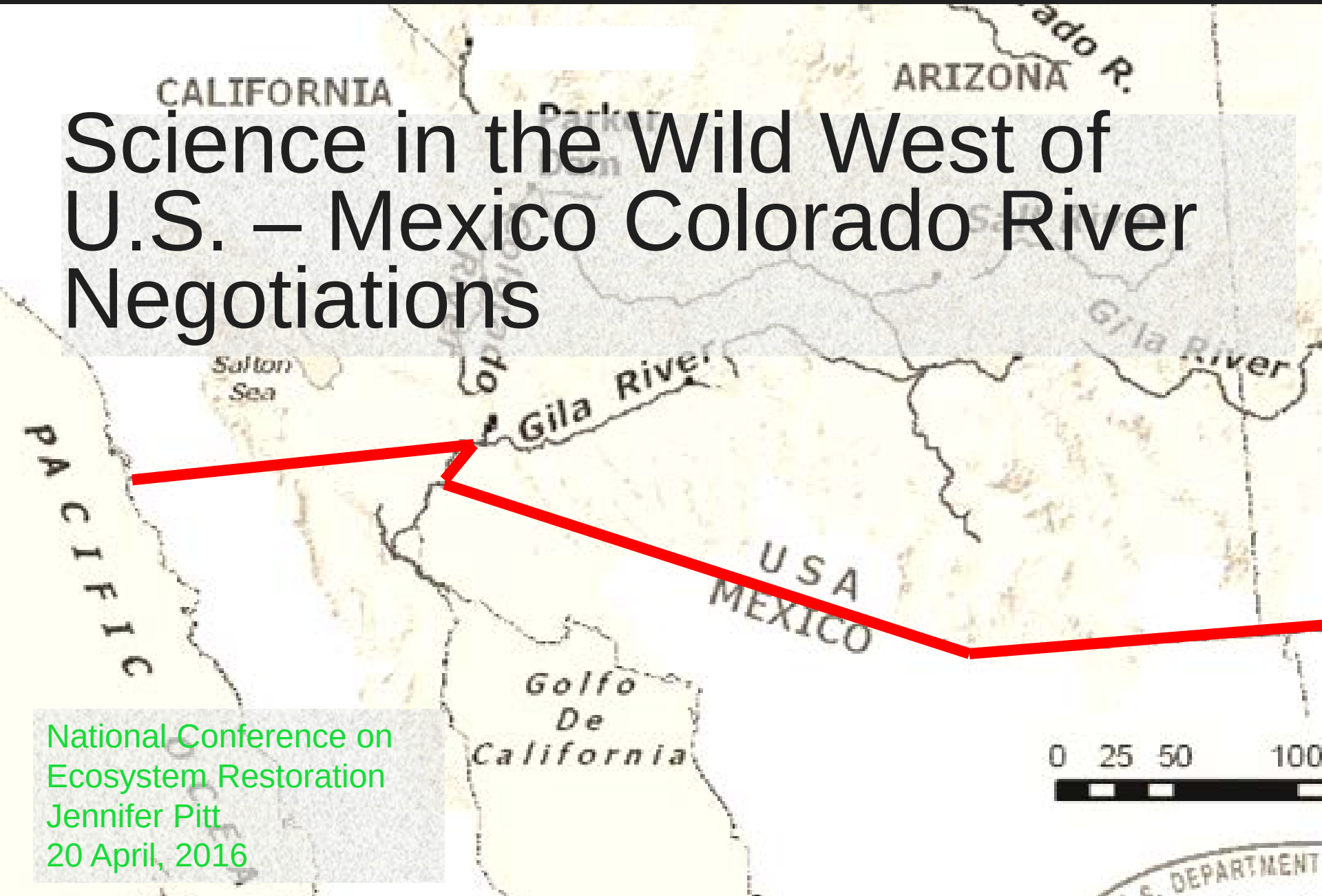
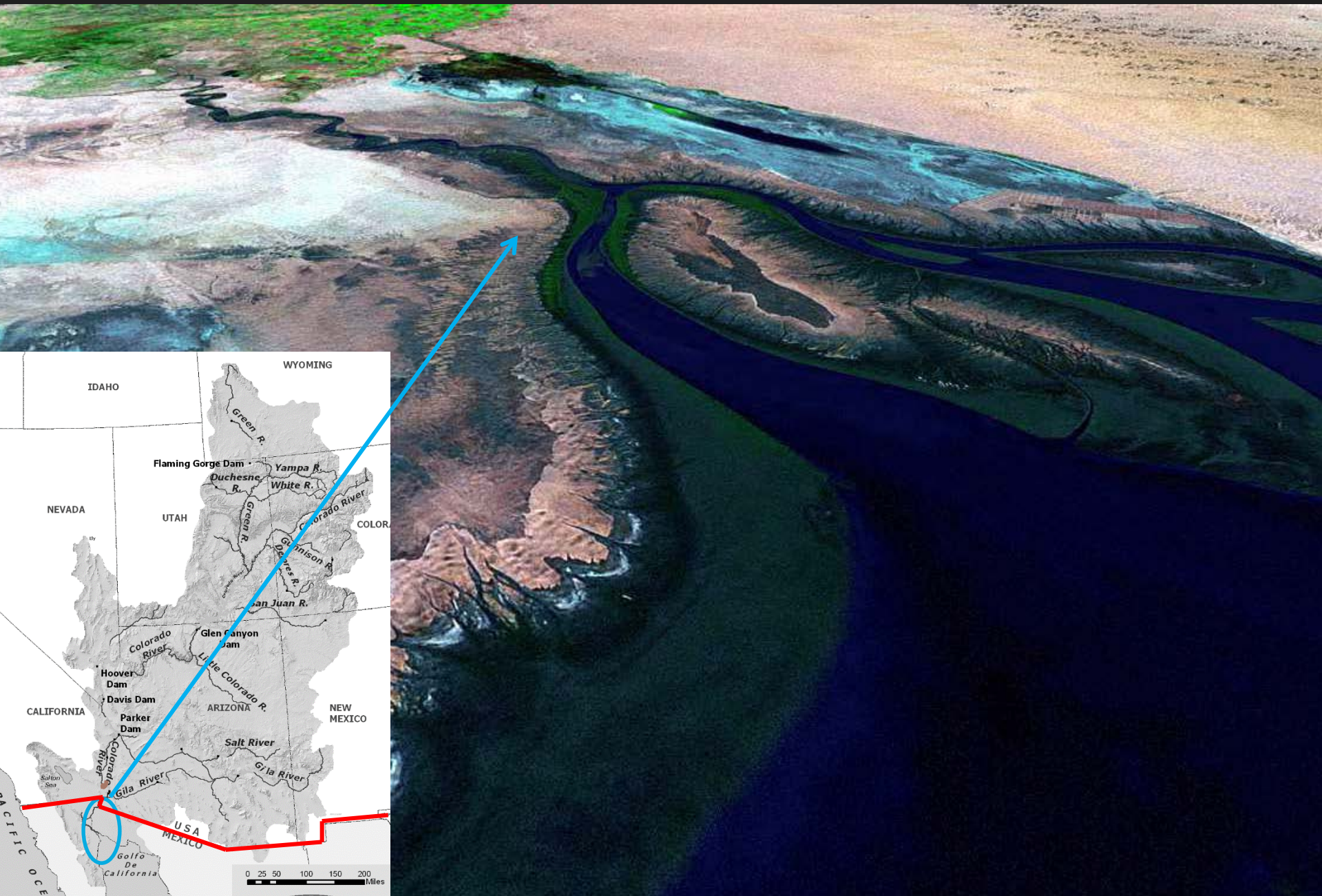
Science in the Wild West of U.S. – Mexico Colorado River Negotiations



National Conference on Ecosystem Restoration
Jennifer Pitt
20 April, 2016

Audubon


WYOMING
IDAHO
Green R.
Flaming Gorge Dam
Yampa R.
Duchesne R.
White R.
NEVADA
UTAH
Green R.
Colorado River
COLORA
Gunnison R.
Dolores R.
San Juan R.
Colorado River
Glen Canyon Dam
Little Colorado R.
Hoover Dam
Davis Dam
CALIFORNIA
ARIZONA
NEW MEXICO
Parker Dam
Salt River
Colorado River
Gila River
Gila River
Salton Sea
USA
MEXICO
Golfo De California
0 25 50 100 150 200
Miles

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2012 US-Mexico Colorado River Agreement: Minute 319

2013-2017

Mexico voluntarily adopts reduced delivery when reservoir storage is low

New flexibility for Mexico to store water in US reservoirs

Binational joint investments in water conservation

US and MX commitments to deliver water to the Colorado River Delta, matched by private trust

US commitments to provide funding for habitat restoration

Commitment to renegotiate longer-term agreement

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Did Science Inform Minute 319?

CON

- US water users and states unable to recognize environmental standards or goals outside of the US (= outside of ESA)
- Environmental flows were Mexico's "ask" negotiated in context of shortage commitment, water transfers, other management reforms
- Existing data sparse
- Environmental flows less than ½ volume hypothesized in literature

PRO

- Enough to water to send a signal
- Binational commitment to monitoring

Ej. Luis Encinas Johnson

THE UNIVERSITY OF ARIZONA

Reed Phillips Consulting

POR LA REALIZACION PLENA DEL HOMBRE

U.S. DEPARTMENT OF THE INTERIOR
MARCH 3, 1849

RAISE THE RIVER
RECONNECT THE COLORADO

SONORAN INSTITUTE

NATIONAL GEOGRAPHIC

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

Reserva de la Biosfera
ALTO GOLFO DE CALIFORNIA
Y DELTA DEL RÍO COLORADO

The Nature Conservancy
Protecting nature. Preserving life.™

CONAGUA
Comisión Nacional del Agua

pro natura
noroeste

CEDES

USGS
science for a changing world

BLUE LEGACY

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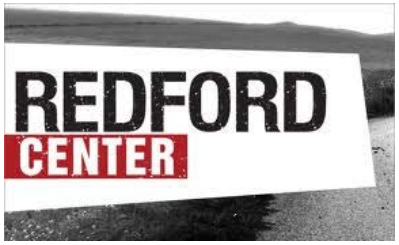
REDFORD CENTER

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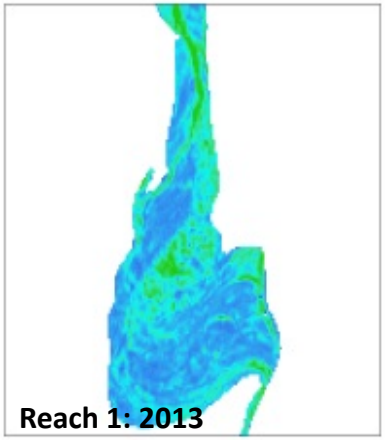
Web Site
INTERNATIONAL BOUNDARY AND WATER COMMISSION
COMISION INTERNACIONAL DE LIMITES Y AGUAS

North American Wetlands Conservation Act
NAWCA

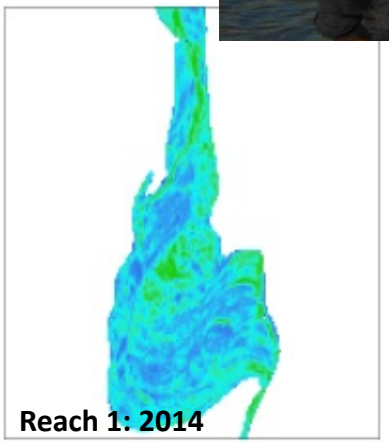
SJV

SEMARNAT
SECRETARÍA DE
MEDIO AMBIENTE
Y RECURSOS NATURALES

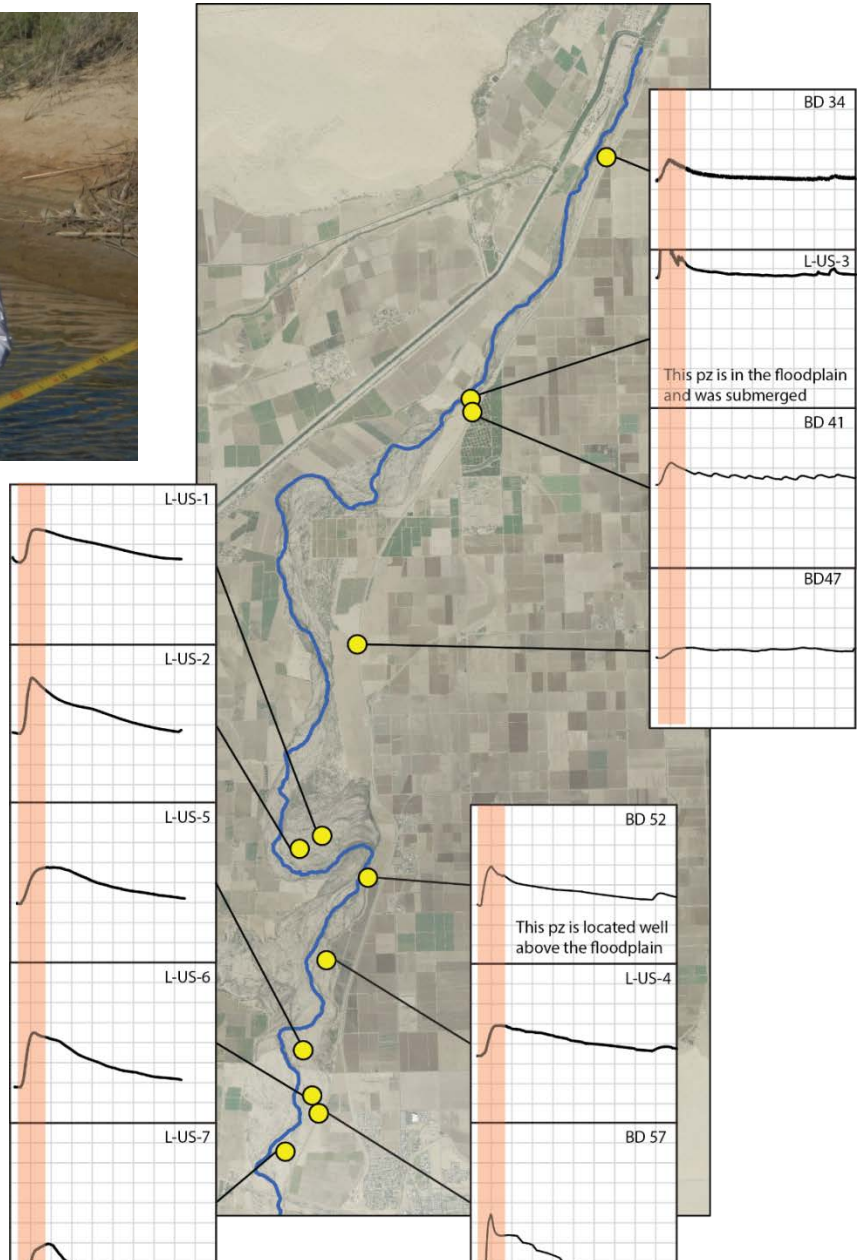
ESTADOS UNIDOS MEXICANOS



Reach 1: 2013



Reach 1: 2014



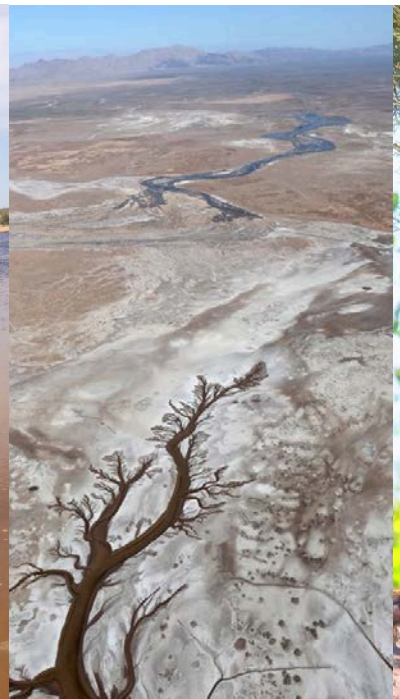
Will Science Inform Minute 319 Successor?

PRO

- 2+ years intensive monitoring of environmental flow impacts
- Negotiators looking at environmental flow scenarios
- Binational environmental workgroup used data and models to quantify impacts for a range of possible environmental flow scenarios:
  - Innundation and hydrologic connectivity
  - New habitat
  - Social impact
- Scenarios optimize environmental and social impact

CON

- Environmental flows will be Mexico's "ask" negotiated in context of shortage commitment, water transfers, other management reforms
- US water users and states unable to recognize environmental standards or goals outside of the US (= outside of ESA)

Negotiators and stakeholders have seen something good happening in the Colorado River Delta – science confirms it and science improves it

Science tells our story
(thanks!)