

Colorado River Basin Salinity Control Program

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Colorado River Basin Salinity Control Forum

CRWUA – No Spare Change

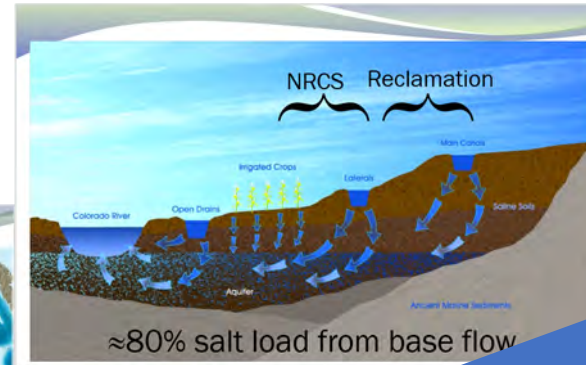
December 14, 2021

Las Vegas, NV



Colorado River Salinity Control Program

Program Funding



Geology

100 mya
1000s ft of shale



Improved
Water
Quality

100 mg/L less salt

Why

Genesis

Implementation

Funding

Improved Water Quality

100 mg/L less salt





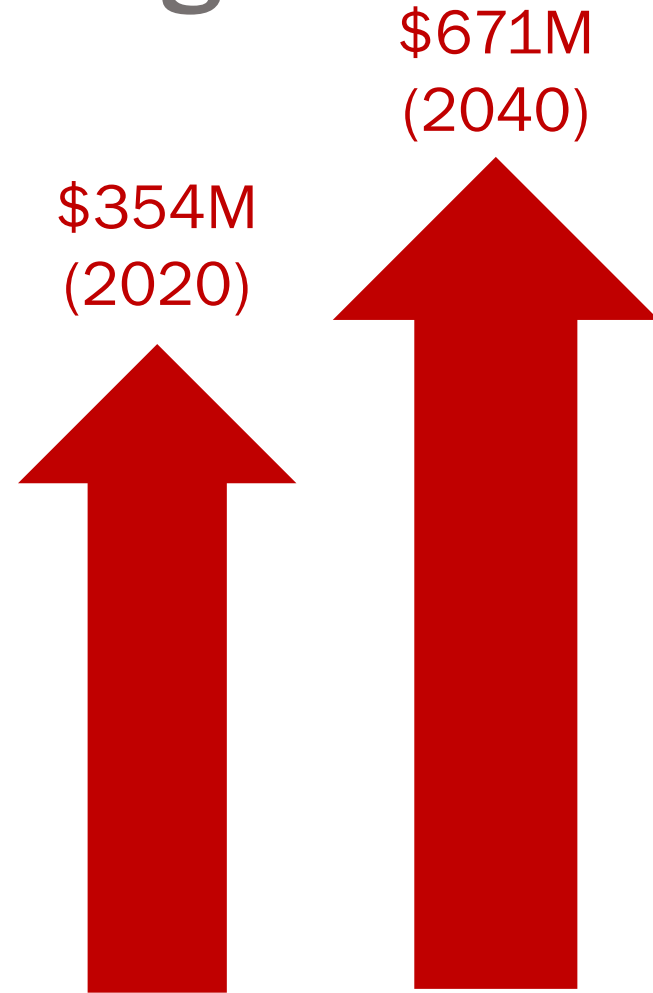
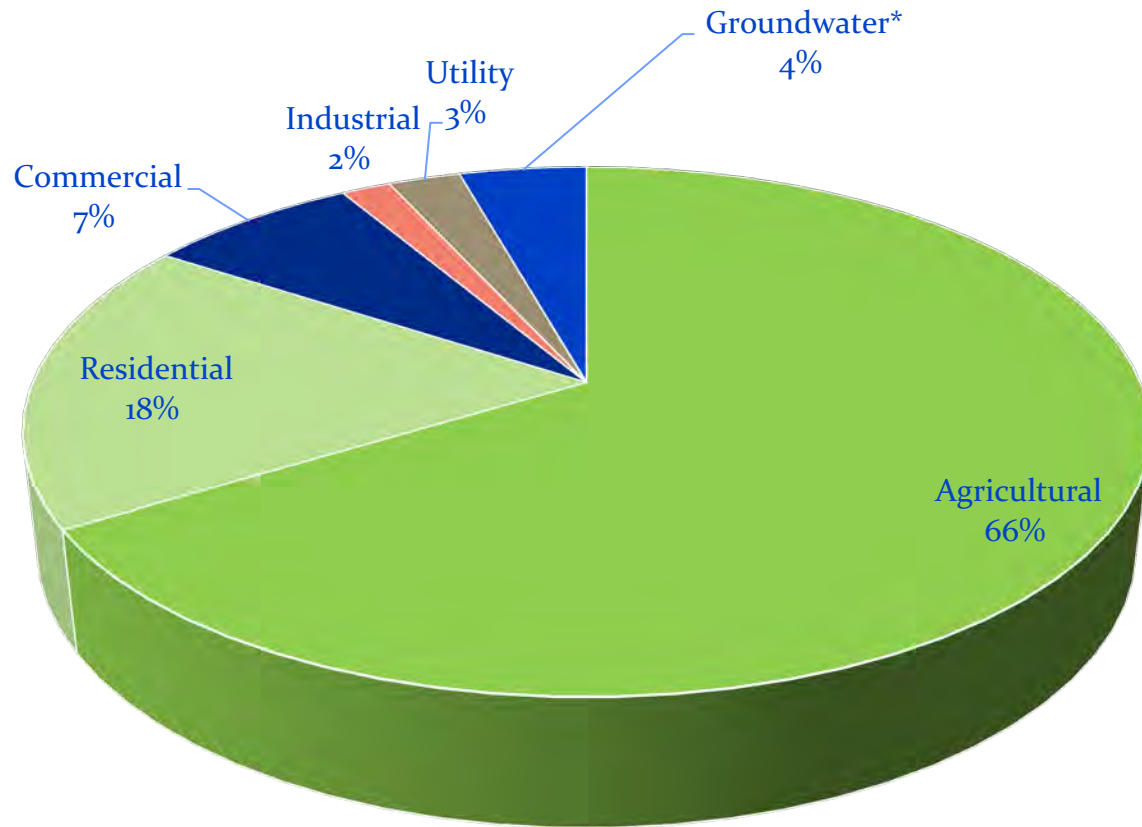
Clark County

Quantified salinity damages \$45 million less per year due to the salinity control program.

Total damages averted:
\$300 M annually

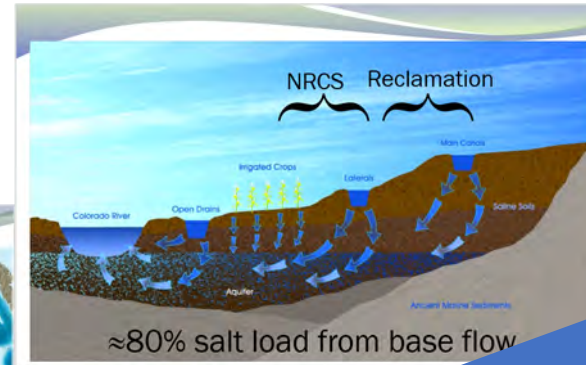


Quantified Salinity Damages



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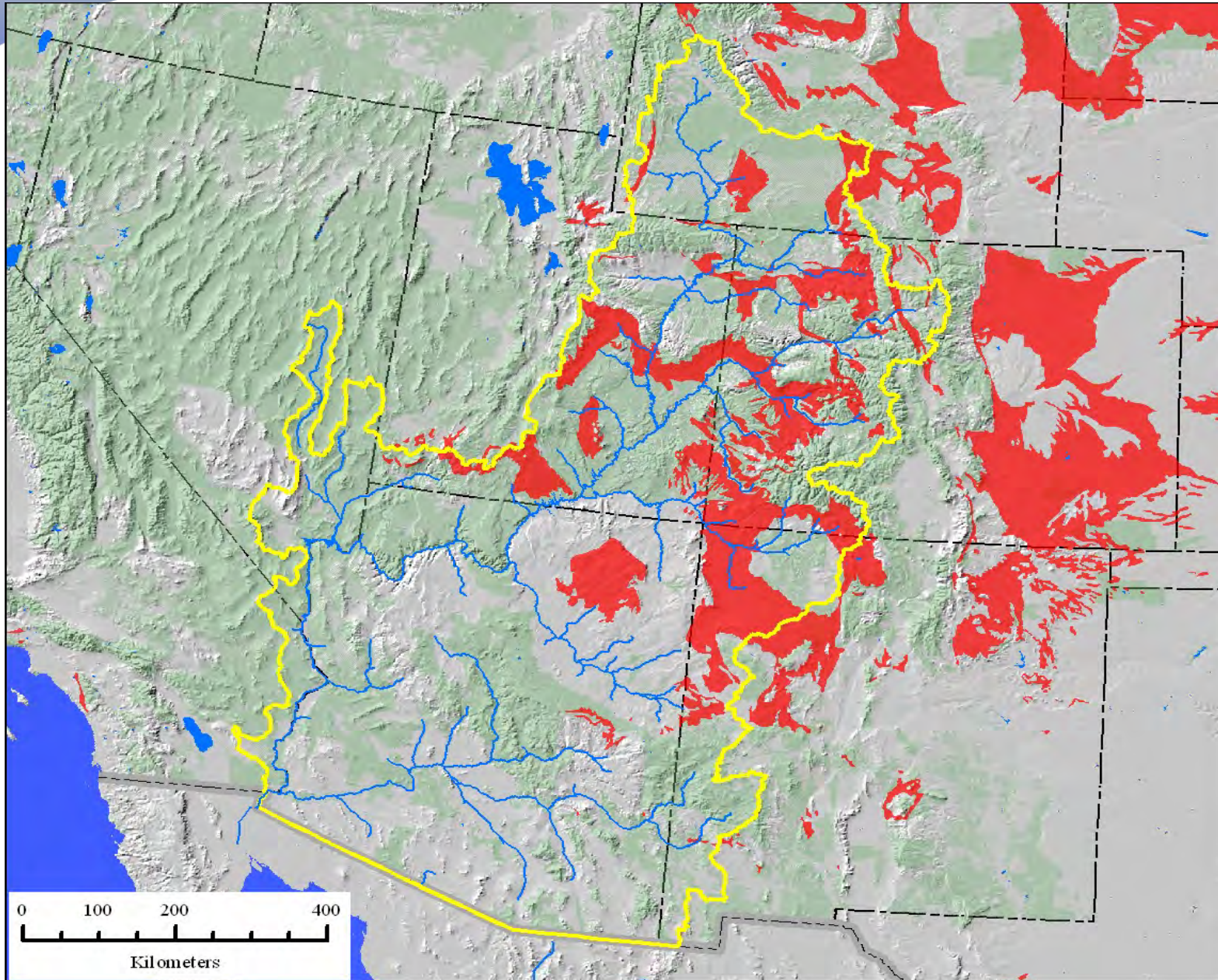
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Mancos Shale

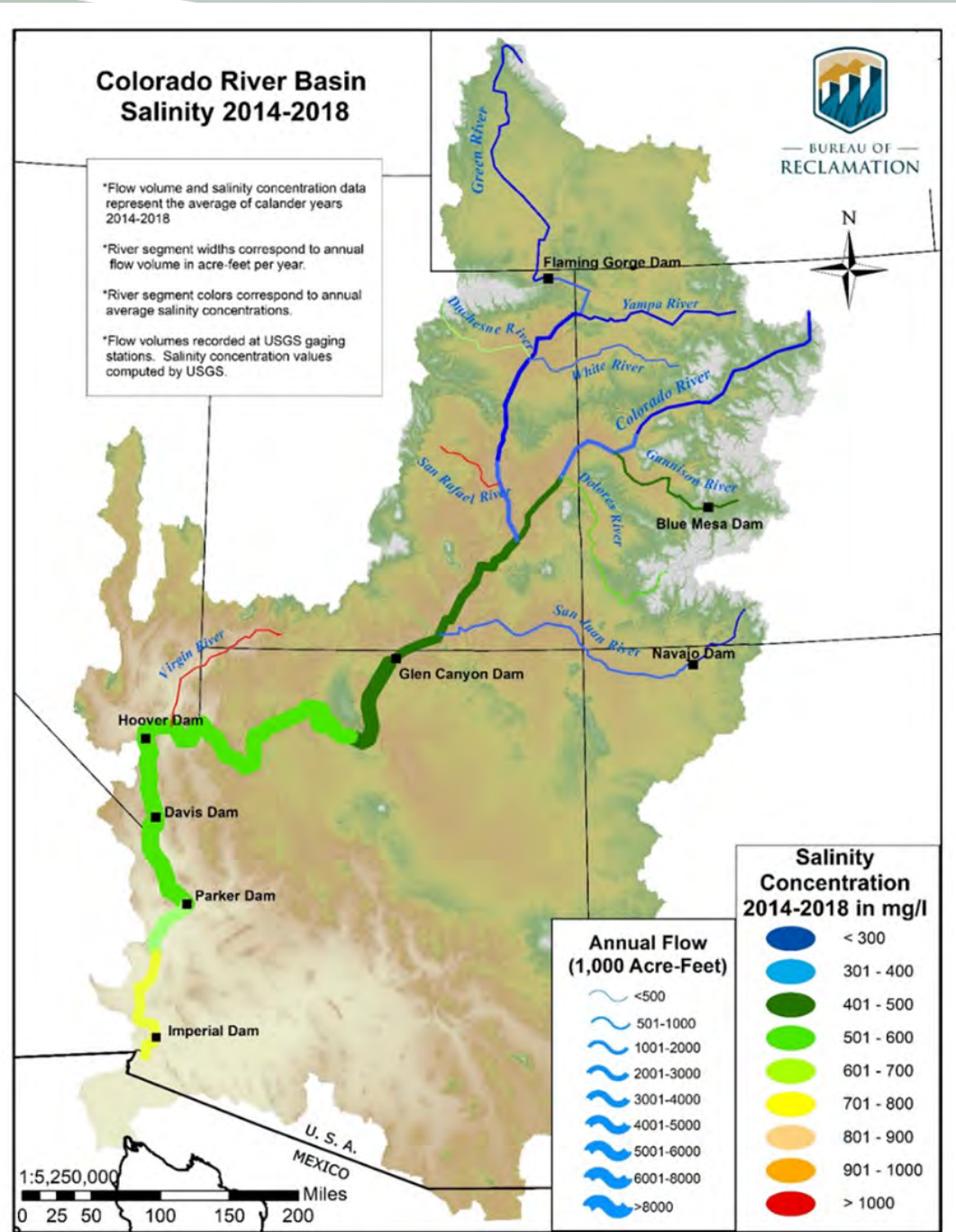




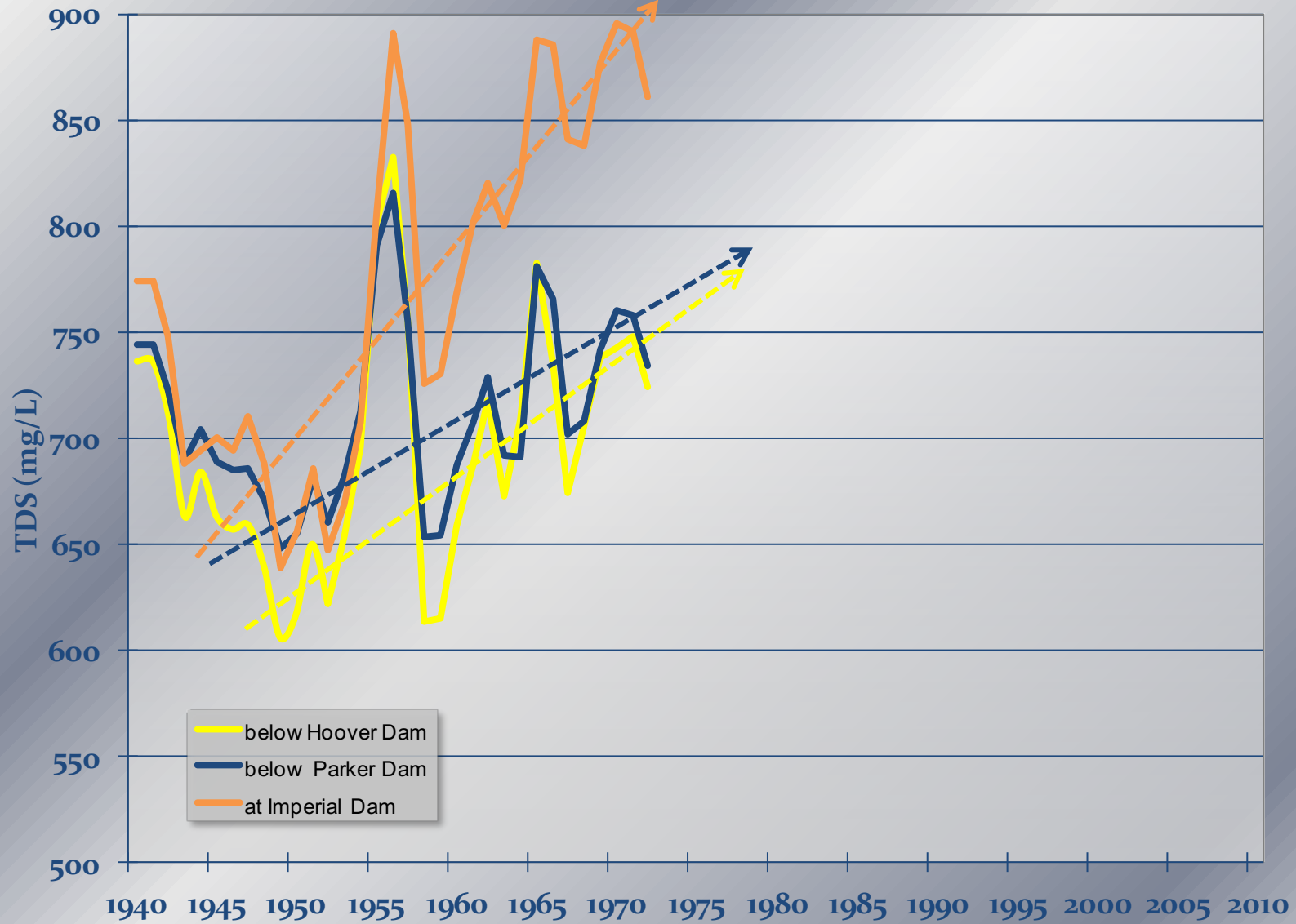
- Pervasive through Upper Basin
- Highly erodible
- Forms valleys
- Loaded with salt

Increases in salinity

50 mg/L – 800 mg/L



Colorado River Salinity Concentrations at Numeric Criteria Sites



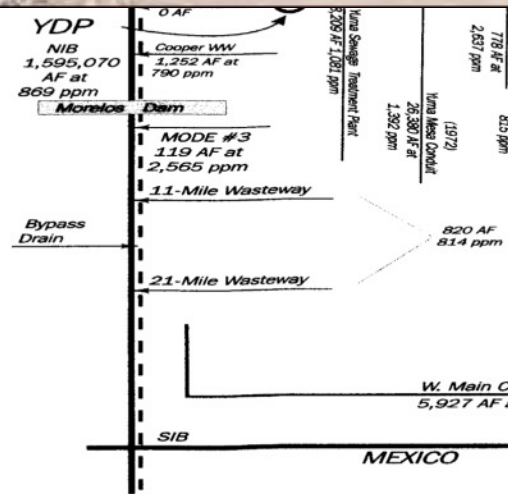
Salinity Control Program History

- Early 1970's
 - Salinity of the Colorado River was rising
 - Significant concerns by Mexico

Program History



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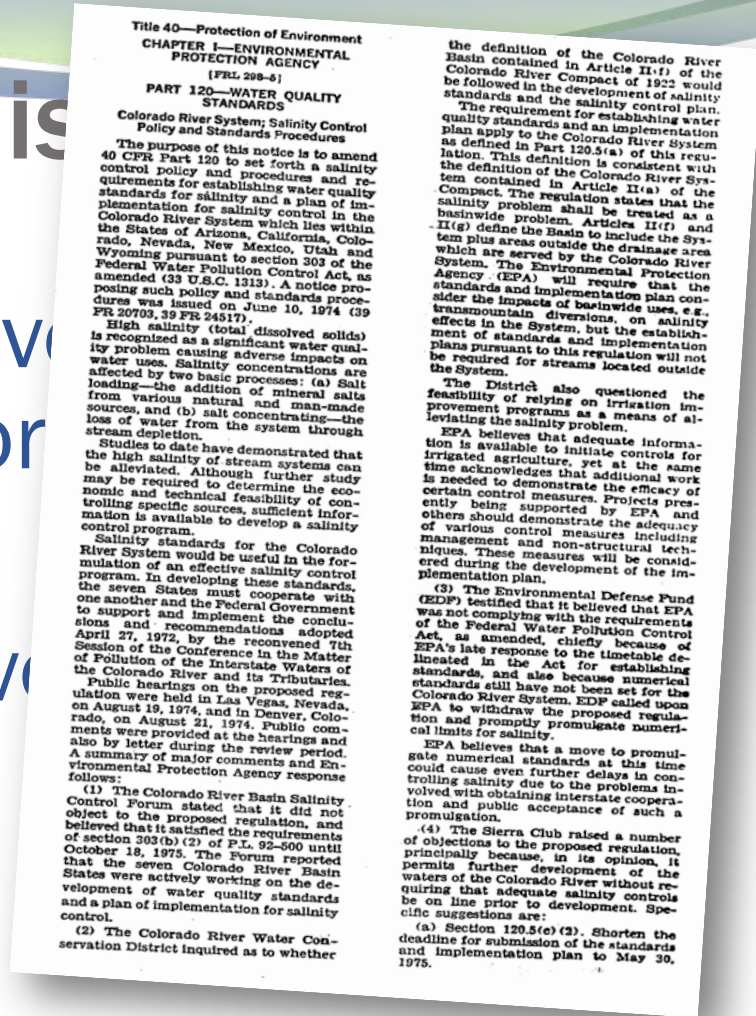


Salinity Control Program History

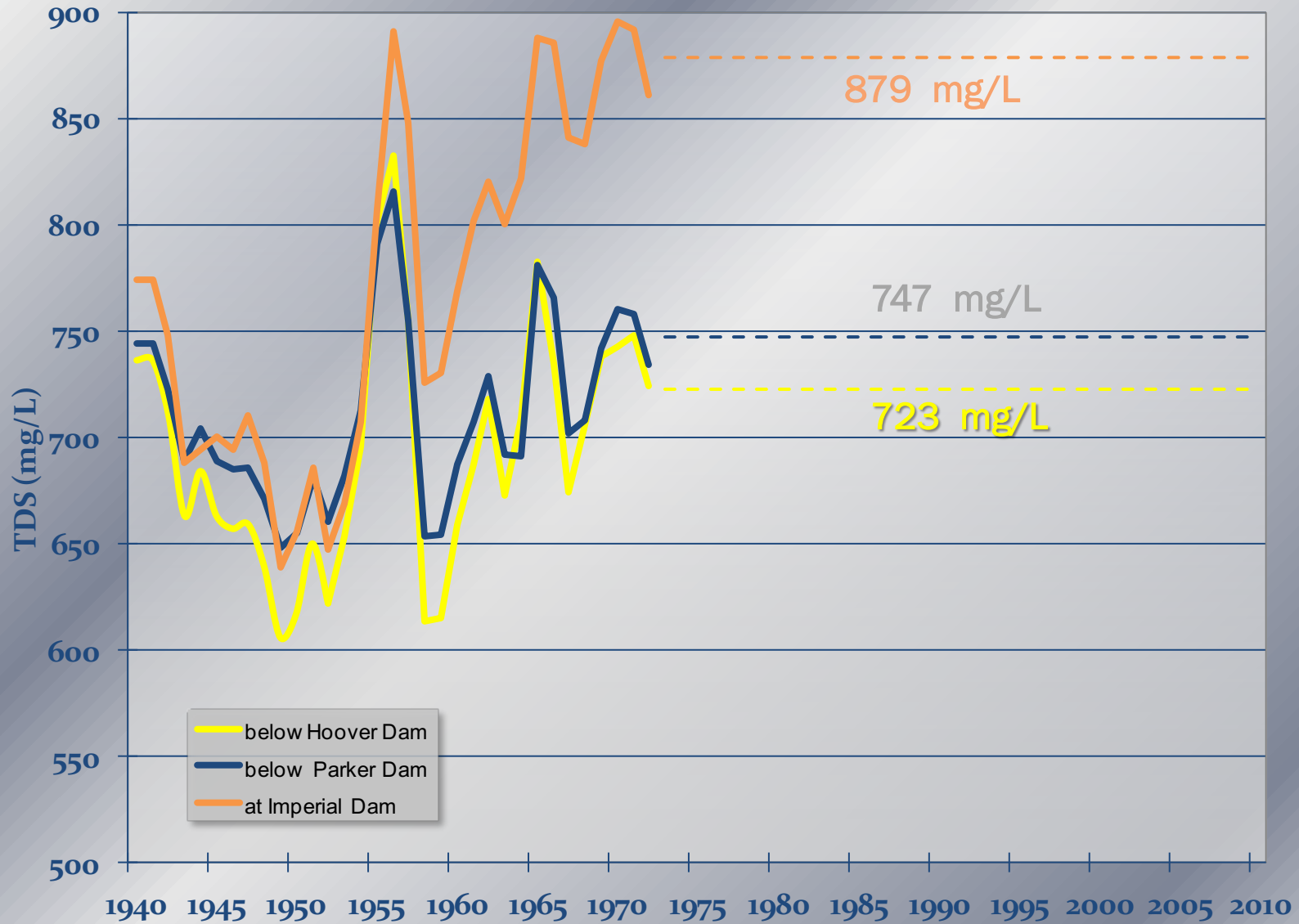
- Early 1970's
 - Salinity of the Colorado River was rising
 - Significant concerns by Mexico
 - 1972 Amendments: Federal Water Pollution Control Act

Salinity Control Program History

- 1973 – created the Colorado River Basin Salinity Control Forum (Forum)
- 1974 – passed the Colorado River Basin Salinity Control Act (Act)
 - Title I and Title II
- 1975 – adopted salinity standards for the Colorado River

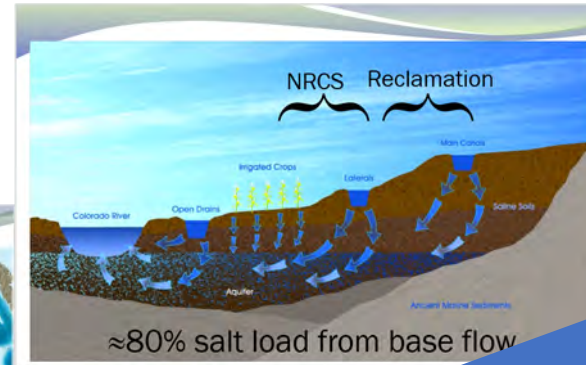


Colorado River Salinity Concentrations at Numeric Criteria Sites



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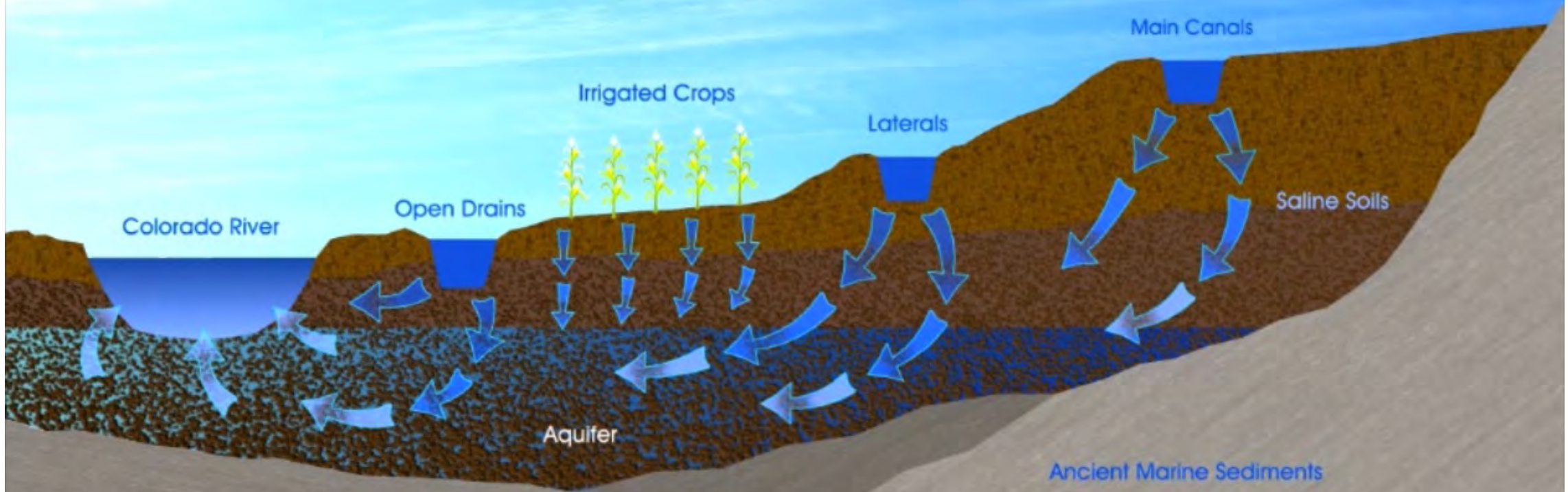
Why

Genesis

Implementation

Funding

NRCS Reclamation



≈80% salt load from base flow

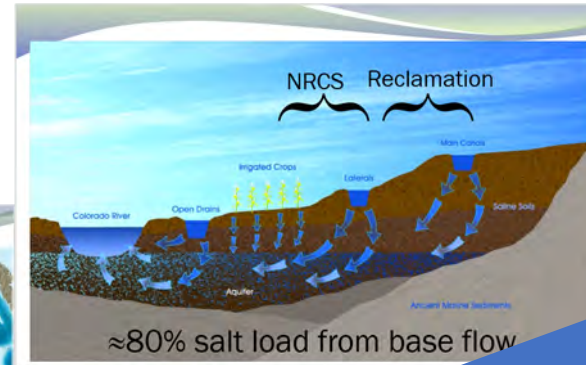






Colorado River Salinity Control Program

Program Funding



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Why

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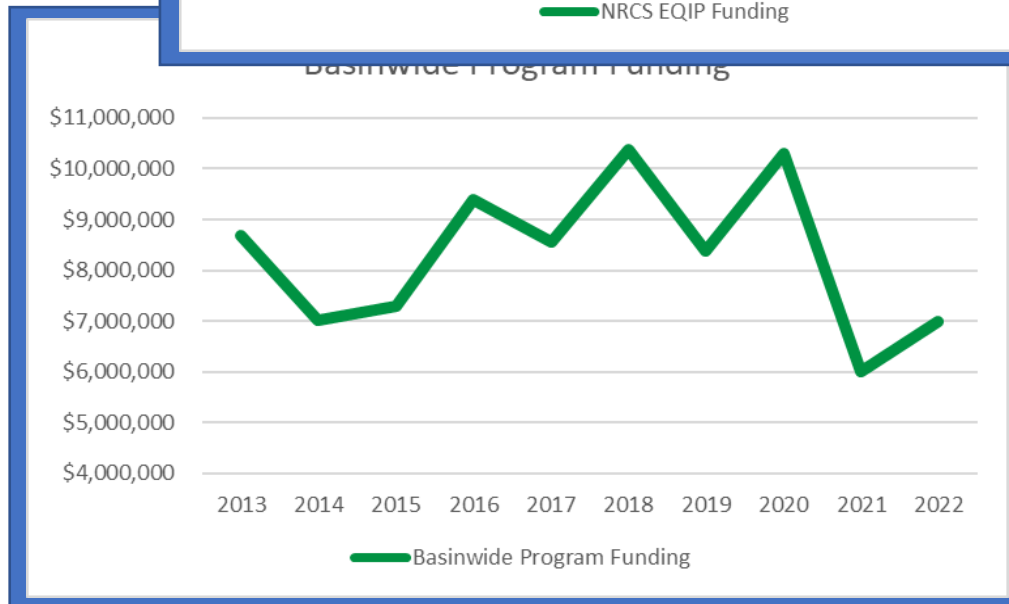
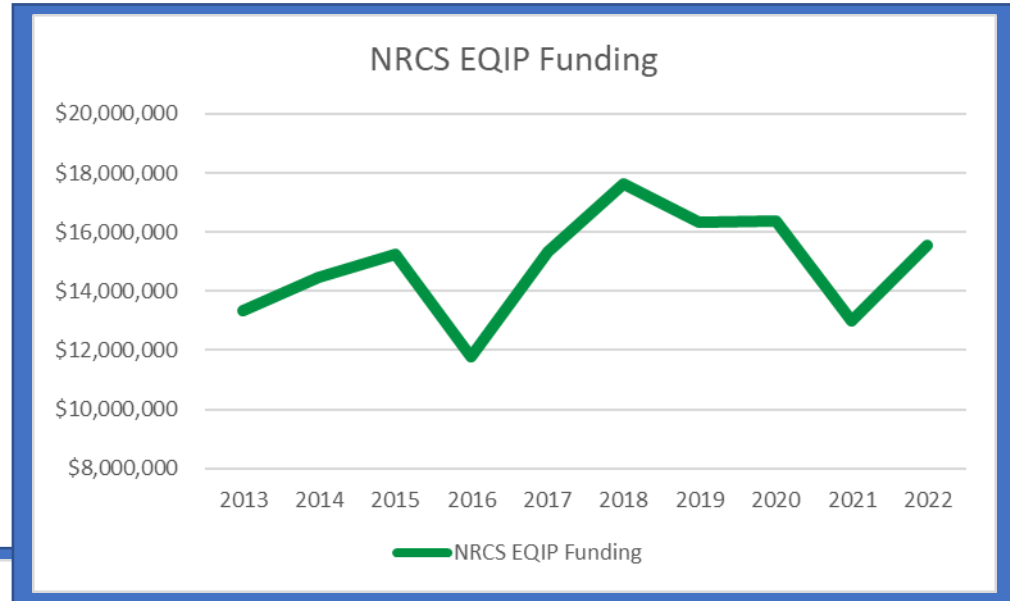
Implementation

Funding

Program Funding



FY 2022 Program Funding



	Appropriation
	\$7.0M Pres. Budget
\$12.4M	\$12.4M anticipated
\$2M	\$2M anticipated



Appropriation and Cost Share

- Reclamation receives an appropriation for full amount
- Builds
- Project sponsor repay Treasury for a portion

Appropriation and Cost Share

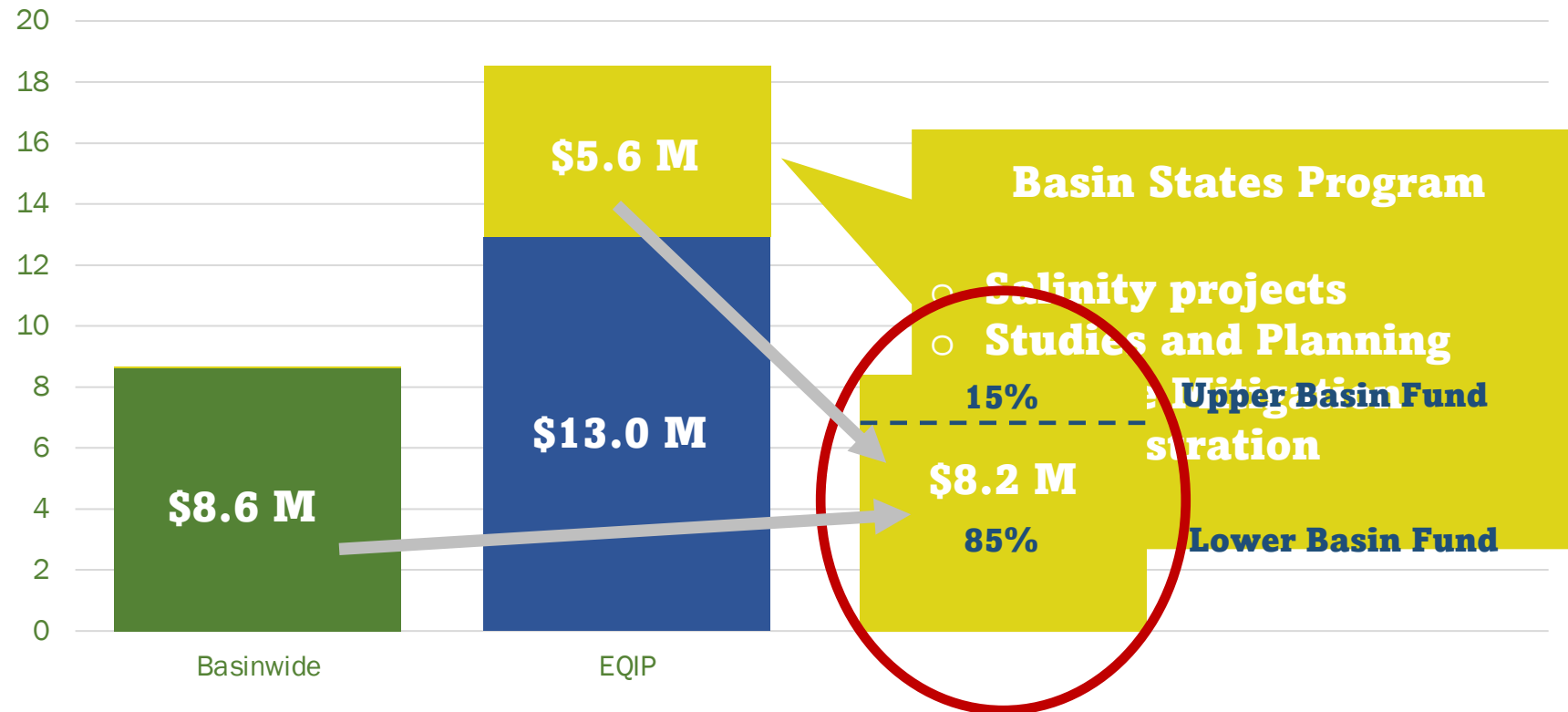
- “Most” of salt load from federal lands
- Federal Government pays 70% of total costs
- Example: \$10 M Project

1996 Appropriation ~~\$10 M~~ **\$7 M**
 ~~Repayment \$3 M~~
 Upfront Cost Share



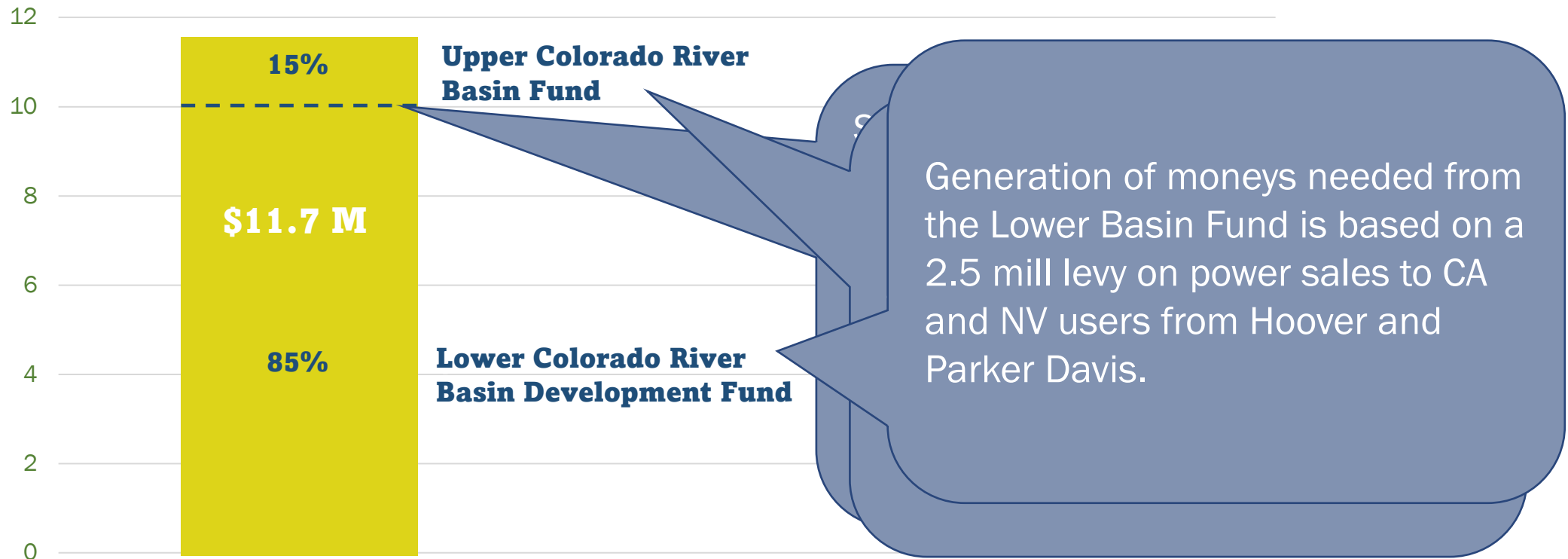
Appropriation and Cost Share

Colorado River Basin Salinity Control Funding – FY2021



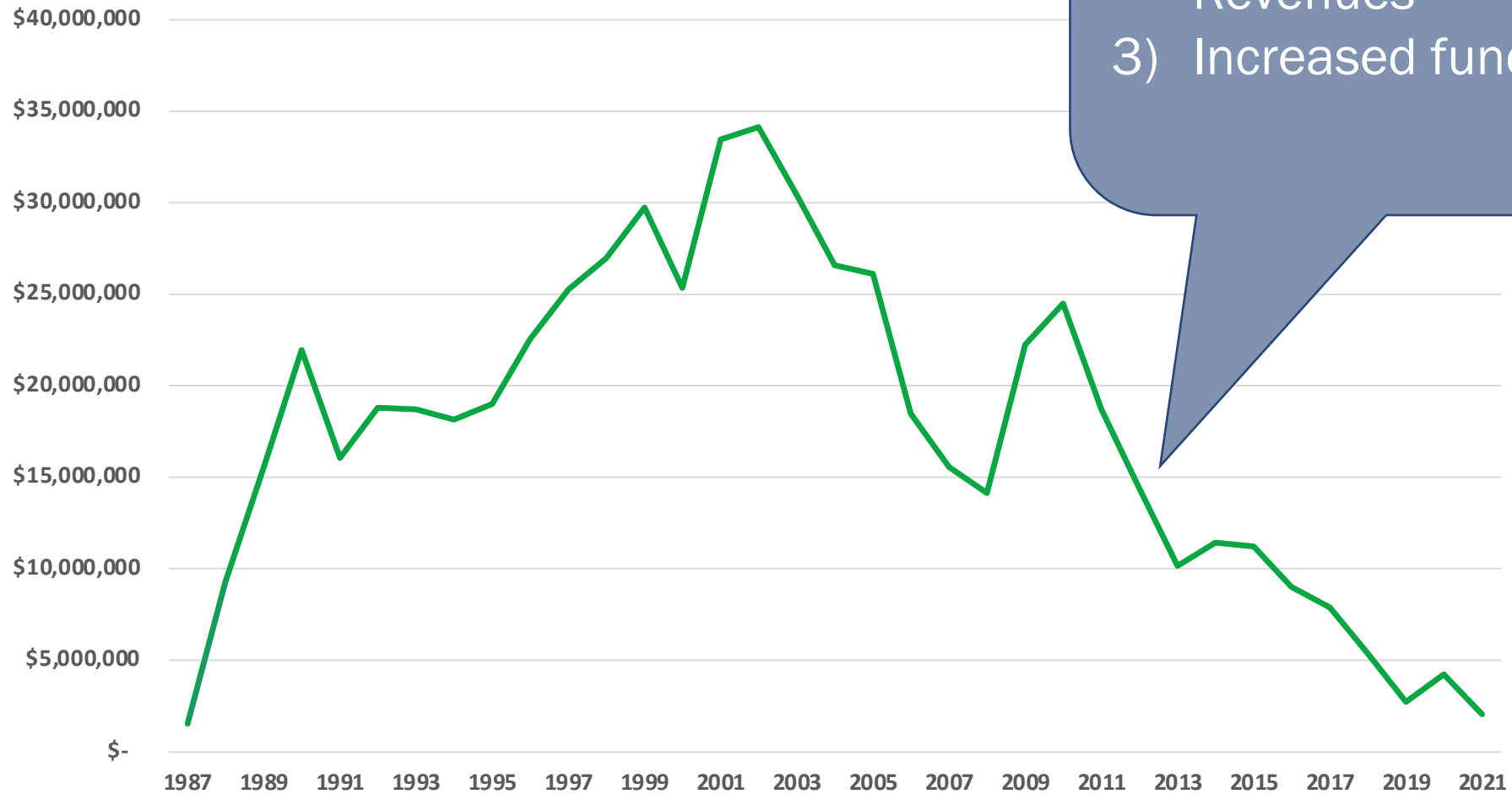
Cost Share

Colorado River Basin Salinity Control Funding



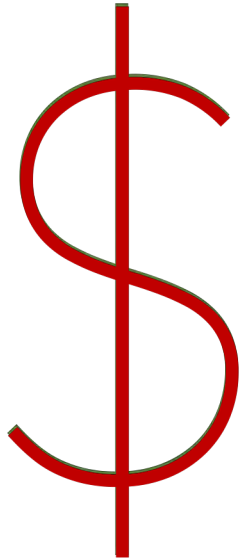
Cost Share (LCRBDF)

LCRBDF - Actual Fund Balance



- 1) Upfront cost share
- 2) Declining Power Revenues
- 3) Increased funding to EQIP

What if the cost share \$ are insufficient?



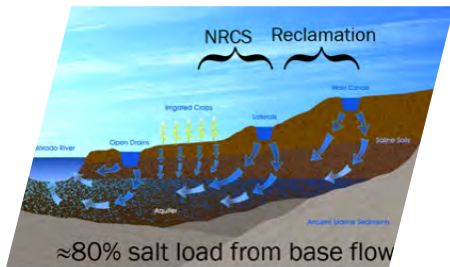
Upper Colorado River Basin Fund

- Was not contemplated (adjust rates)
- We don't know

Lower Colorado River Basin Development Fund

- Repayment: delay repayment – with interest
- Upfront: no provision – delay implementation
- Program Funding Committee

Summary



Why

- To improve water quality to water users
- To reduce damages

Need

- Because there is an infinite supply of salt
- Because salinity levels were increasing
- Because of regulatory requirements

How

- By dramatically improving irrigation efficiencies
- By reducing contact between water and saline soils

Funding

- A combination of appropriation and cost share
- Costs share from power revenues is reducing or is threatened
- Looking for creative solutions