

DRAFT
Technical Information
for Preparing Water Transfer Proposals

(Water Transfer White Paper)

Information for Parties Preparing
Proposals for Water Transfers
Requiring Department of Water Resources
or Bureau of Reclamation Approval

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Section 4 Reservoir Storage Release

Water is made available for transfer by reservoir release when the seller releases water from their reservoir in excess of what would be released annually under normal operations. The water must also be released at a time when it can be captured and/or diverted downstream. Each storage facility is unique, and, therefore, each reservoir storage release (or reservoir reoperation) proposal must be evaluated on a case-by-case basis. Sufficient information must be provided to establish normal operating conditions and normal end-of-season storage as well as typical release patterns. Definitively establishing the without-transfer proposal conditions for a reservoir reoperation is difficult because normal conditions can vary substantially, depending on many factors such as annual hydrology, agency demand, and instream requirements. Sufficient information must be provided to ensure the water transfer proposal is providing additional storage withdrawal. Data spanning a variety of hydrologic conditions is necessary to develop without transfer proposal or “normal” operating conditions.

The information needed for evaluation of a reservoir storage release transfer is detailed in the reservoir reoperation transfer checklist (see Appendix B). At a minimum, the following information is needed to evaluate the without-transfer operating conditions:

- A minimum of five years’ reservoir operating data, including end-of-month storage.
- End-of-season reservoir storage
- Historic and forecast inflows with monthly updates.
- Historic and forecast water demands with monthly updates.
- Historic reservoir releases.
- Instream requirements.
- Flood control diagram.
- Reservoir Area-Capacity Curve, if available.
- End-of-season target carryover storage, if any.

In addition to the information necessary to establish the without-transfer conditions, information will be required during the transfer period to verify delivery of the transfer water. Such information could include independent gage information downstream of the reservoir as well as reservoir release and storage data.

4.1 Refill Criteria

Refill of the reservoir storage space vacated by the water transfer can adversely affect downstream water users if it is done at a time when other downstream legal users of

water could have utilized reservoir releases. Refill criteria are required for all reservoir release water transfers to ensure that the transfer does not injure other legal users of water. In general, the refill of vacated space from a water transfer will be restricted to periods when the refill quantity is in excess of the needs of any legal user of water downstream of the point of diversion. For example, if a transfer of reservoir storage originates above another reservoir, refill will not be considered to occur until the downstream reservoir goes into flood control operations. Alternately, if a transfer source directly affects the inflows to the Delta, refill will not be considered to occur until the Delta is declared to be in excess conditions as defined in the COA between Reclamation and DWR. Each transfer proposal is unique; thus, refill criteria must be developed for each proposal and must be tailored to these unique circumstances. The refill criteria are typically developed in coordination with the SWP and CVP operations staff. The refill period can span a number of years if the hydrology in subsequent years is insufficient to allow refill.