

La cuenca transfronteriza

Río Bravo - Rio Grande:

contexto histórico, problemática y soluciones.



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Contenido



Contexto histórico:

- 1500 – 1906
- 1907 – 1944
- 1944 – 2020

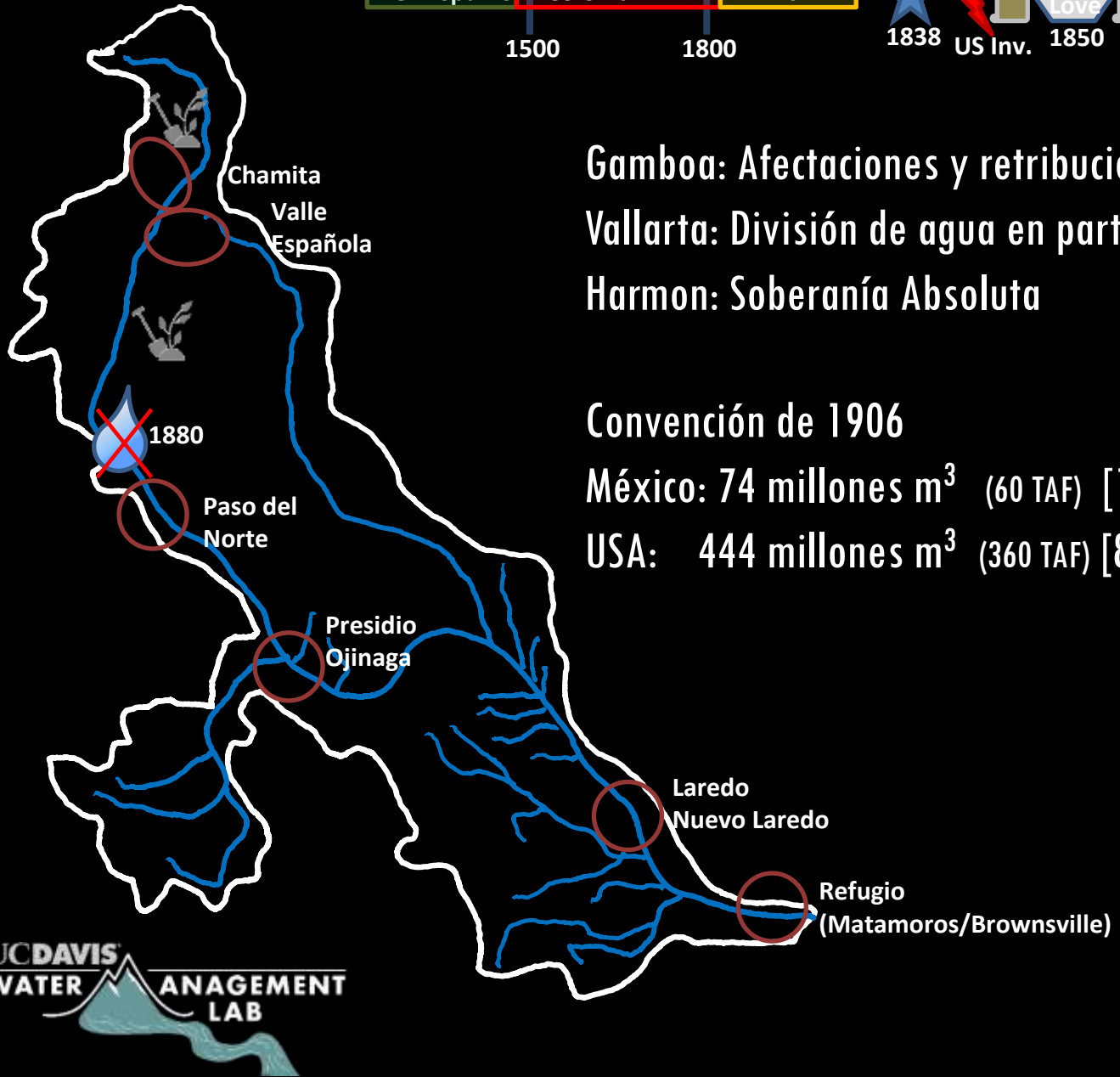
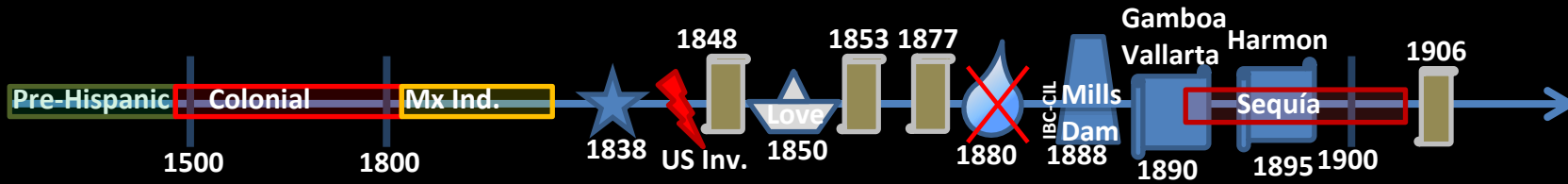
Problemáticas:

- De los últimos 40 años
- Del presente ciclo (Ciclo 35)

Soluciones

- De corto plazo
- De largo plazo

Algunas reflexiones ...



Gamboa: Afectaciones y retribuciones
 Vallarta: División de agua en partes iguales
 Harmon: Soberanía Absoluta

Convención de 1906
 México: 74 millones m³ (60 TAF) [15%]
 USA: 444 millones m³ (360 TAF) [85%]

DOCTRINA VALLARTA

"La soberanía de un estado sobre una porción de un río transfronterizo no autoriza el derecho a usar el agua del otro estado o a causar detrimento a los usos del agua ya establecidos."

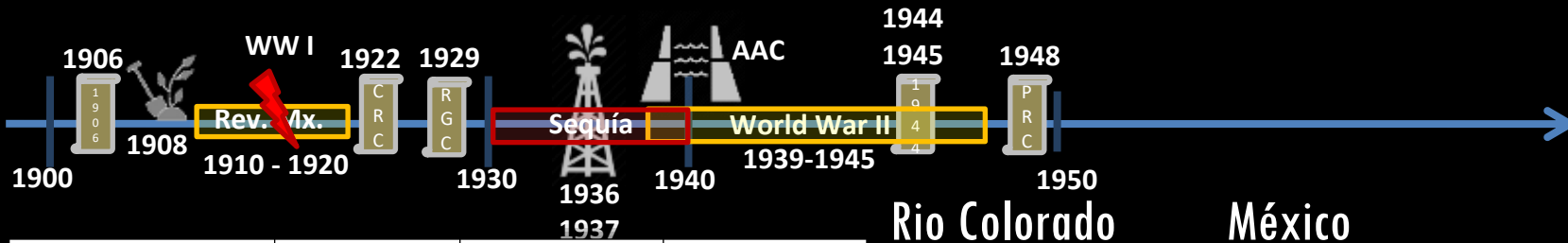
"el agua debe ser distribuida de forma equitativa y razonable entre ambas naciones"

DOCTRINA HARMON

"El principio fundamental basado en la ley internacional es la soberanía absoluta de cada nación por encima de cualquier otra nación dentro de su propio territorio."

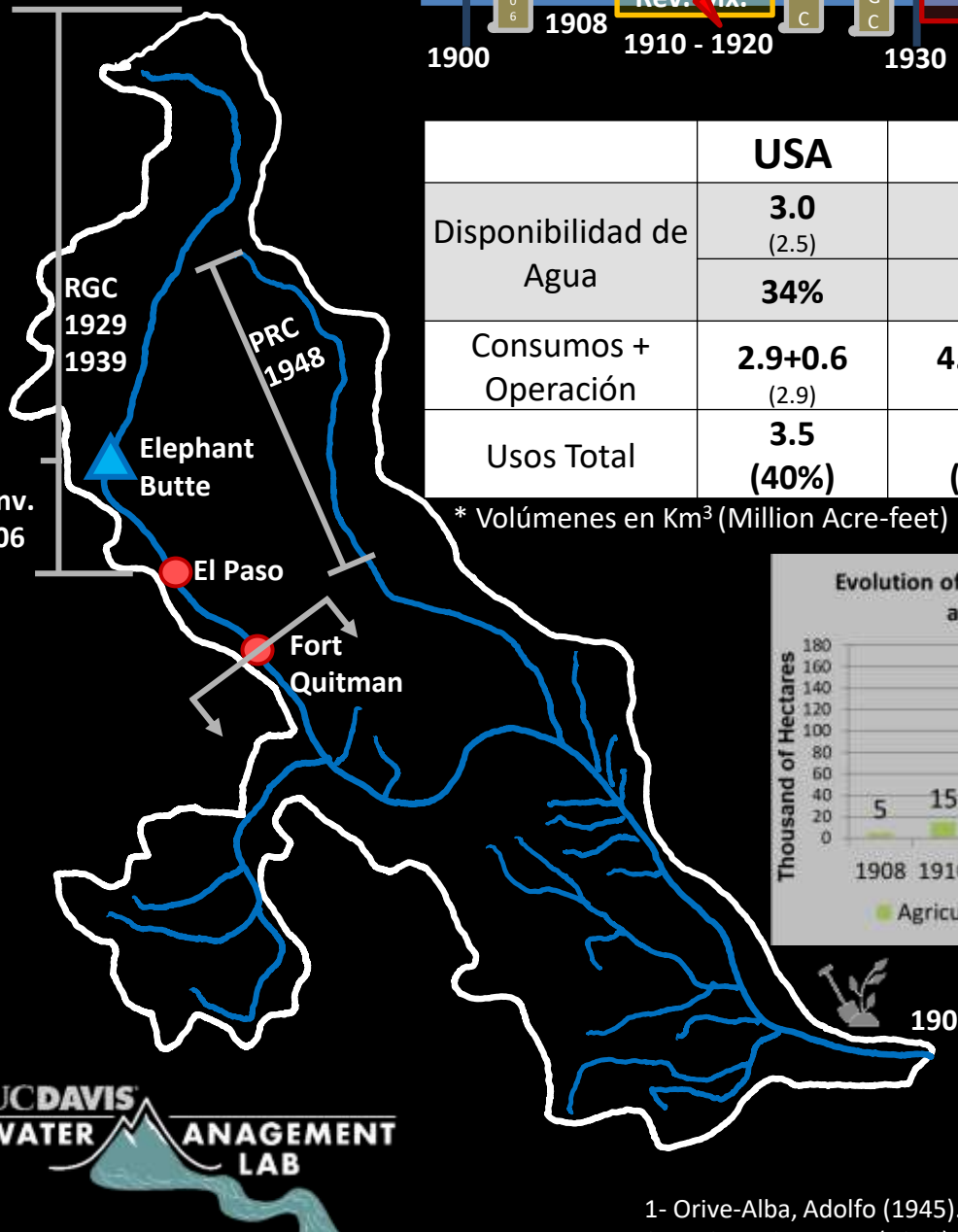
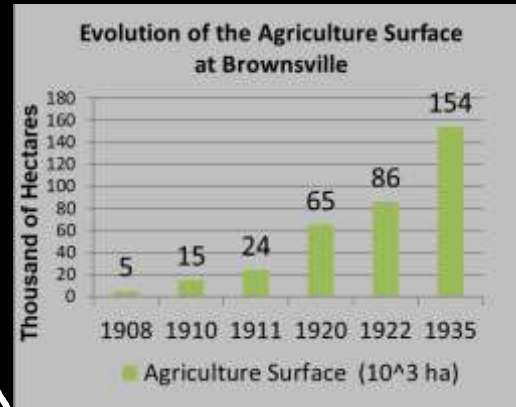
"Mexico no tiene el derecho de impedir el desarrollo de EEUU y negar a nuestros habitantes el uso y provisión que la naturaleza ha provisto dentro de nuestro territorio."

Figure provided by: Todd L. Blaylock
 Data provided through cooperative research by: Todd Blaylock and Jack Schreck, Center for Colorado River Studies, Utah State University
 Blaylock, T.L. and Schreck, J.C. 2016. Estimating the natural flow regime of rivers with largestanding development: the numbers counts of the Rio Grande Water Resources Research (2016-2017) and
 Serravallo, S., J. Pablo Cruz Parilla, and Yareli Gonzalez Escobar, Water Management Lab, University of California Davis
 Gonzalez Escobar, Y.A. 2017. Determining the natural flow of the midboundary Rio Grande for brown trout. Master's Thesis. Instituto Politécnico Nacional. University of California, Davis, CA.
 All values are in million cubic meters
 Small tributaries and inflows are not illustrated but are included in totals
 *Provisional Volume - Based on best available estimate

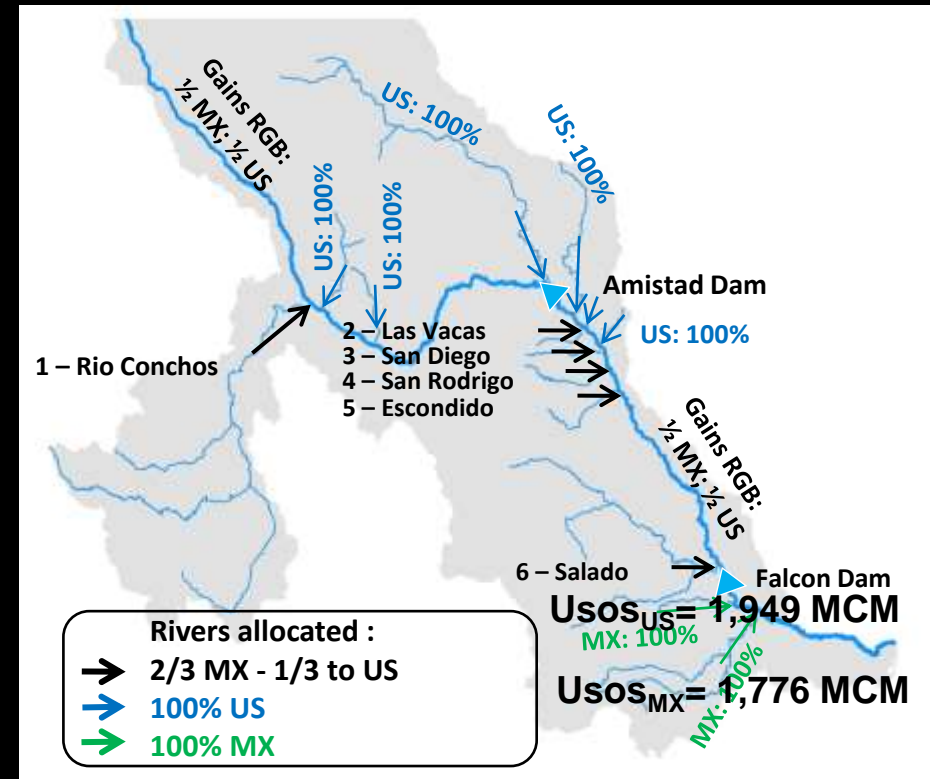


	USA	MX	Total
Disponibilidad de Agua	3.0 (2.5)	5.8 (4.7)	8.8 (7.2)
	34%	66%	100%
Consumos + Operación	2.9+0.6 (2.9)	4.7+0.6 (4.3)	7.6+1.2 (7.2)
Usos Total	3.5 (40%)	5.3 (60%)	8.8 (100%)

* Volúmenes en Km³ (Million Acre-feet)



Rio Colorado México
Rio Bravo/Grande EEUU
EEUU México

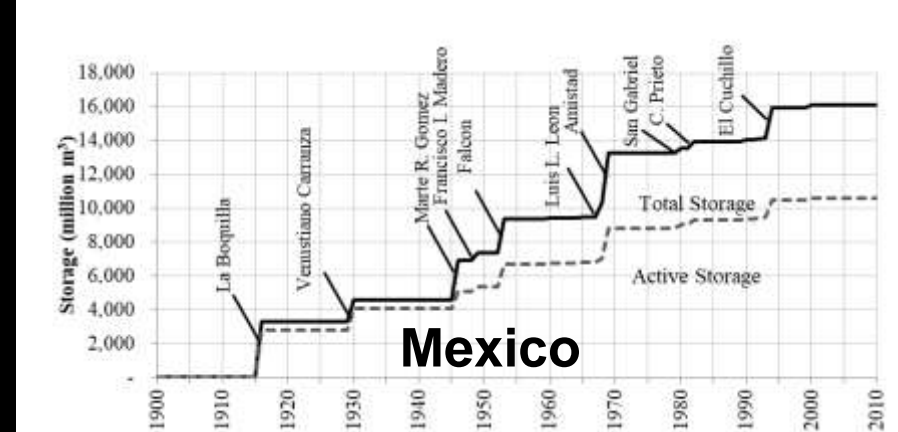
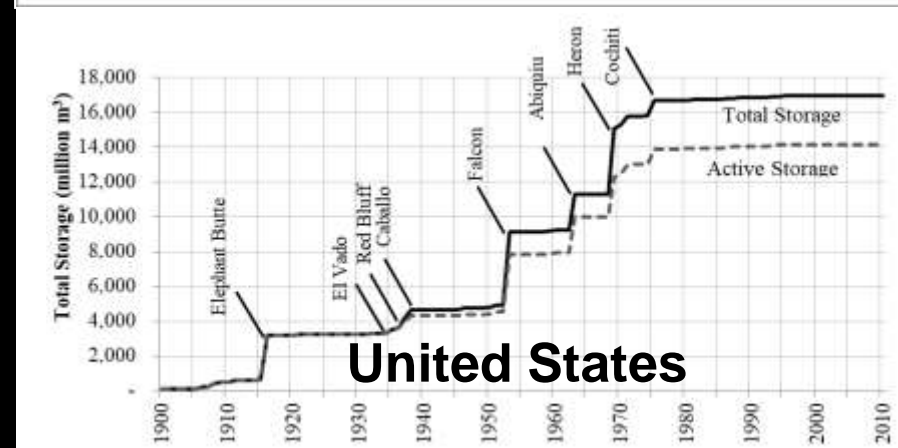
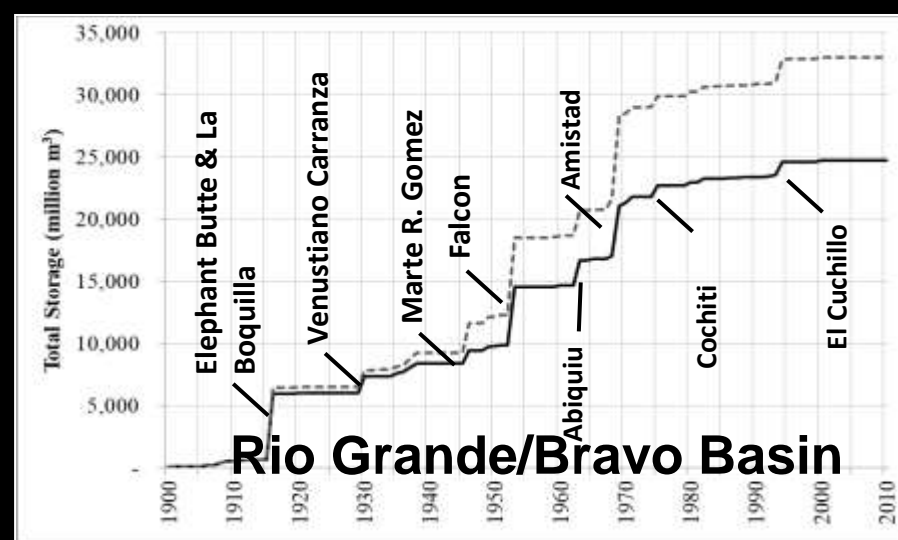
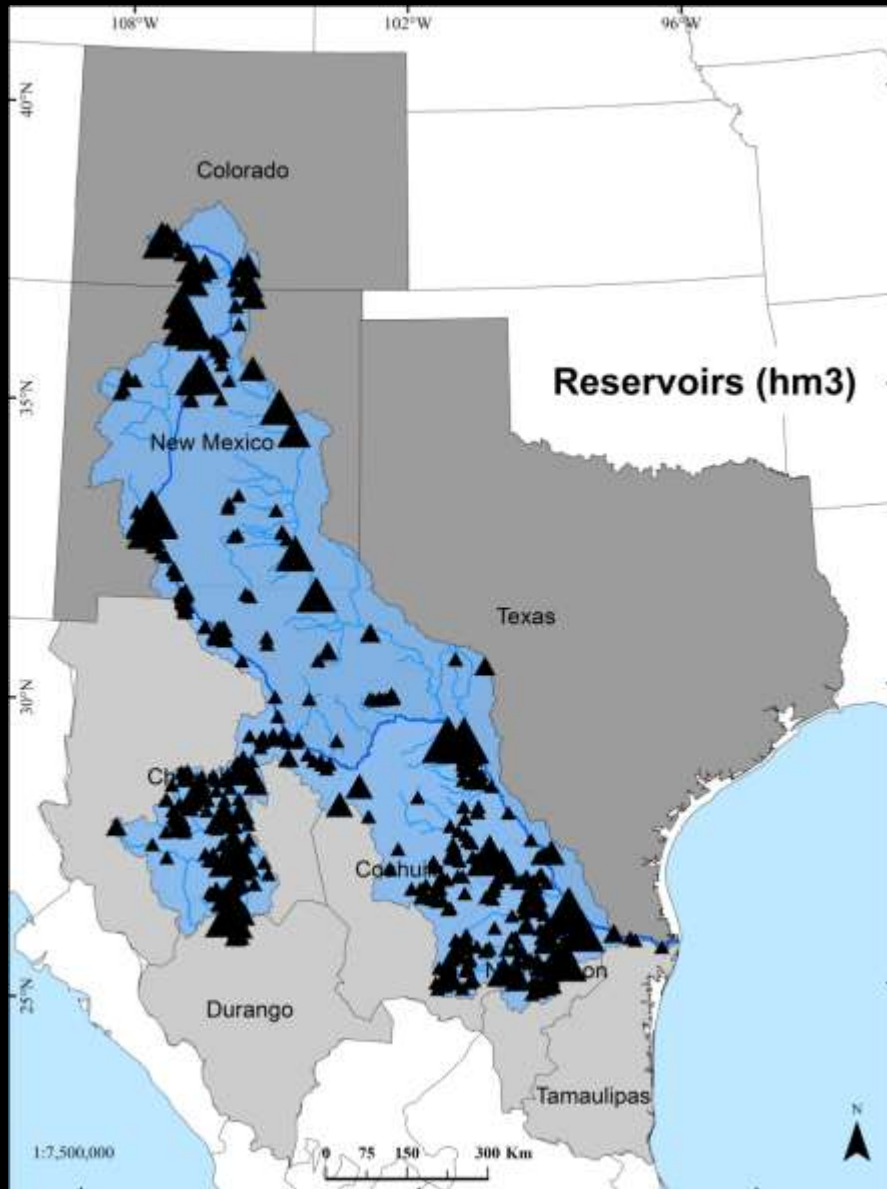


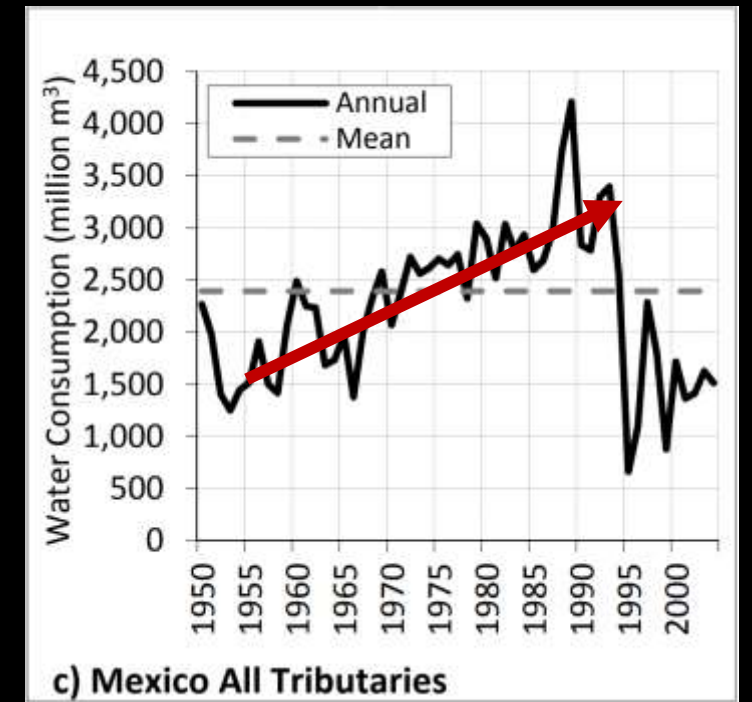
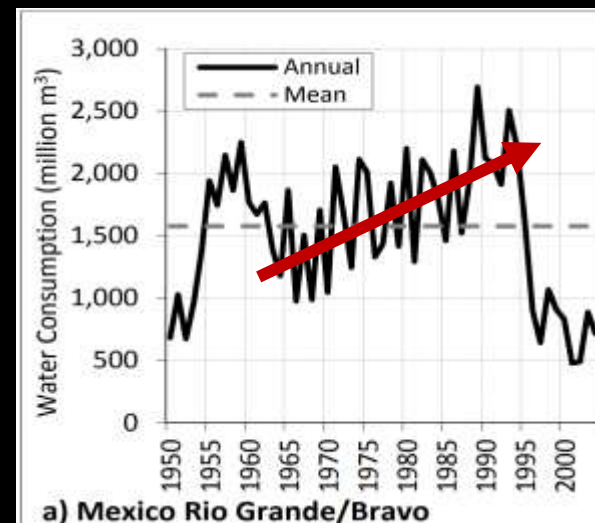
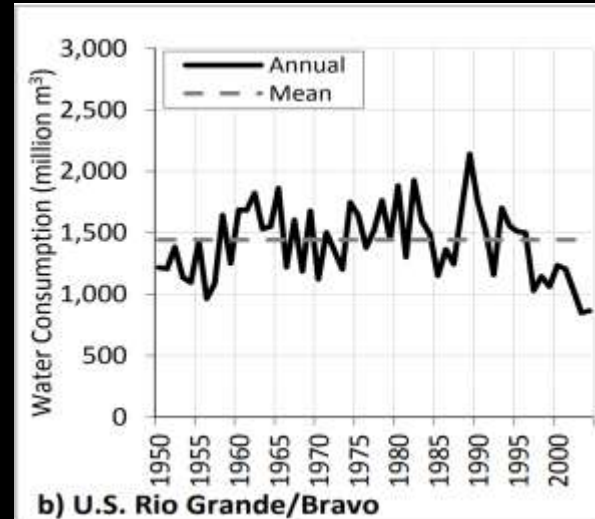
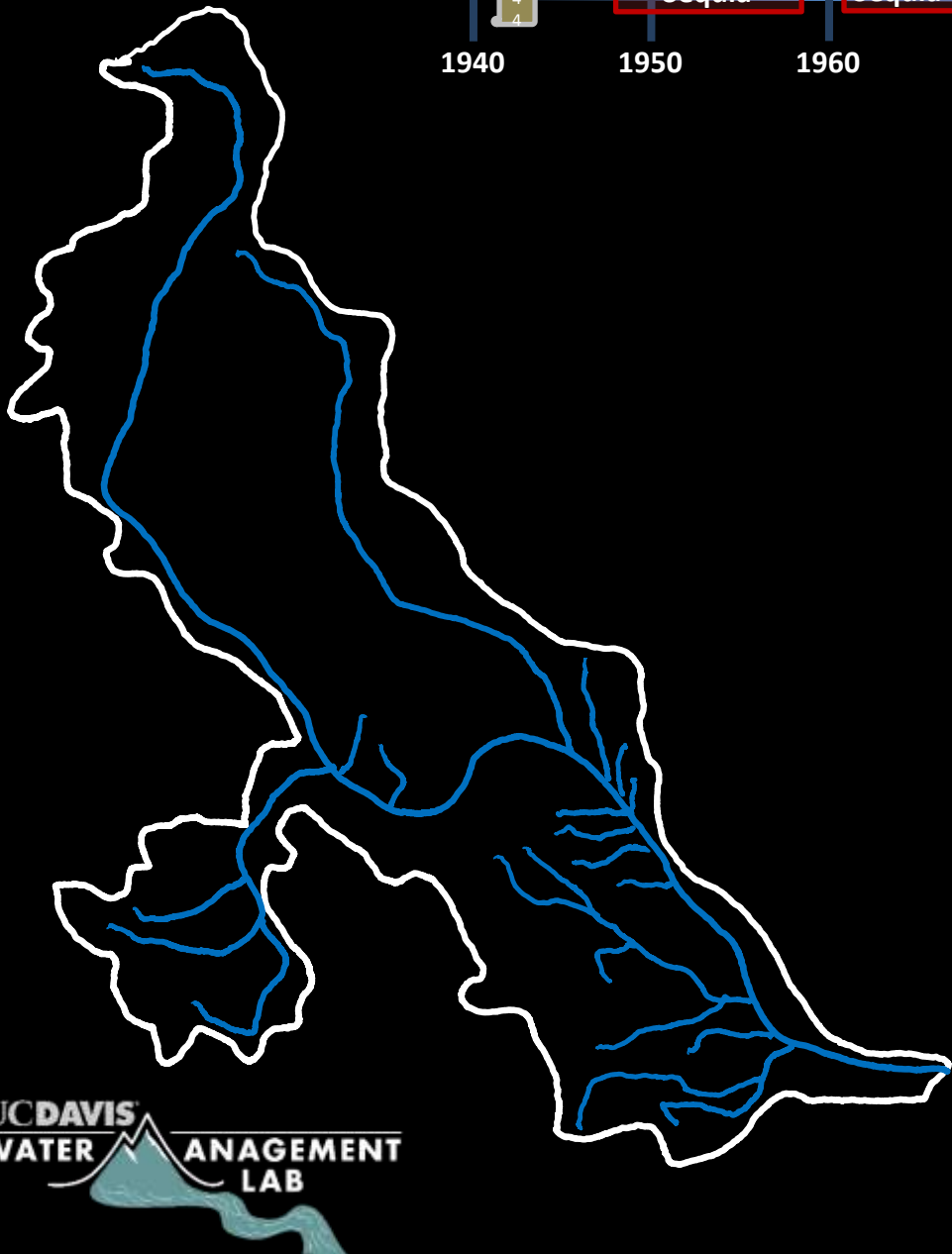
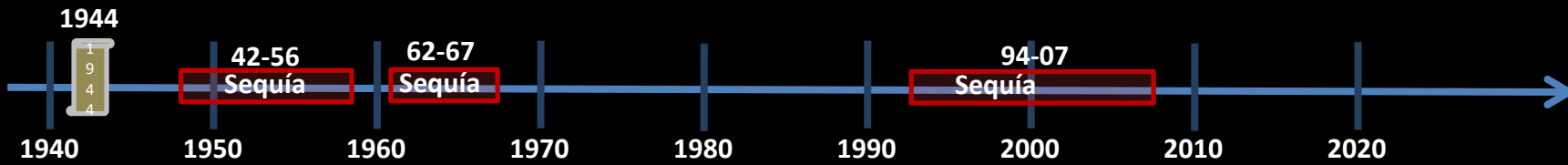
Rivers allocated :
 → 2/3 MX - 1/3 to US
 → 100% US
 → 100% MX

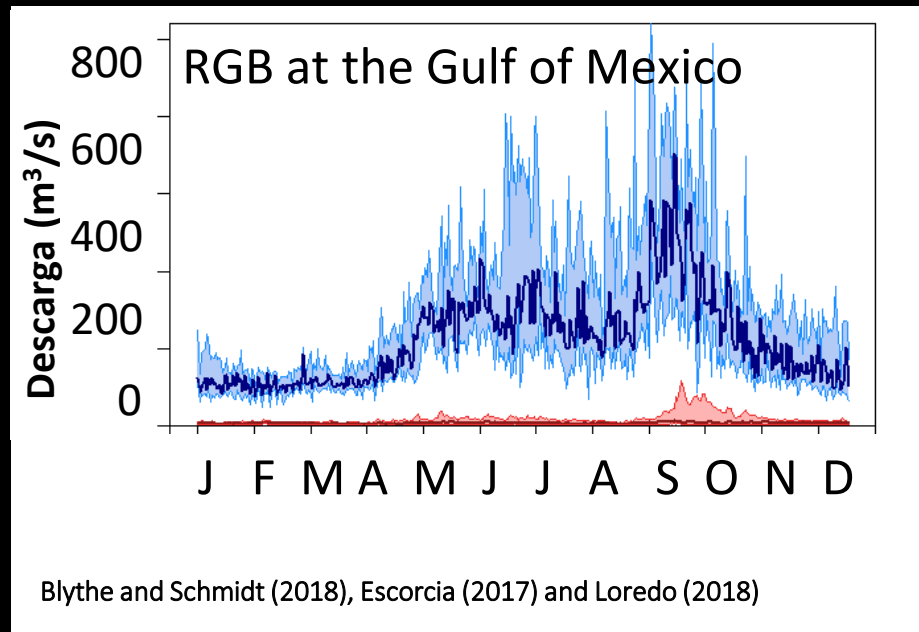
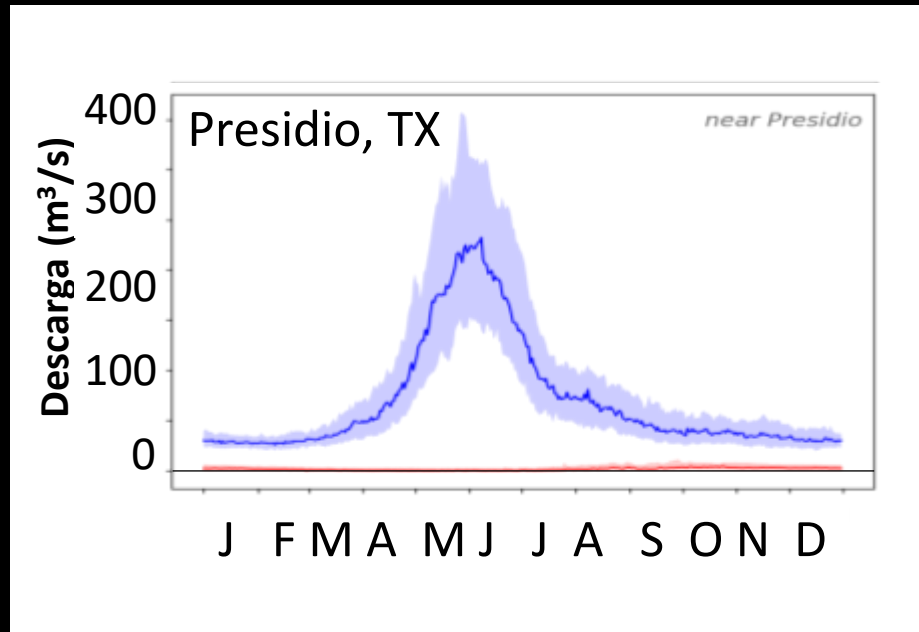
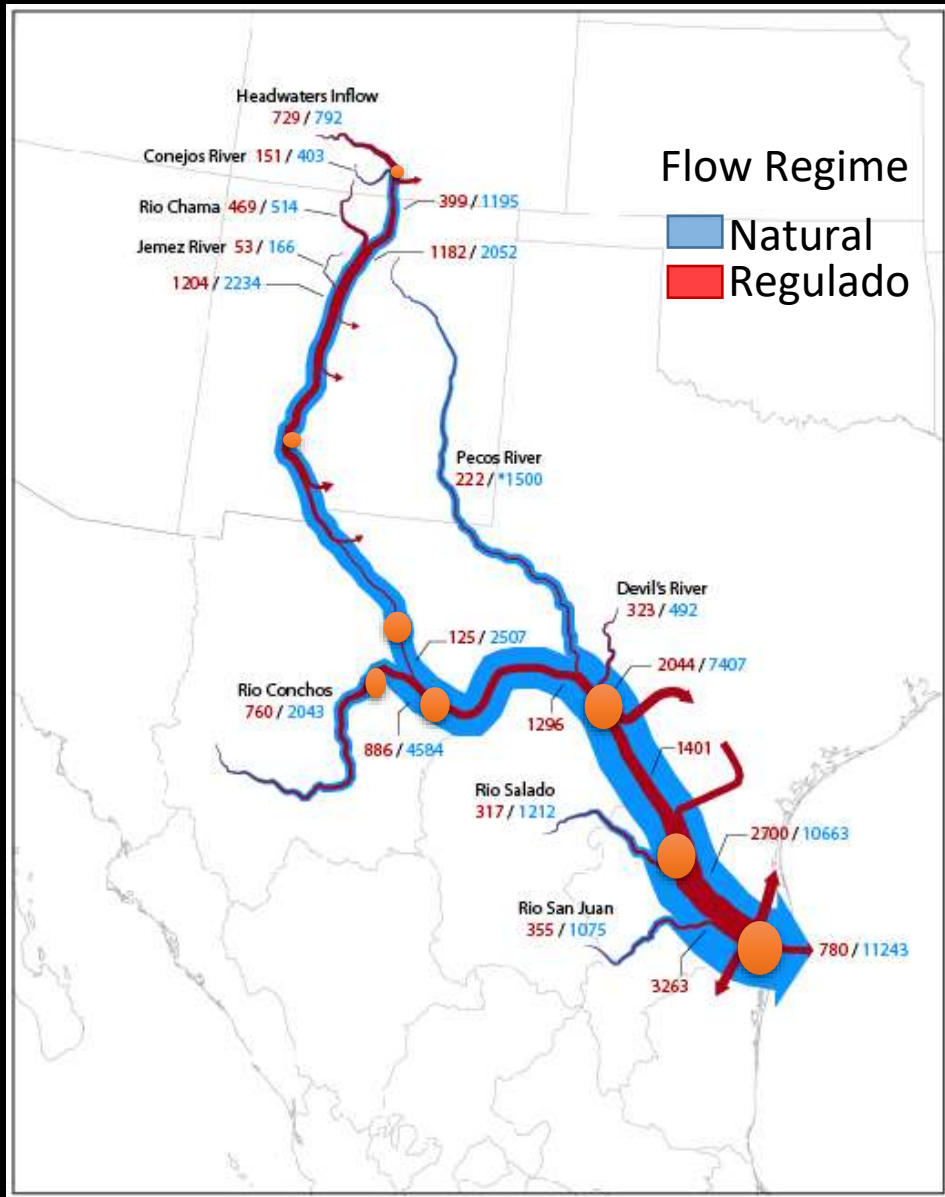
Usos_{US} = 1,949 MCM
 Usos_{MX} = 1,776 MCM

Upper basin (CO,WY,UT)	9.25	(7.5)	(45.5%)
Lower basin (CA,NV,AZ,NM)	9.25	(7.5)	(45.5%)
Mexico (valle de Mexicali)	1.85	(1.5)	(9.0%)
Total	20.35	(16.5)	(100%)

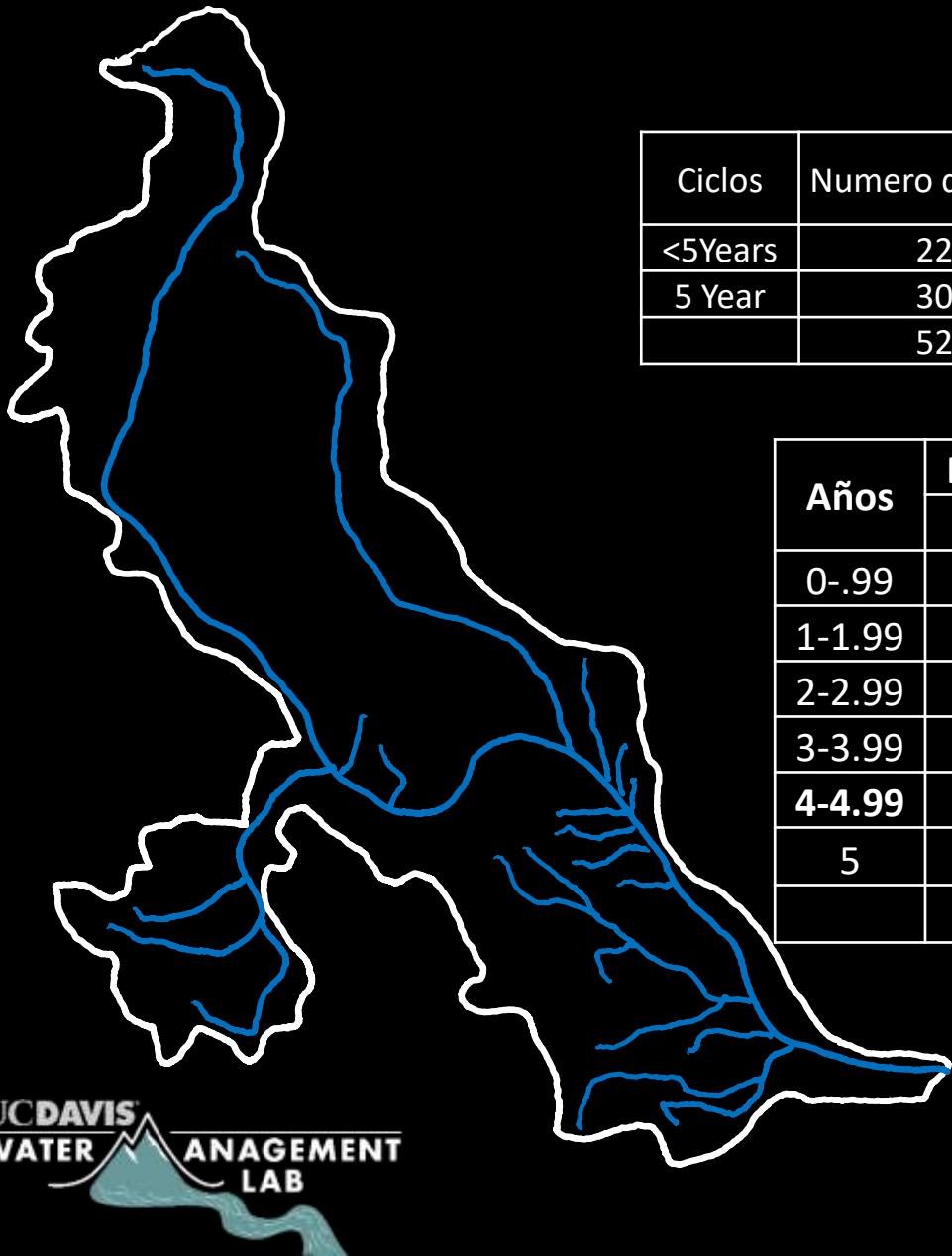
1- Orive-Alba, Adolfo (1945). "Informe técnico sobre el tratado internacional de aguas presentado ante el H. Senado mexicano" Comisión Nacional de Irrigación.
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Blythe and Schmidt (2018), Escorcía (2017) and Loredó (2018)



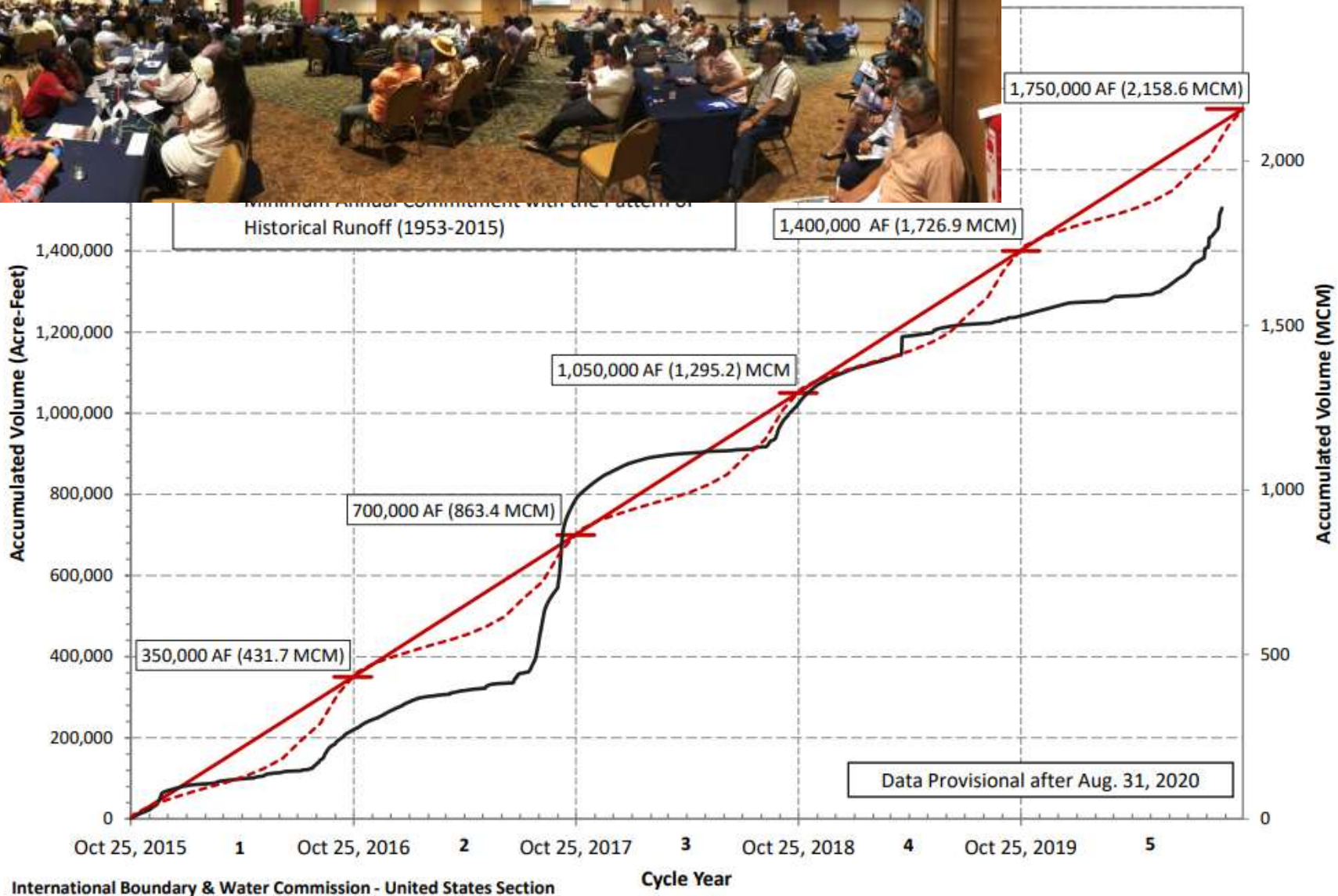
Ciclos	Numero de años	Frecuencia
		Relativa
<5Years	22	0.42
5 Year	30	0.58
	52	1

Años	Duracion	Frecuencia
	(Años)	Relativa
0-.99	4.1	0.08
1-1.99	8.8	0.17
2-2.99	2.1	0.04
3-3.99	7.0	0.13
4-4.99	0.0	0.00
5	30.0	0.58
	52.0	1.00

Cycle	Date		Duration (years)	Volume (MCM)		
	Beginning	Ending		Obligated	Delivered	Difference
1	1-Oct-1953	30-Sep-1958	5	2159	1571	-588
2	1-Oct-1958	30-Sep-1963	5	2159	2835	676
3	1-Oct-1963	30-Sep-1968	5	2159	2198	39
4	1-Oct-1968	21-Aug-1972	3.9	1680	2752	1073
5	22-Aug-1972	15-Feb-1973	0.5	209	274	65
6	16-Feb-1973	16-Oct-1974	1.7	718	1016	297
7	17-Oct-1974	8-Dec-1976	2.1	926	1913	987
8	9-Dec-1976	6-Nov-1978	1.9	824	1391	566
9	7-Nov-1978	16-Nov-1978	0.0	11	47	35
10	17-Nov-1978	7-Sep-1979	0.8	348	685	336
11	8-Sep-1979	11-Jun-1981	1.8	759	1043	285
12	12-Jun-1981	3-Sep-1981	0.2	98	210	111
13	4-Sep-1981	11-Oct-1981	0.1	44	185	140
14	12-Oct-1981	26-Oct-1981	0.0	17	54	36
15	27-Oct-1981	1-Jun-1982	0.6	257	275	17
16	2-Jun-1982	1-Jun-1987	5.0	2159	1879	-280
17	2-Jun-1987	23-Jun-1987	0.1	25	93	67
18	24-Jun-1987	2-Aug-1987	0.1	46	128	81
19	3-Aug-1987	31-Aug-1987	0.1	33	74	40
20	1-Sep-1987	29-Sep-1988	1.1	466	734	268
21	30-Sep-1988	2-Nov-1991	3.1	1334	2446	1111
22	3-Nov-1991	17-Dec-1991	0.1	52	33	-20
23	18-Dec-1991	23-Jul-1992	0.6	258	618	360
24	24-Jul-1992	26-Sep-1992	0.2	76	124	47
25	27-Sep-1992	26-Sep-1997	5.0	2159	896	-1263
26	27-Sep-1997	30-Sep-2002	5.0	2159	1783	-376
27	1-Oct-2002	30-Sep-2007	5.0	2159	3798	1639
28	1-Oct-2007	8-Oct-2008	1.0	441	973	532
29	9-Oct-2008	28-Feb-2009	0.4	169	475	306
30	1-Mar-2009	12-Jul-2010	1.4	590	1245	655
31	13-Jul-2010	19-Aug-10	0.1	45	722	677
32	20-Aug-10	3-Sep-2010	0.0	18	126	108
33	4-Sep-10	24-Oct-2010	0.1	60	366	306
34	25-Oct-2010	24-Oct-2015	5.0	2159	1,843	-315.9
35	25-Oct-2015	24-Sep-2020	5.0	2159	1,494	???



ican Tributaries

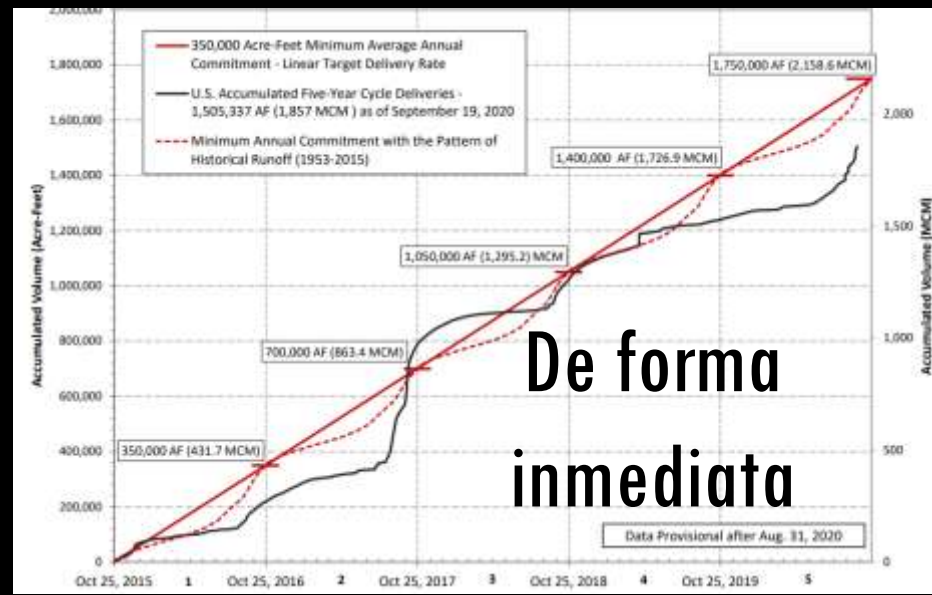




Soluciones

Poco probable que no haya adeudo
 Cumplir lo mas pronto posible
 Mostrar liderazgo
 Mover agua de presas
 Aplicar la ley

Aprobar el reglamento
 Agricultura Sustentable
 Apoyo a CILA y CCRB
 Despolitización



A corto plazo



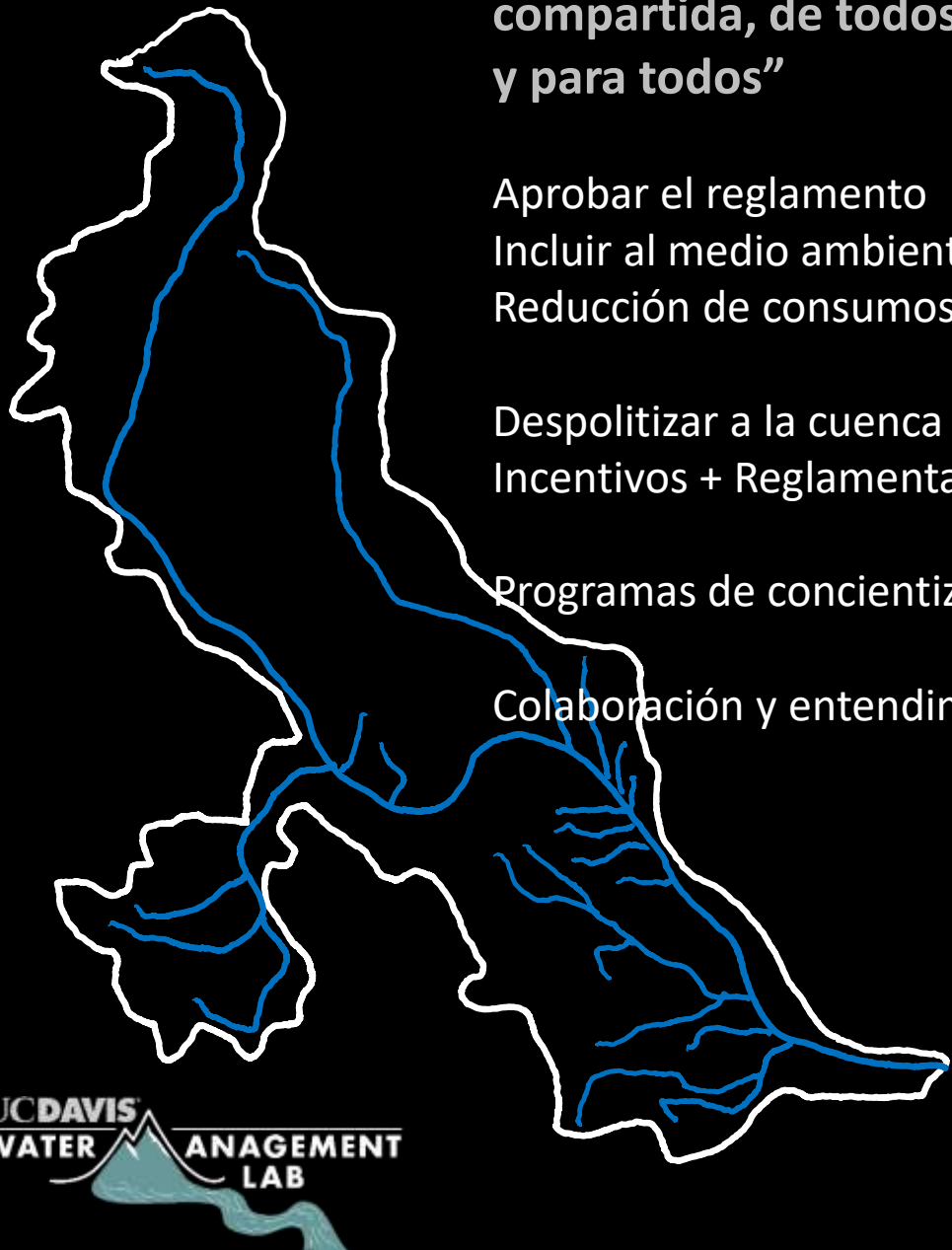
Visión de cuenca compartida:
"Cuenca semiárida,
compartida, de todos
y para todos"

Aprobar el reglamento
Incluir al medio ambiente
Reducción de consumos

Despolitizar a la cuenca
Incentivos + Reglamentación

Programas de concientización

Colaboración y entendimiento





Algunas reflexiones

Se siguen utilizando argumentos obsoletos y refutados
La estrategia de Juan Escutia no funciona

Es muy fácil descalificar, agricultores, empresarios, al gobierno, este es un problema complejo

Las verdades a medias no le sirven a nadie

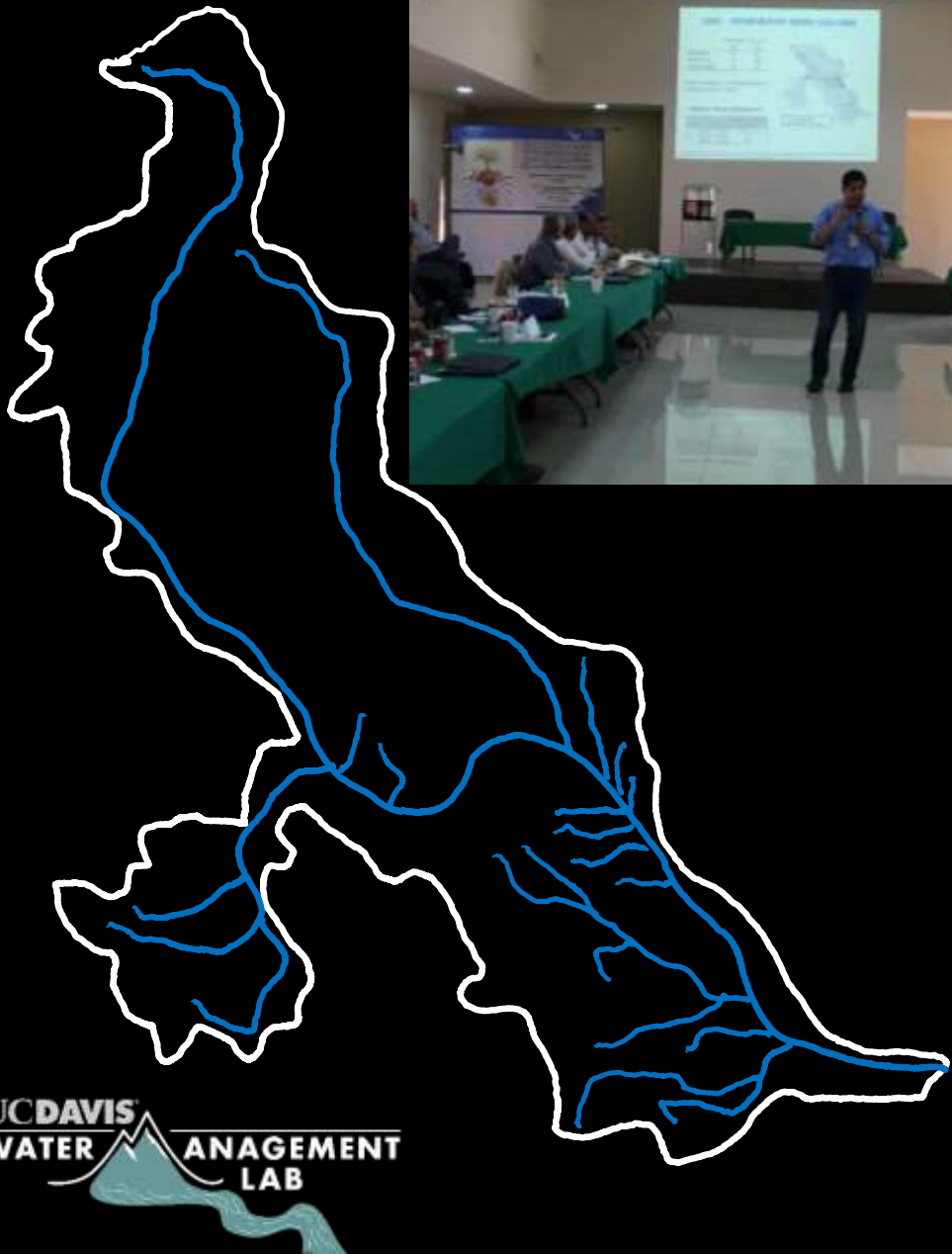
Guerra de los medios y las noticias a la carta

Es bueno revisar al pasado, pero es tiempo ver al futuro

Apoyar a las instituciones que han dado buenos resultados:

- Consejo de Cuenca del Rio Bravo
- Reforzar a la CILA

Aceptar que todos somos parte del problema, y por lo mismo todos somos parte de la solución



Gracias - Thank you

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Laura Garza



Pablo Ortiz



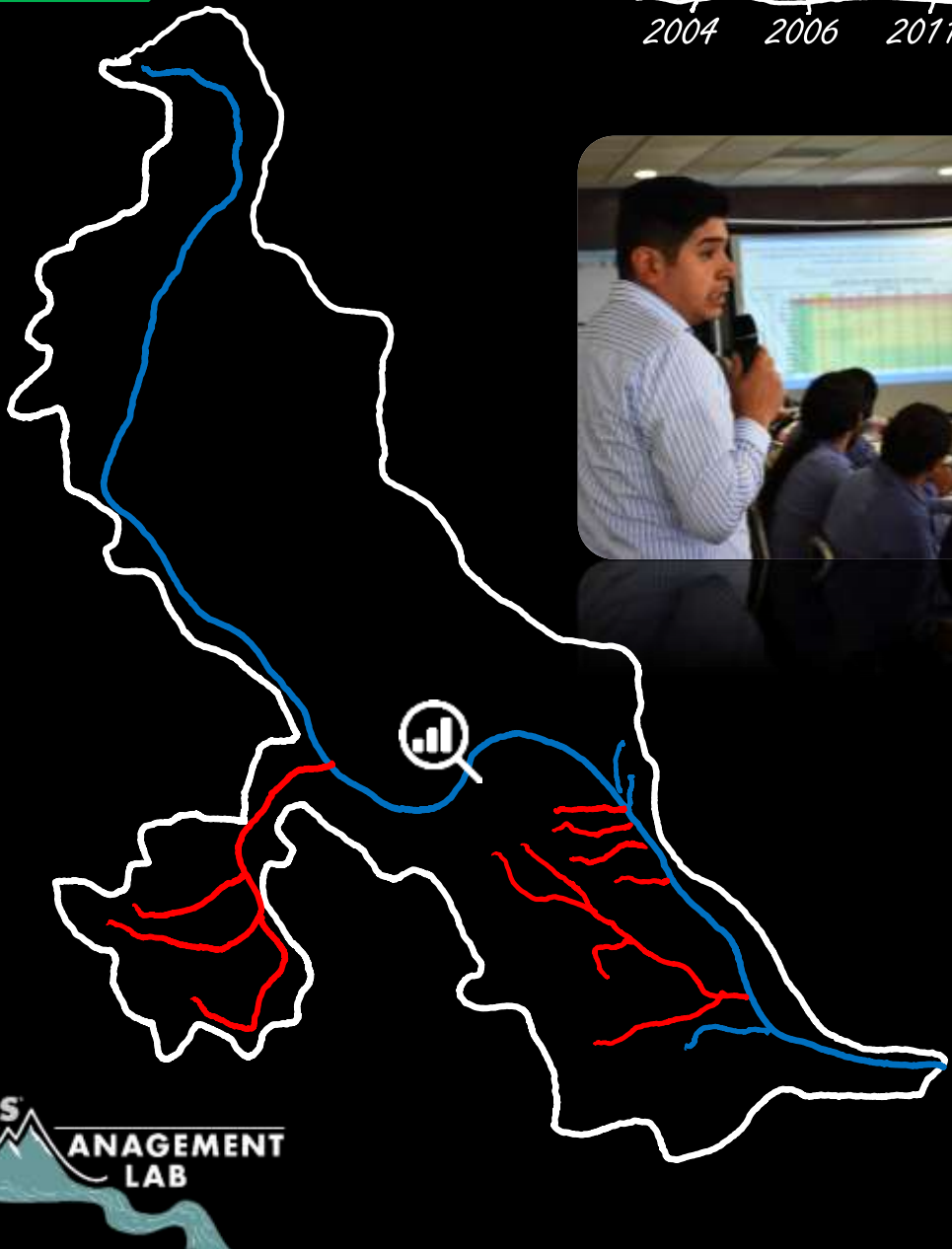
Grace Gómez



Ramón Saiz

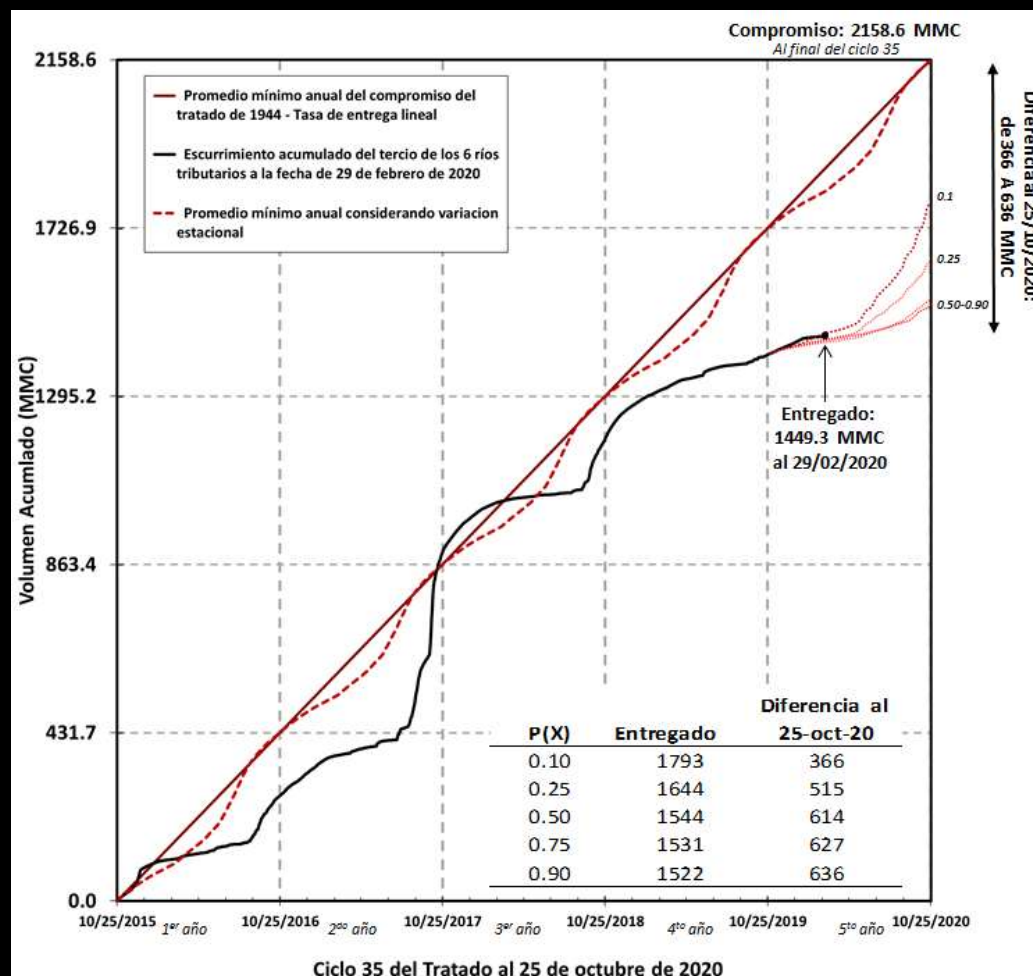


2004 2006 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

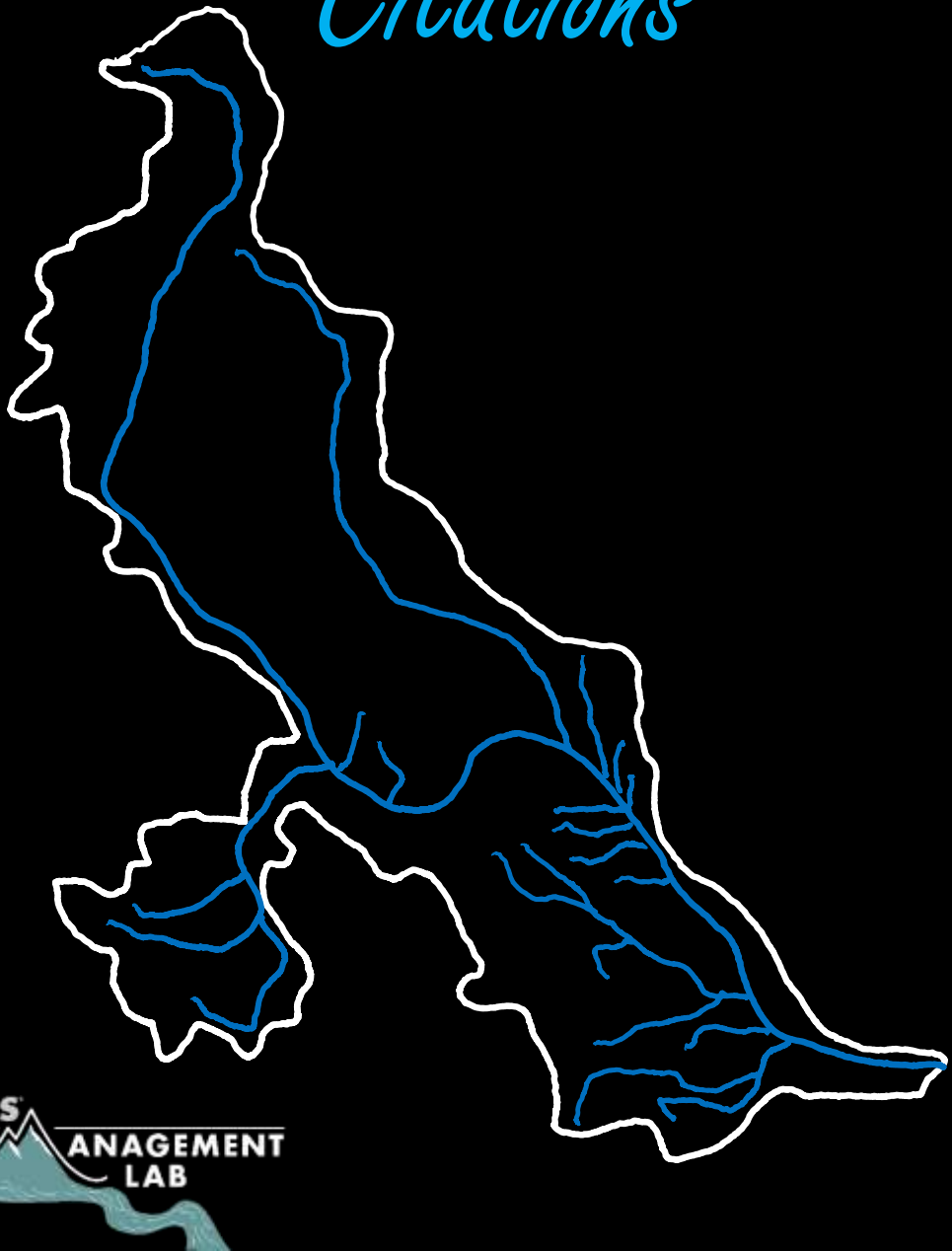


Risk analysis of treaty compliance

Water deliveries projections for the Treaty of 1944

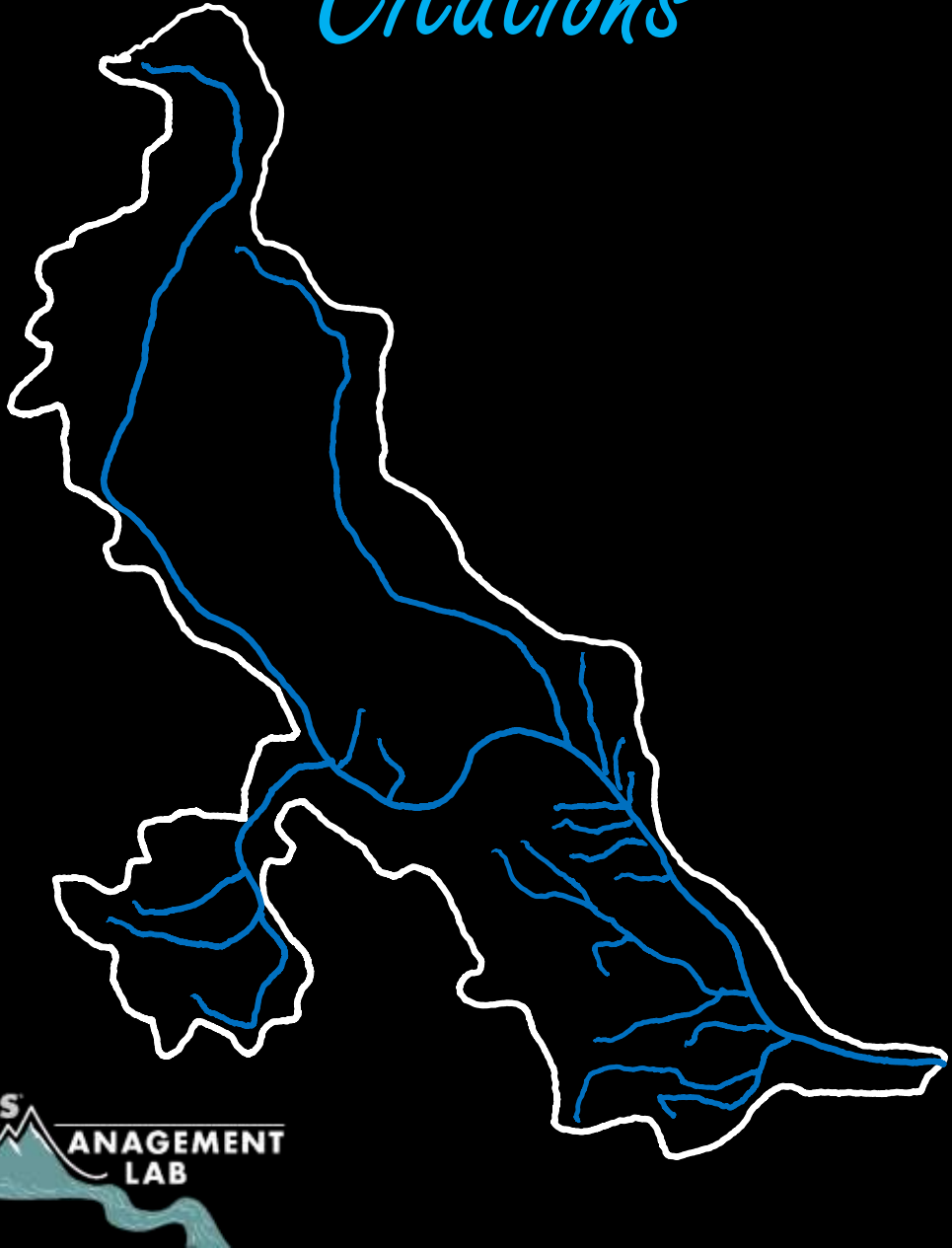


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Muchas gracias



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