Water Transfer Overview

What is a Water Transfer

Transaction between a willing seller and buyer where seller implements measures to make surface water available for diversion by buyer

Most Common Types of Transfers

- Crop Idling
  - Idling land that would have been planted in order to transfer the water conserved
- Groundwater Substitution
  - Pumping groundwater for use in sellers service area and transferring the surface water seller would have diverted
- Reservoir Reoperation
  - Releasing surplus storage for transfer

Assuring Responsible Transfers

- Transfer will not injury other legal users of water
  - Limit transfer to “Real Water” – water that would not have been available downstream absent the transfer
- Transfer will not unreasonably impact fish, wildlife or other instream resources
  - Transfer will not unreasonably affect streamflow or quality
- Transfer will not unreasonably impact the economy of the area from which the water is developed (where use of another public agencies facilities are required)

Determining Real Water

- Seller has documented water right that is transferrable during period of the transfer
- Seller would have used the water in the absence of the transfer
  - Amount of water represents increase in supply downstream at point of buyers diversion
  - Records to support historic use of water
  - Water is physically available at time of transfer
  - Annual hydrology – water is available under right
  - Seller has physical ability to divert water

Determining Real Water
Crop Idling

- Need accurate estimate of how much water crop would have consumed - Evapotranspiration of Applied Water (ETAW)
- ETAW by year type, on-farm cultural practices, and region
- Need records of historic cropping patterns
- ETAW pattern must match transfer pattern unless storage is available
- Idle land must be maintained free of excess vegetation or weeds may consume water intended for transfer – can be significant issue in areas with high groundwater

Determining Real Water
Groundwater Substitution

- Groundwater pumping affects streamflow in connected system – Sacramento River watershed
- Timing of depletions is important - Must consider potential Streamflow depletion (SF) impacts during balanced conditions
- SF dependent on well location and aquifer parameters
- Need accurate flow meters at well

Determining Real Water
Reservoir Reoperation

- Sellers water right must include storage
- Releases must be in excess of planned operations
- Need records of historic operations to determine projected releases without transfer
- Refill of storage vacated for transfer can impact downstream users if it occurs when downstream users have demand for water
- Refill criteria critical to protecting downstream users

Other Types of Transfers

- Conservation
  - Not all conservation measures generate transferrable water
    - Reduction in Consumptive Use
    - Reduction in discharge to unusable basin
- Crop Shifting
  - Shift from high water use crop to one with lower ETAW – reduction in consumptive use
- Instream Dedication
  - Typically limited to reduction in consumptive use
  - Riparian rights may be transferrable

Use of SWP and CVP Conveyance Facilities

- Need Conveyance Agreement
- Availability of Excess Capacity
  - Project Operational Requirements, export limitations
  - Contractual priorities
- Regulatory Restrictions
  - Transfer Window – July through September
  - Compliance with water quality and flow objectives contained in D-1641
    - May require supplemental water to convey transfer water through Delta to export facility - carriage water losses