RECLAMATION Managing Water in the West

Intentionally Created Surplus (ICS)

On December 13, 2007, the *Record of Decision for the Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead* (Interim Guidelines) was implemented. Among other things, the Interim Guidelines create a framework to authorize entitlement holders who meet established criteria to develop ICS to augment Colorado River system reservoir storage. The purposes of ICS include:

- Encourage the efficient use and management of Colorado River water, and to increase the water supply in Colorado River system reservoirs through the creation, and delivery, of ICS.
- Assure any contractor that invests in conservation or augmentation to create ICS that no other contractor will lay claim to the ICS.
- Increase the surface elevations of both Lake Powell and Lake Mead to higher levels than would have otherwise occurred, benefiting storage.
- Help minimize or avoid shortages to water users in the lower basin.

There are four categories of ICS. These include:

- Extraordinary Conservation ICS created through the implementation of extraordinary conservation measures such as fallowing, canal lining programs, and desalination programs.
- Tributary Conservation ICS created by leasing or purchasing pre-1929 documented water rights on the Colorado River System tributaries within the entitlement holder's state.
- Imported ICS created by introducing non-Colorado River System water in that entitlement holder's state into the mainstream.
- System Efficiency ICS created when an entitlement holder makes a capital contribution to the Secretary of the Interior for use in funding projects designed to realize system efficiencies that save water that would otherwise be lost from the mainstream of the United States.



Warren H. Brock Reservoir, a System Efficiency ICS project funded by the Central Arizona Water Conservation District, the Metropolitan Water District of Southern California, and the Southern Nevada Water Authority.

The table below lists the entitlement holders that currently have ICS in storage in Lake Mead, the total amount of ICS stored through calendar year 2013, and the planned creation amounts for calendar years 2014 and 2015. At the end of 2013, approximately 1,118,000 acre-feet of ICS credits were stored in Lake Mead. Actual ICS creation amounts for 2014 and 2015 will be reported in Reclamation's annual Water Accounting Report.

Entitlement Holder	2013 End-of-Year ICS Balance ¹ (acre-feet)	2014 Planned ICS Creation ² (acre-feet)	2015 Planned ICS Creation ² (acre-feet)
Central Arizona Water Conservation District	103,000	0	0
Imperial Irrigation District	0	up to 25,000	up to 25,000
Metropolitan Water District	474,000	up to 200,000	up to 200,000
Southern Nevada Water Authority	541,000	up to 46,000	up to 46,000

¹Values rounded to the nearest thousand acre-feet.

² Per entitlement holder's approved 2014 and 2015 Plan(s) of Creation.

Water Education Foundation: Lower Colorado River Tour

Inadvertent Overrun and Payback Policy (IOPP)

The IOPP became effective January 1, 2004, with the implementation of the Colorado River Water Delivery Agreement, sometimes referred to as the Federal Quantification Settlement Agreement. The IOPP is an administrative policy that accounts for inadvertent overuse of Colorado River water by lower basin entitlement holders, and requires that such overuse be paid back to the system through implementation of extraordinary conservation measures. The policy provides entitlement holders the flexibility needed to fully use their entitlement while insuring any use in excess of such entitlement is repaid to the system. An entitlement holder incurring an overrun is required to begin payback in the calendar year following the publication of Reclamation's annual Colorado River Accounting and Water Use Report in which the overruns are identified.

Examples of extraordinary conservation measures that might be used to pay back an overrun include:

- Delivery System Improvements physical improvements to the delivery or distribution system. Such improvements may include, but are not limited to: concrete-lining, pipe-lining, or other encasement of existing canals; building storage and terminal reservoirs and spill-interceptor canals; operational spill capture and reuse; improved control of flows and water levels through computer automation of distribution system; improved measurement of deliveries to laterals and fields; and non-leak gates.
- Land Fallowing terminating water deliveries to lands that currently are, historically were, and otherwise would have been in agricultural production and irrigated with Colorado River water.
- Seepage Recovery capture of seepage water from unlined delivery canals and laterals for subsequent reintroduction to the delivery system.
- On-Farm Conservation field level conservation measures such as scientific irrigation scheduling, salinity management and soil moisture monitoring; converting to drip irrigation; installation of tailwater pumpback and reuse systems.
- Foregone banking of Colorado River water off-stream.

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Through calendar year 2013, approximately 151,000 acre-feet of Colorado River water have been repaid to the system through extraordinary conservation measures implemented under the IOPP.

State	Cumulative Overrun Amount (acre-feet)	Cumulative Payback Amount (acre-feet)	2013 End-of-Year Overrun Account Balance (acre-feet)	
Arizona	15,000	14,000	600	
California	249,000	132,000	117,000	
Nevada	5,000	5,000	0	
Total	269,000	151,000	118,000	

All values rounded to the nearest thousand acre-feet.