

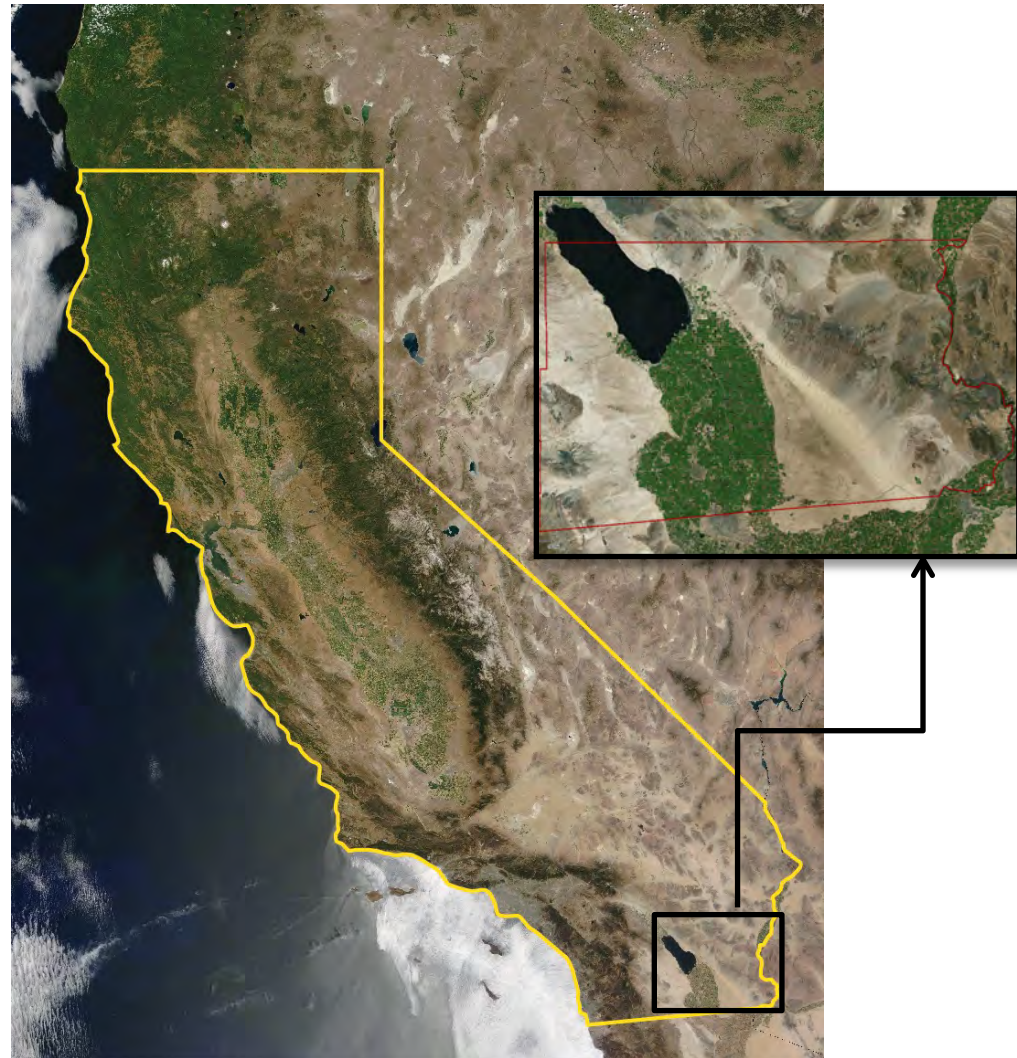
# Agricultural-to-Urban Water Conservation Transfers: Imperial Irrigation District's Efficiency Conservation Programs

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# IID

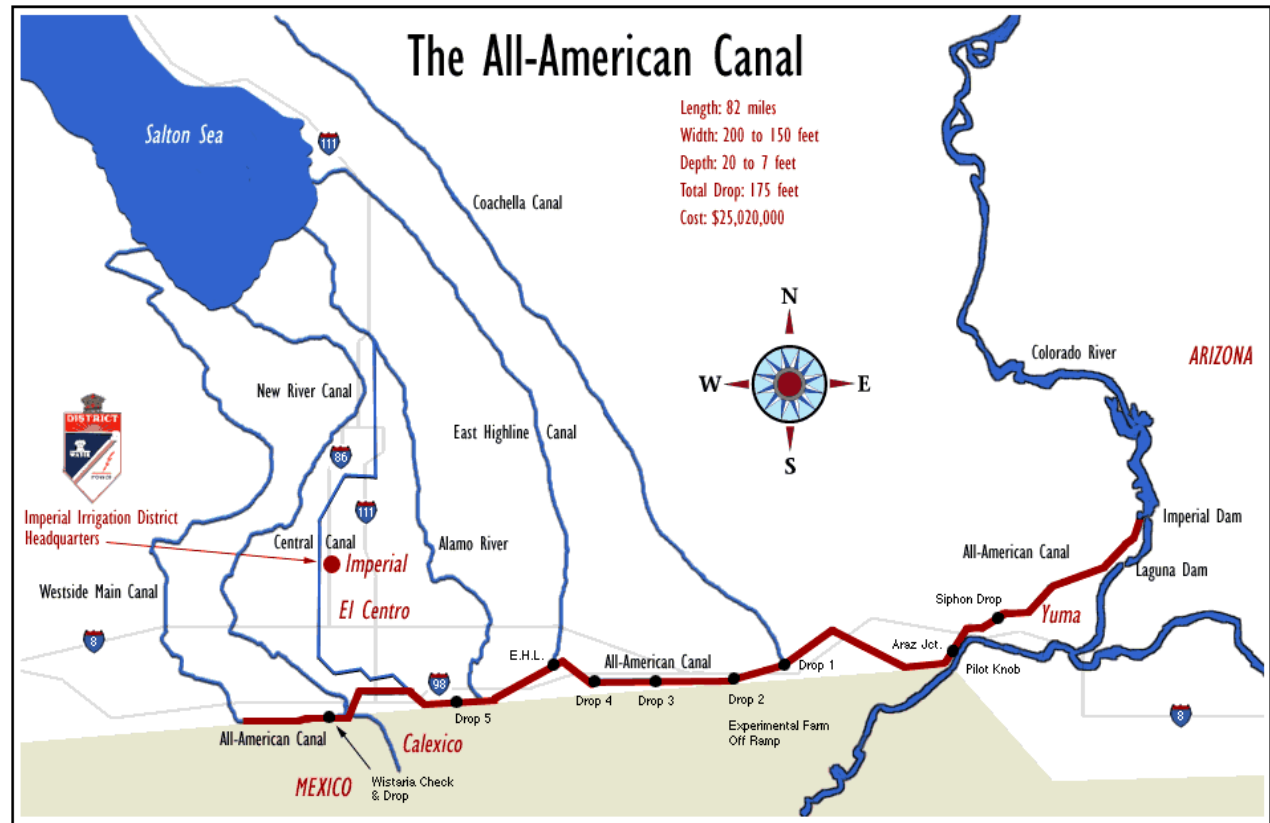
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# IID's Water Supply & Service Area

- 3,100,000 acre-feet annual Colorado River consumptive use entitlement
- 1,061,637 – gross acres within boundaries
- 520,307 – total acreage receiving water
- 471,682 – total farmable acreage
- Imperial Dam diversion structure, headworks and six desilting basins
- 82-mile long All-American Canal



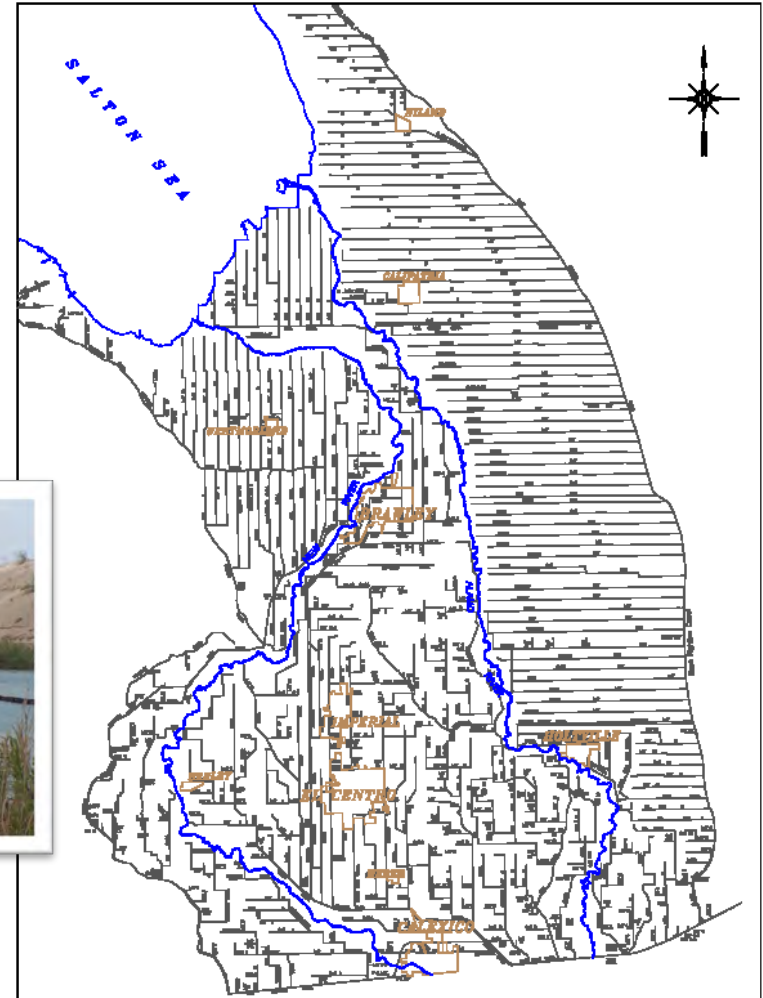
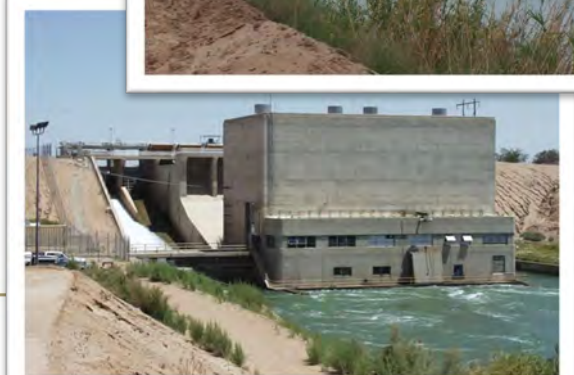
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# Irrigation and Drainage System

- Imperial Dam diversion works and desilting basins
- 1,590 miles of conveyance facilities
- 1,457 miles of surface drains
- Hydroelectric plants



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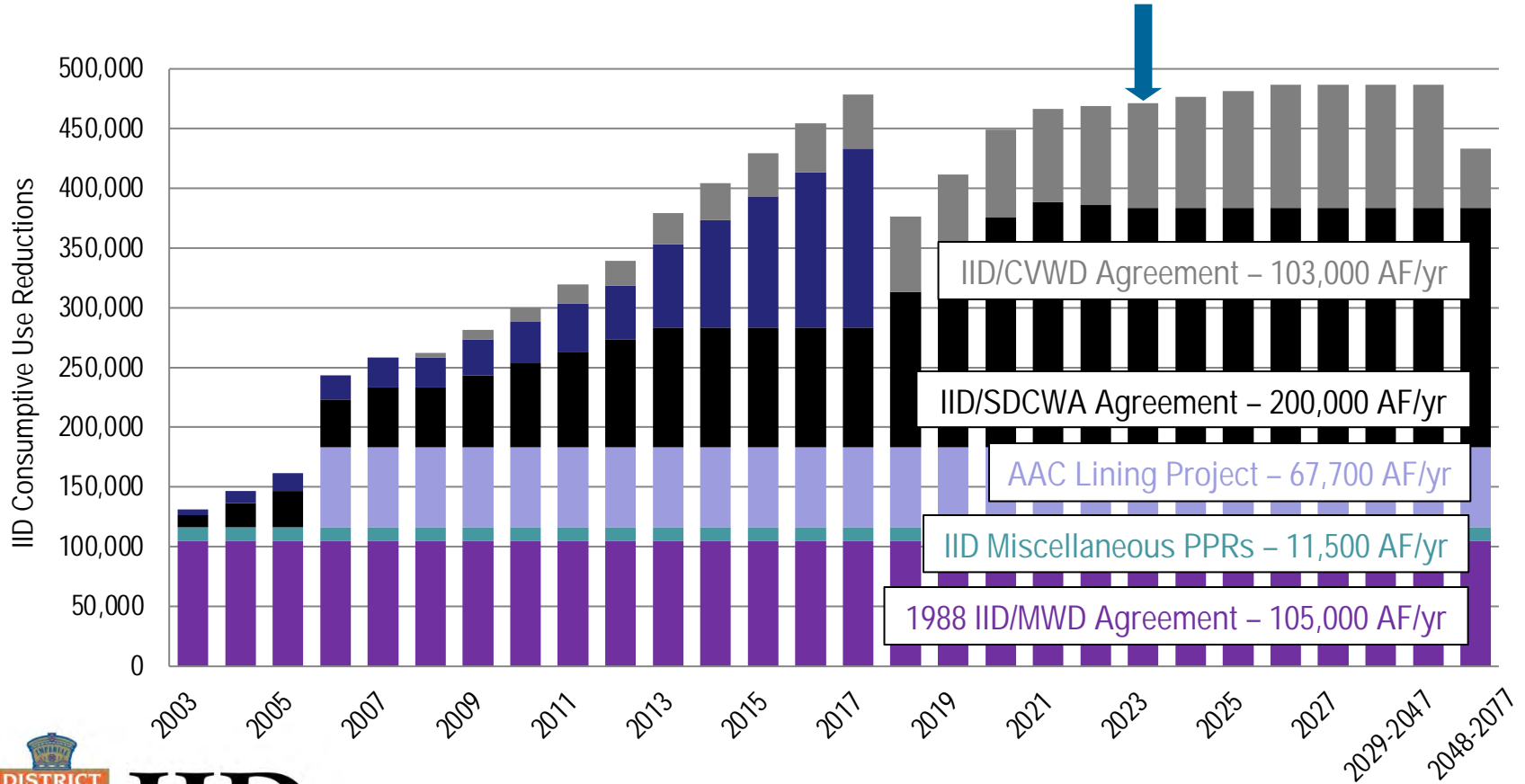
# Imperial County - \$2.6 Billion Agricultural Economy



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# QSA Water Conservation Programs

**2003-2023 Total Conservation = 7.7+ Million Acre-Feet**



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# 1988 IID/MWD Conservation Program

MWD funded capital improvements to IID's conveyance system (completed in 1997) and related annual O&M expenses in exchange for the 105,000 acre-feet per year of conservation those projects generate.

- 5 Reservoirs (Bevins, Young, Russel, Willey and Galleano)
- 270 miles of concrete lined canals
- 3 Lateral Interceptors (Plum-Oasis, Mulberry-D, Trifolium)
- System Automation (SCADA, main canal automated gates, water information system and Water Control Center)
- 12-Hour Delivery Program



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# 2003 SDCWA/CVWD Conservation Programs

303,000 AFY of conservation generated from the construction of capital improvement projects that increase operational efficiency and provide water management flexibility, combined with on-farm conservation programs that provide funding to growers for verified conservation measures that improve agricultural water use efficiency.

- *Seepage recovery systems, lateral interties, operational reservoirs, canal concrete lining, automation, and technology improvements.*
- *\$500+ million in direct payments to growers/landowners to implement field-level irrigation improvements (tailwater return systems, drip irrigation, sprinklers, precision land-leveling, etc.)*





# Lower Basin Plan Conservation and IID's Role



- 3 MAF of additional conservation created by Lower Basin States through 2026, with 50 percent left in Lake Mead by EOY 2024. California will create 1.6 MAF of conservation or ICS to build elevation.
- IID's 800,000± AF of conservation was pre-conditioned on the mitigation of Salton Sea impacts related to accelerated playa exposure that was accomplished through a \$250 million federal funding commitment and a 4,000 acre dust control/aquatic habitat project expansion by the California Natural Resources Agency.

- ✓ IID 2023 SCIA ≈ 100,000± AF (on-farm conservation)
- IID 2024-2026 SCIA ≈ 250,000 ± AFY (pending final environmental compliance and permitting)

- Expanded On-Farm Efficiency Conservation
- Deficit Irrigation Program
- System conservation
- Existing conservation/transfer programs
- Fallowing Program

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# The Salton Sea



- 360 square miles, up to 52' deep
- Congressionally designated agricultural sump for IID/CVWD
- Volume of 7.5 MAF with annual inflow of up to 1.3 MAF, no outflow
- Nearly 50% saltier than the ocean
- Repository for agricultural drainage
- Heavily used by migratory waterfowl including endangered species
- > 11' elevation decline since 2003 and 30,488 acres of playa exposed since 2003
- Without transfers, Sea was estimated to turn hypersaline between 2010 and 2025
- With transfers, Sea was estimated to turn hypersaline 1-9 years earlier

Year	Exposed Playa Total Acres
2007	4,200
2012	10,600
2017	16,200
2022	34,700
2027	54,500
2032	64,700
2037	69,100
2042	72,500
2047	74,000

Year 2042 to 2047  
Exposed Playa: 74,000 acres



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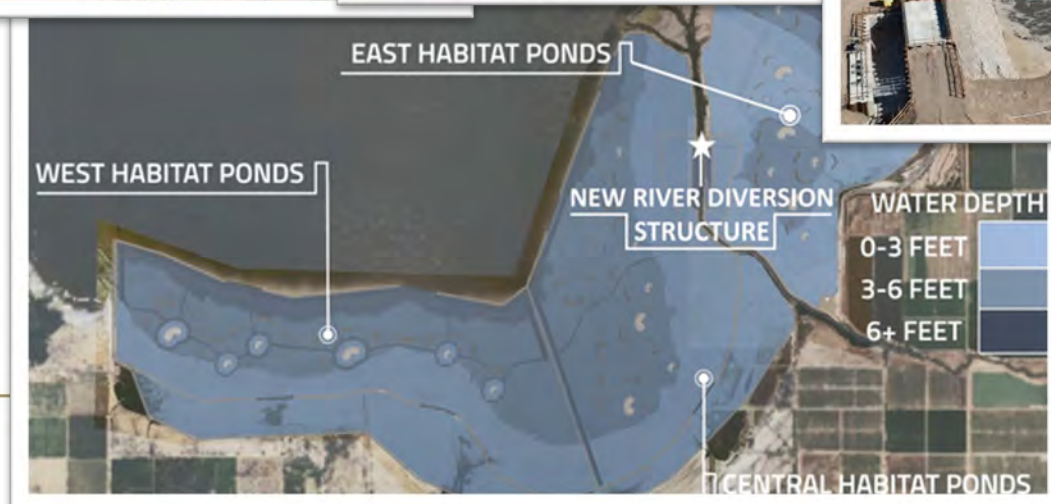
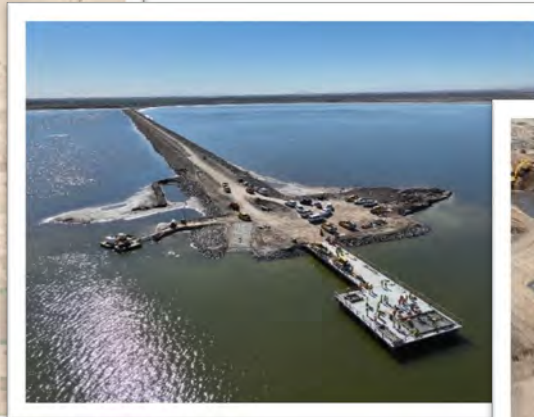
[www.iid.com/water/salton-sea](http://www.iid.com/water/salton-sea)  
<https://www.youtube.com/watch?v=Sua-gQyTScU&t=70s>



# California Salton Sea Management Program



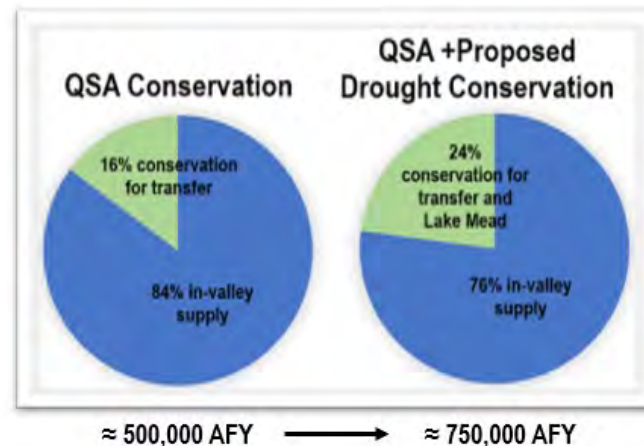
- 4,110 acre Species Conservation Habitat project is a series of constructed ponds with islands and areas of varying water depths to provide fish and bird habitat
- 750 acres dust suppression projects



# The Colorado River – A Critical Community Resource



- The Colorado River is the region's only water supply.
- IID has a year-round growing season with robust cropping yields that provide the nation a safe and reliable food supply. One in every six jobs in Imperial Valley is directly related to agriculture.
- The communities that rely on IID for water are largely disadvantaged, underserved minority populations.
- All IID conservation reduces Salton Sea inflows, contributing to ecosystem and public health (air quality) impacts.
- IID already conserves and transfers 16 percent of its water supply, more than 485,000 AFY, to Southern California.



- For the Lower Basin Drought Plan IID will increase its conservation target to  $\approx 750,000$  AFY, or more than 24 percent of IID's entitlement.



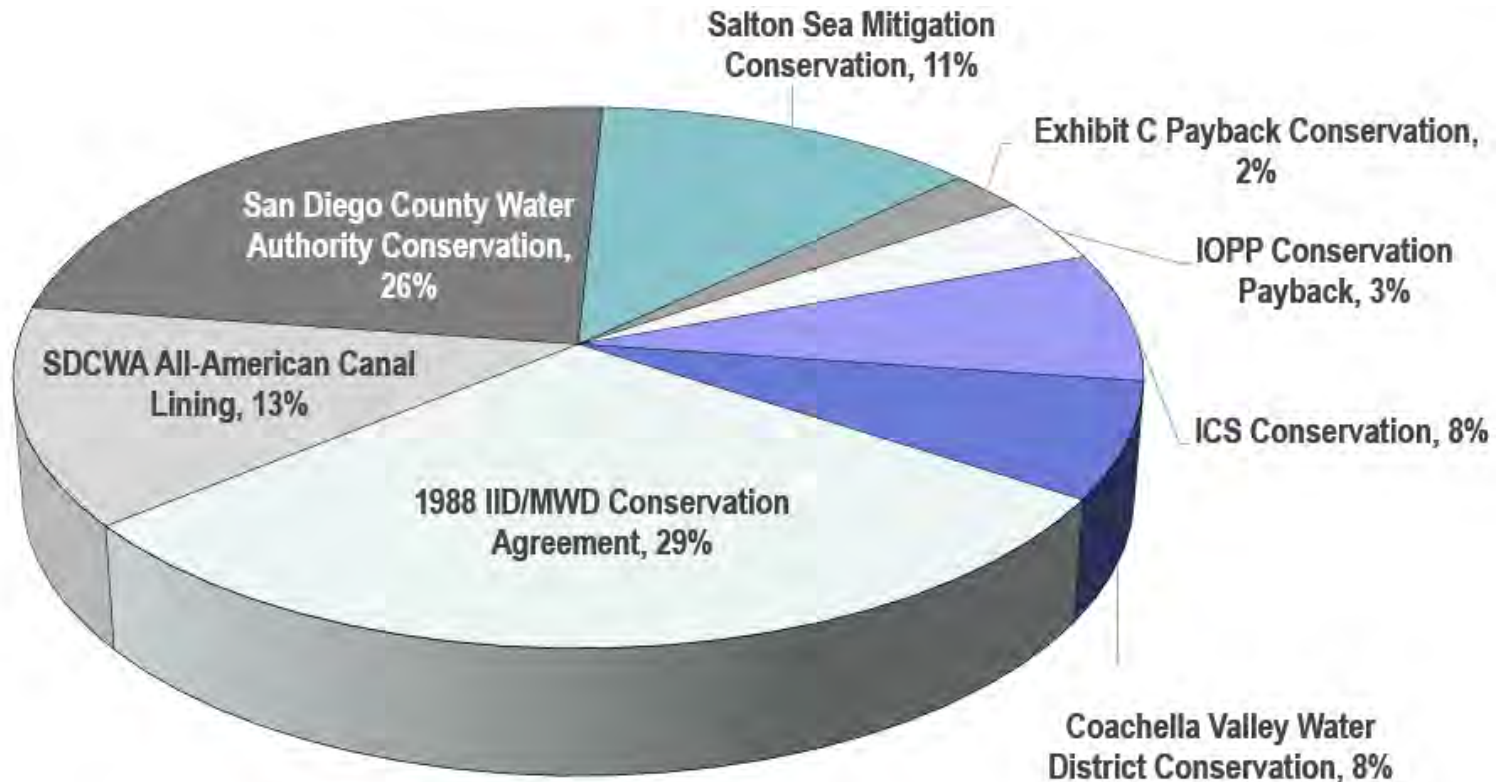
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# IID's QSA Water Conservation & Transfer Summary (2003-2023 Totals $\geq 7.7$ million acre-feet)



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