

Water Transfer Overview



DWR Role in Water Transfers

- Operator of the State Water Project
 - Primary role is to convey transfer water if capacity is available in SWP facilities upon request of buyer (Water Code Sec. 1810)
- As a water supply planning agency
 - Public Outreach
 - Compile and disseminate transfer information

State Water Project Facilities



California
State Water
Project

Use of SWP and CVP Conveyance Facilities

- Need Conveyance Agreement
- Availability of Excess Capacity
 - Project Operational Requirements, export limitations
 - Contractual priorities
- Primary Regulatory Restrictions
 - Transfer Window – July through September
(Biological Opinions)
 - 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

Water Code Section 1810

- Public agency may not deny bona fide transferor use of used capacity in conveyance facilities if it can find:
 - No injury to any legal user of water
 - No unreasonable impacts to fish, wildlife, or other instream beneficial uses
 - No unreasonable affects to overall economy of county from which water is transferred

Assuring Responsible Transfers

Compliance with WC § 1810

- Transfer will not injure 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
- Monitoring included as part of Transfer Approval

Analysis and Public Review of Transfer Proposals

- Pre-1914 water right holders
 - Typically subject to CEQA
(See 4/25/14 Governor's Emergency Exemption for 2014)
- Post 1914 Water Right holders
 - Petition process includes analysis of impacts
- Federal contractors or use of Federal facilities requires compliance with NEPA
- Each of above processes includes opportunity for public comment
- DWR can request supplemental information

Special Considerations in 2014

- Governor's April 25, 2014 Proclamation of Continued State of Emergency
 - Recognizes continued extreme drought conditions and severe impacts to water users
 - Directs DWR and Water Board to expedite processing of water transfers requests
 - CEQA suspended for actions taken by state agencies
- Agencies will still review to assure no injury to legal users or unreasonable impacts
 - Did not suspend WC § 1810 and 1725 et seq

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 seller's service area and transferring the surface water seller would have diverted

➤ Reservoir Reoperation

- Releasing surplus storage for transfer

Determining Real Water

Necessary to find no injury to any legal user

- 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

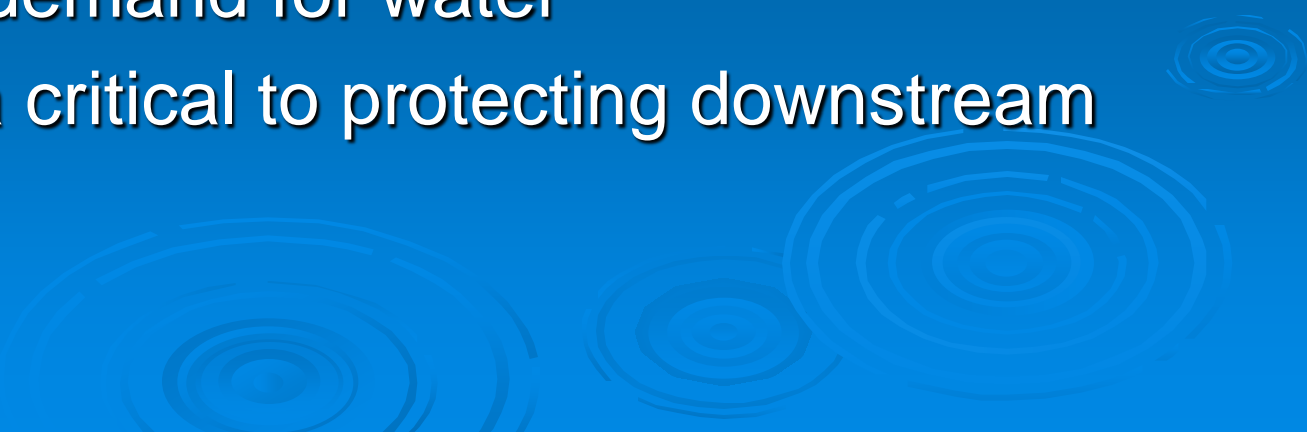
Determining Real Water Crop Idling

- Need accurate estimate of how much water crop would have consumed - Evapotranspiration of Applied Water (ETAW)
- ETAW by crop 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
 - Directly from streamflow or interception of water that would have discharged to stream
- 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
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Other Potential Impacts

- Potential impacts to sensitive species in the areas idled
 - Adoption of protective measures for idled areas
- Potential water quality or water level impacts
 - Include water level and water quality monitoring
- Potential economic impacts
 - Limit amount of acreage idled
- Each transfer requires cases by case analysis

Other Types of Transfers

➤ Conservation

- Not all conservation measures generate transferrable water
 - Reduction in Consumptive Use
 - Reduction in discharge to unusable basin

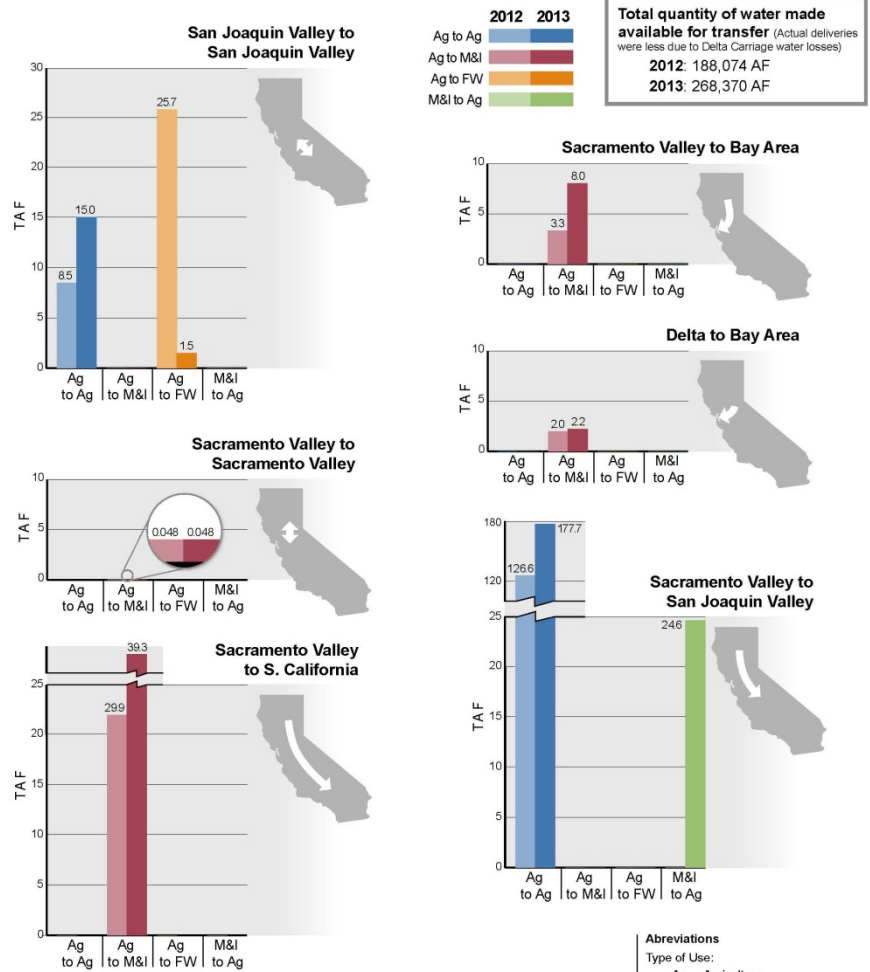
➤ Crop Shifting

- 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

Non-Project Water Transfers within the Sacramento/San Joaquin Watersheds



The figures above include transfers requiring the approval of the SWRCB, including Yuba accord transfers, as well as transfers of water diverted under pre-1914 water rights. Transfers and exchanges of SWP and CVP water are not included. Operational issues delayed the export of most transfer water made available from the Feather River in 2012 until 2013. For 2013, a portion of water transfers to certain CVP contractors was exported through Jones Pumping Plant in July. Water was moved during the transfer period of July-September. The total amount of water pumped through Banks Pumping Plant was 2.37 MAF in 2012 and 1.18 MAF in 2013. Data is preliminary.

Abbreviations

Type of Use:

- Ag Agriculture
- M&I Municipal and Industrial
- FW Fish and Wildlife

Measurements:

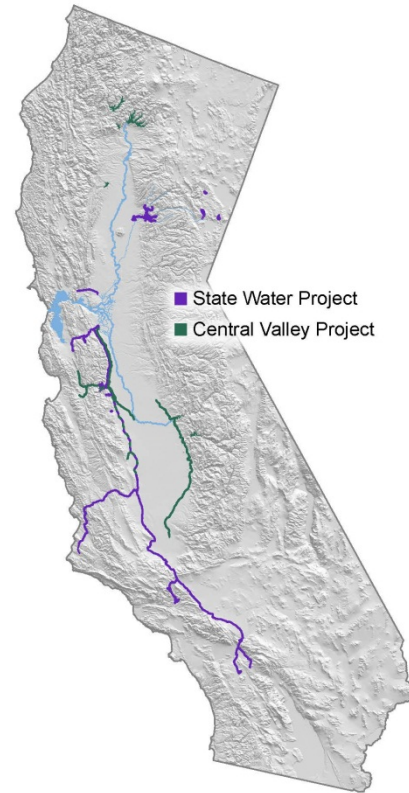
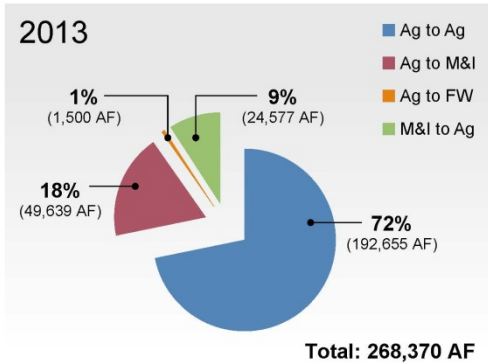
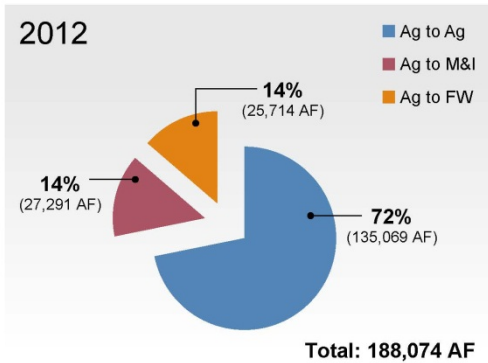
- AF Acre-feet
- TAF Thousand Acre-feet
- MAF Million Acre-feet



2012/2013 Transfer Activity

January 28, 2014

Non-Project Water Transfers within the Sacramento/San Joaquin Watersheds



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