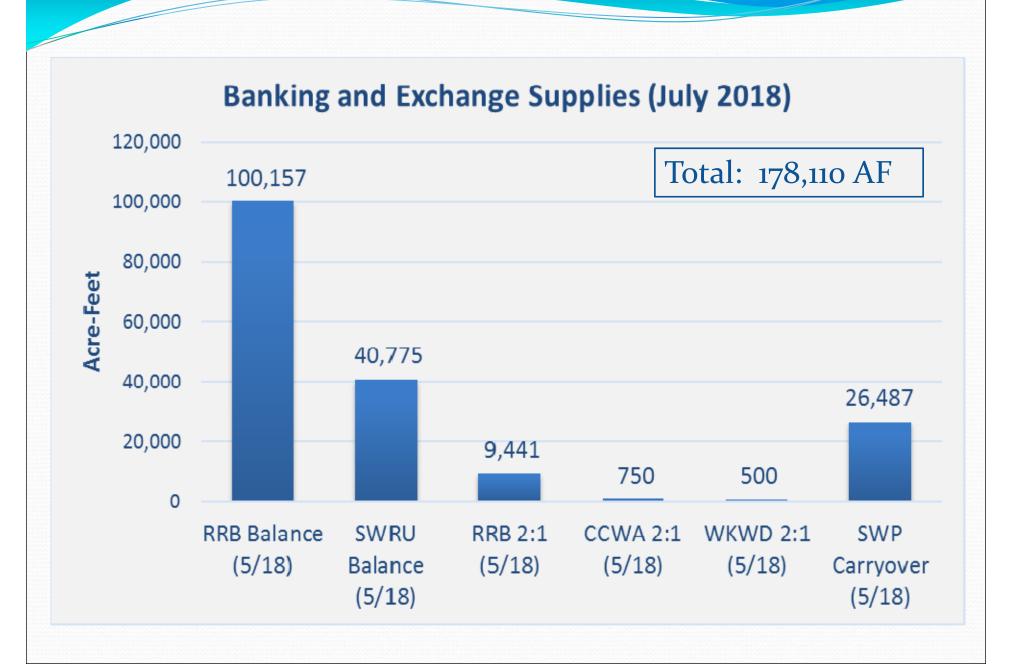
SWP Article 56 Carryover Supply

- Balance July 2018 = 26,487 AF
- Maximum based on available storage in San Luis Reservoir
- Delivery capacity limited between 25-50% of Table A amount
- Subject to "spill"
- No cost to store or extract

Operating Constraints: Balancing risk of spill with alternative water management actions

Current Status of Banking and Exchange Programs

Program	Capacity (AF)	Balance (AF)	Annual Extraction Capacity
Rosedale-RioBravo Water Bank	100,000	100,157	10,000
Semitropic First Priority Water Bank (SWRU)	50,870	40,775	5,000
Rosedale-Rio Bravo 2:1 Exchange	9,500	9,441	-
West Kern 2:1 Exchange	2,500	500	-
Central Coast Water Agency 2:1	750	750	-
SWP Carryover	42,788	26,487	Account Balance
Total	206,408	178,110	



Questions?