Status of Water Transfers

Bill Croyle
California Department of Water Resources
Drought Management Team

Water Transfers Initiatives

- **Executive Order B-21-13 May 2013**
  - Expedite Review and Processing of Voluntary Water Transfers
- **Governor's Emergency Drought Proclamations**
  - January 17 2014 Action 4, 5 and 9
  - April 25, 2014 Actions 2 and 19
- **Coordination Meetings**
  - SWRCB, USBR, CDFW, USFW, NMFS
  - Technical Team
  - Buyers / Sellers
  - Public Listening Session
- **California Water Action Plan**
  - Management Actions in Support of Water Transfers

Ongoing Process Improvements

- **DWR Streamlining Process**
  - Improving Contracting Procedures for Transfers Dependent on SWP Facilities
  - Facilitating Fast-Tracking of Transfers with Appropriate Supporting Documentation
  - Improving Coordination and Alignment with SWRCB, USBR, CDFA, USFW, NMFS
  - Updating Transfer Information on Web
  - Clearinghouse Approach for Current Transfers

Public Outreach Tools

2014 Department of Water Resources (DWR)

Water Transfers Activities

MANAGEMENT OF WATER TRANSFERS IN CALIFORNIA AND DWR'S ROLE

Voluntary water transfers assist in supplementing water supply portfolios for areas experiencing water scarcity. The volume of water transfers in the state has grown over the last 20 years, and since 2005, the annual totals have ranged from 1.2 million acre-feet (MAF) to 1.7 MAF (PPIC, 2012). Cross Delta transfers are a small component of the total.

Water transfers are voluntary actions proposed by willing buyers and sellers, and are not initiated by state agencies. DWR is one of several public agencies involved in approval and management of proposed water transfers in California, and DWR's involvement is due to its management of the State Water Project export facilities in the Delta. Others include the State Water Resources Control Board (State Water Board), the California Department of Fish and Wildlife, US Bureau of Reclamation, US Fish and Wildlife Service, National Marines Fisheries Service, county governments, and local/regional water districts. DWR's jurisdiction is limited to transfers affecting the Sacramento-San Joaquin Delta (Delta) export facilities of the State Water Project; this represents a small fraction of statewide transfers. For example, for 2013, DWR facilitated about 265 thousand acre-feet of water transfers through State Water Project facilities.

DWR and other involved public agencies must address all legal requirements, ensure that transfers meet beneficial uses, that proposed transfers are a real water supply, and that they continue to serve as a responsible water shortage management tool in the public interest. Approval of transfers must consider water rights, environmental impacts, area of origin impacts, storage and conveyance agreements, and other issues; the complexity of the situation and the extent of necessary inter-agency coordination will dictate the time required to grant an approval. In coordination with other agencies, DWR's primary role is to approve and facilitate responsible transfers within its area of jurisdiction and coordinate with and provide guidance to buyers and sellers.

Actions Underway

DWR is working to streamline and improve its processes and guidance for water transfers. DWR hosted a meeting with representative buyers and sellers in August 2013 where the following specific recommendations were received: (1) improve outreach, (2) refine transfer process schedule, (3) conduct regular coordination with applicants, (4) prepare technical guidance information, (5) simplify process and reduce administrative costs, (6) form work groups, (7) develop fast tracking procedures for proposals, (8) develop template agreements, and (9) rely on existing information and data from transfer proponents for crop land idling and groundwater substitution transfers. DWR is acting on these recommendations, along with additional direction from the Governor's California Water Action Plan (October 2013 draft), Governor's Executive Order B-21-13, and the California State Drought Emergency Proclamation declared on January 17, 2014. Because this process has already begun, the proclamation of drought by the Governor reinforces the need for work underway.

For additional information, contact
Public Affairs Office
1416 9th Street, Room 204
Sacramento CA 95814
Phone: (916) 653-9712
Fax: (916) 653-4684

Or visit us on the Web at
www.water.ca.gov

DWR Water Transfers website: http://www.water.ca.gov/watertransfers/

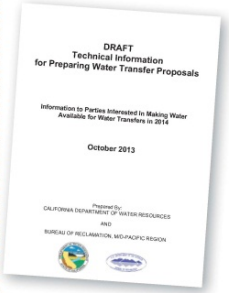
Transfers in coordination with the following agencies:

The following work is already underway to streamline processes for 2014 water transfers:

- **Maintain existing guidance for preparing water transfer proposals:** Sellers will continue to use the 2013 guidance materials for 2014 proposals. It can be found at http://www.water.ca.gov/watertransfers/.
- **Facilitate fast-tracking:** DWR has established an Addendum to DRAFT Technical Information for Preparing Water Transfer Proposals that will facilitate fast-tracking for many transfers in 2014. The addendum can be found at http://www.water.ca.gov/watertransfers/.
- **Improve contracting procedures:** DWR has developed standardized templates and related contracting materials to assist transfer proponents and approving agencies.
- **Agency alignment:** DWR is working to strengthen alignment of the management of short and long term water transfers with the State Water Board and USBR. Several coordination meetings have already been held since October.

Moving forward, DWR's strategic approach is to organize its improvements in the five key areas listed below, to support DWR's leadership in the broader arena of critical water shortage/drought management for California.

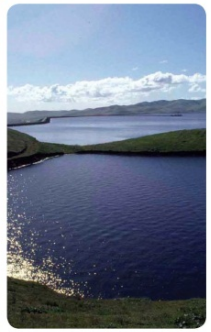
- **Statewide management of water transfers/outreach:** Conduct public outreach and foster transparency to provide the public and all interested parties with detailed information on statewide water transfers.
- **Technical, operational, and administrative rules:** Continue to improve guidance by addressing internal review and contracting processes, as well as water transfer operations and verification methods.
- **Water management assessments:** Continue to develop and periodically update detailed technical guidance related to the different types of water transfers.
- **Environmental and local ordinance consideration:** Consider development of long term environmental documentation for water transfers to address potential cumulative impacts and other issues of concern.
- **Operational transfer system:** Continue to develop tools and analytical capabilities to address transfer capacity determination, system water management information, and transfer management.


DRAFT
Technical Information
for Preparing Water Transfer Proposals

Information to Parties Interested in Making Water Available for Water Transfers in 2014

October 2013

Prepared By:
CALIFORNIA DEPARTMENT OF WATER RESOURCES
AND
BUREAU OF RECLAMATION, MID-PACIFIC REGION



rev. February 6, 2014

DROUGHT PREPAREDNESS & RESPONSE

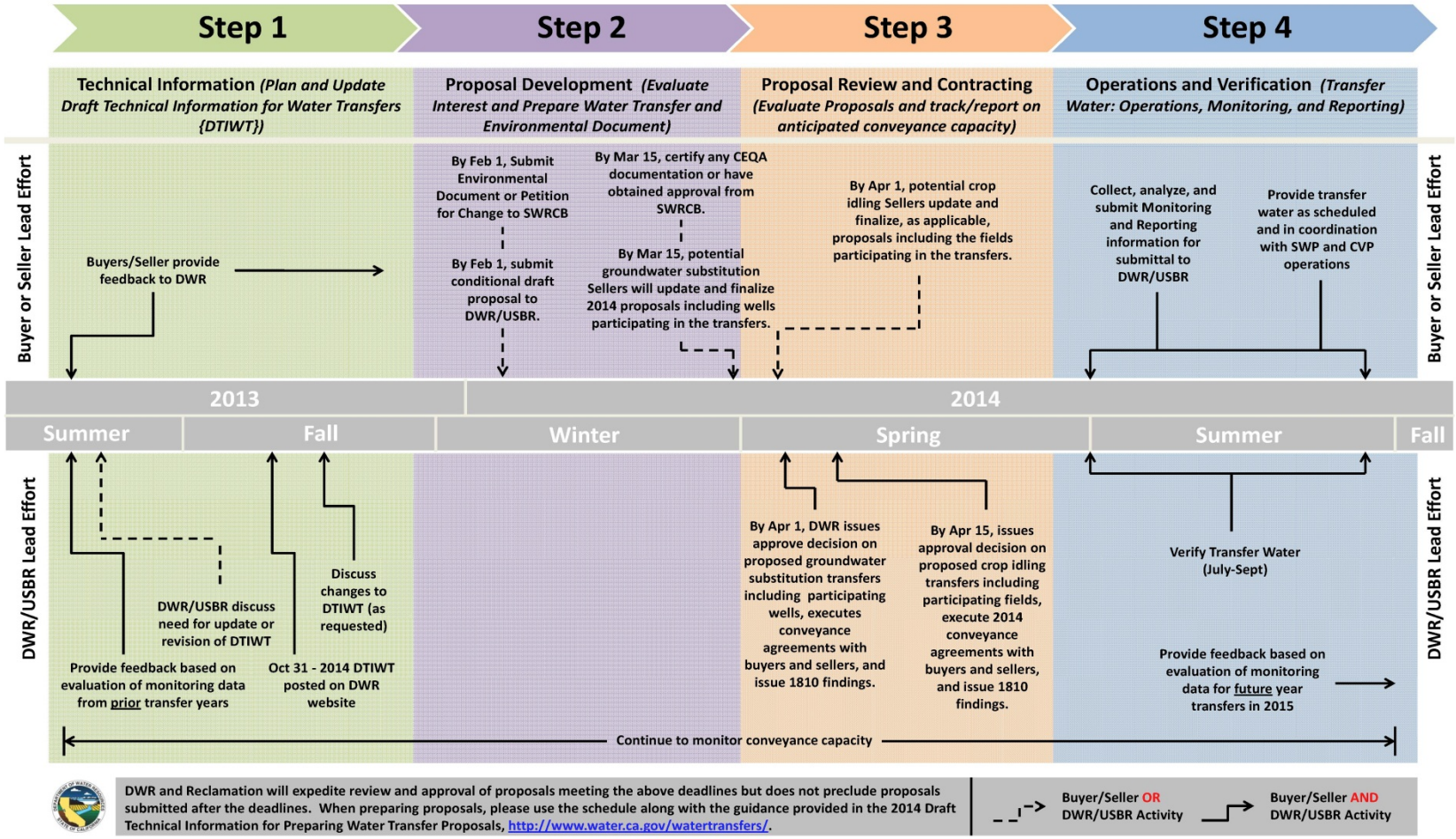
DWR Water Transfers website: http://www.water.ca.gov/watertransfers/

Transfers in coordination with the following agencies:

Short Term Improvements

Process Streamlining

At-A-Glance - 2014 Water Transfer Expedited Process and Schedule (Rev. Jan 13, 2014)



2014 Transfers

- **Groundwater Substitution Transfers:**
  - Expedite Proposals Similar to Approved in 2013
  - Accept Wells Previously Approved by DWR from 2009 - 2013
  - Stream flow Depletion Factor for Remain Unchanged for 2014 Unless Not Appropriate
- **Cropland Idling**
  - Expedited DWR Field Surveys
  - Additional DWR Staff Resources

Long Term Management Improvements

- **Statewide Management of Transfers and Outreach**
  - Continue to Conduct Public Outreach with Stakeholders to Foster Transparency
  - Continue to Provide Detailed Information to Public
- **Technical, Operational, and Administrative**
  - Continue to Improve Efficiencies in
    - Internal Review Processes
    - Contracting Processes
    - Water Transfer Operations
    - Verification Methods

Long Term Management Improvements

- **Water Management Assessments**
  - Continue to Develop and Update Technical Guidance for Different Types of Water Transfers
- **Environmental and Local Ordinance Consideration**
  - U.S. Bureau of Reclamation and SLDMWA Developing a Long-Term Environmental Document
  - Local Groundwater Studies and Restrictions
  - Multi-benefit Transfers
- **Operational Transfer System**
  - Continue to Develop Tools and Analytical Capabilities
    - Improved System Water Management Information
    - Improved Determination of Transfer Capacity
    - Improve Transfer Management and Oversight

Benefiting California's Future

For Additional Information on Water Transfers

http://www.water.ca.gov/watertransfers/

Background on Transfers

- What is a water transfer?
  - Reallocation of water among water users
- Why transfer water?
  - Flexibility of water use in California

Agencies Approving Transfers

- U.S. Bureau of Reclamation
  - Central Valley Project (CVP)
- Department of Water Resources
  - State Water Project (SWP)
- State Water Resources Control Board
  - Post-1914 water rights

Overview of Transfers

- Seller must either:
  - Release water from reservoir storage, or
  - forego direct diversion of water
- Where does water go?
  - Northern area of state to central/southern areas
  - Other regions of the state
- How much is transferred?
  - 2013: 277,283 acre-ft processed

Reallocation vs Transfer

- Reallocation within a district do not require State Board approval unless:
  - Change point of diversion, purpose or place of use.
- Transfer needed:
  - Water to be used by other user outside service area.

Pre-1914 Water Right Transfers

- Can change point of diversion purpose or place of use
- Not required to petition State Water Board
- May chose to petition for instream flow dedication.

Types of Water Transfers

- Surface water transfer
  - Stored water
  - Direct diversion water
- Groundwater transfer
  - Use of groundwater in lieu of surface water
  - Banked groundwater
  - Direct transfer
- Imported water transfer

Overview of Transfer Processing

- Generally Water Code 1725
- Water Right holder fills out Petition form
- Petition submittal (review max 10 days)
  - Fees
  - Acceptance Review
  - Prepare public notice

Necessary Findings

- No injury of other legal users
- No unreasonable affect to fish, wildlife or other instream beneficial uses.
- Only amounts of water consumptively used or stored in absence of transfer.

Public Noticing

- Required before action
- How long? 30 days (now 15 days)
- Post to our website
- Lyris email
- Petitioner: newspaper/post notice

Public Comment

- Staff review of objections received
- Outcome depends on issues raised
  - Acknowledge receiving comment in Order
  - May add term to approval Order to resolve issue.
- Timeline for action (approve or deny): 20 days after close of notice
- If no objections, action within 5 days.

Past Efforts to Improve Transfers

- 1999 Working Group "Guide to Water Transfers"
  - Information needed to complete transfers
  - Review of Water Code and existing regulations
  - Definition of transferable water, determination of consumptive use, applicable refill criteria, impacts on groundwater.
  - Available on our website

Past Efforts to Improve Transfers

- In 2000, the State Water Board workshop led to the development of a *Water Transfer Workgroup*
  - Identified ways to facilitate policies of the State Water Board, CALFED, and the Legislature and Administration.
- In 2002, the workgroup issued a final report in regards to the transfer issues in California.
  - Solutions to resolve issues related to transfers

Past Efforts to Improve Transfers

- Due to the current drought, the State Water Board, Reclamation, DWR, CDFW, U.S. Fish and Wildlife Service and National Marine Fisheries Service established a *Water Transfers Working Group*.
  - Meetings
  - Goal

Water Transfer Website

- Water transfer information is available at our site.
  - 2009-2014 Water Transfers
    - List of participants and their current transfer status
  - Water Transfer Program Information, Guide, Workshop, Issues, Water Code section 1707 Instream Flow Dedication
  - Transfer Process Streamlining
  - Notices
  - Forms

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

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 sellers 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

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

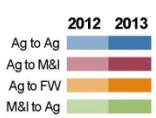
Other Types of Transfers

- 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

2012/2013 Transfer Activity

January 28, 2014

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

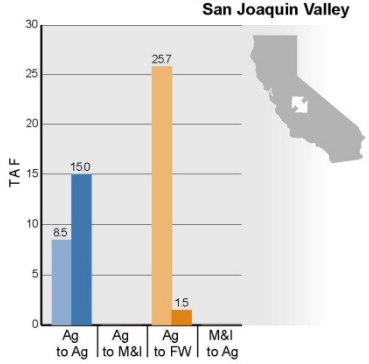


Total quantity of water made available for transfer (Actual deliveries were less due to Delta Carriage water losses)

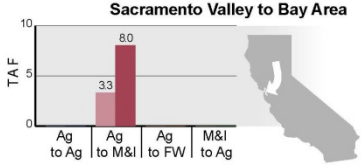
2012: 188,074 AF

2013: 268,370 AF

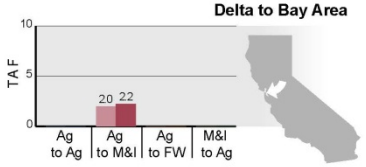
San Joaquin Valley to San Joaquin Valley



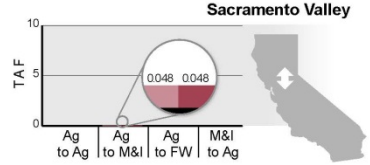
Sacramento Valley to Bay Area



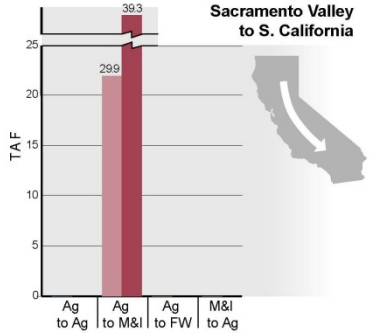
Delta to Bay Area



Sacramento Valley to Sacramento Valley



Sacramento Valley to S. California



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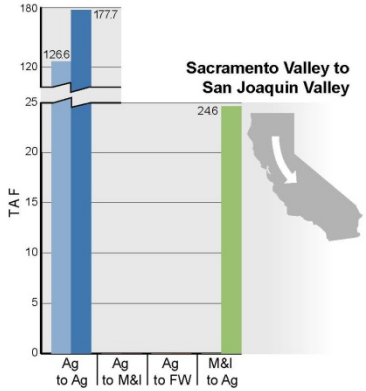

The figures above include transfers requiring the approval of the SWRCB, including Yuba accord transfers, as well as transfers of water diverted under pre-1914 water rights. Transfers and exchanges of SWP and CVP water are not included.Operational issues delayed the export of most transfer water made 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.

Abreviations

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

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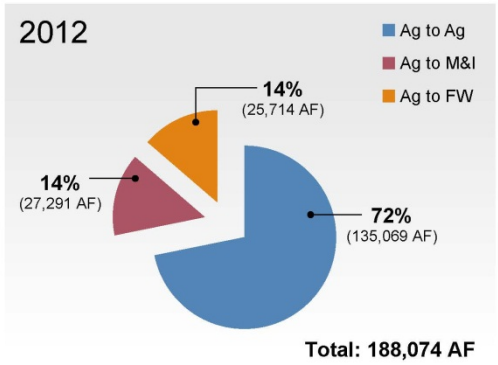

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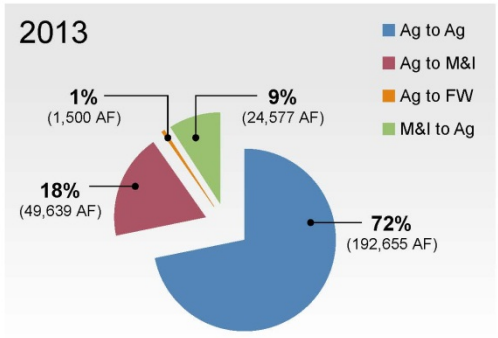

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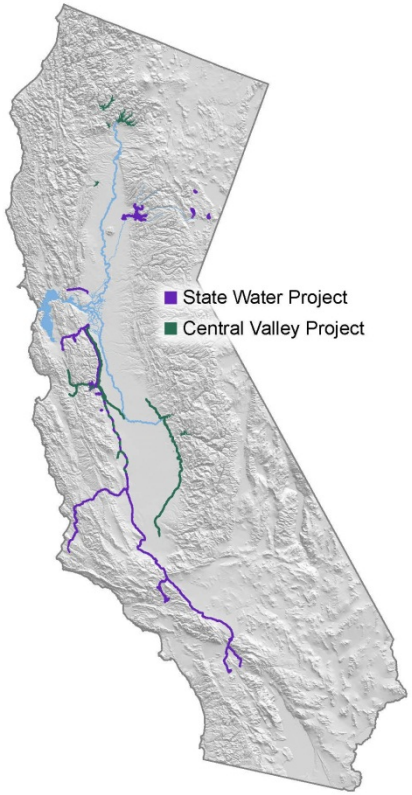

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