# The Future of Rivers in the Colorado River Basin

Jennifer Pitt Colorado Watershed Assembly October 8, 2013

Photo credits: Pete McBride Maitri Erwin Osvel Hinojosa National Park Service Tamarisk Coalition



Finding the ways that work



















Click to insert chart

BUT PARTY AND



# **Colorado River Delta Restoration**



Minute 319 in which US and MX dedicate water for healthy Colorado River flows in the delta while also improving water supply reliability for all users



# HEALTHY FLOWS FOR THE COLORADO RIVER BASIN















### Projected Supply and Demand in the Colorado River Basin

Historical Supply and Use and Projected Future Colorado River Basin Water Supply and Demand



### Yampa River – ecological vulnerability

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#### FIGURE G3-67

Percent of Traces Vulnerable Without Options and Strategies by Scenario and Time Period, Yampa River Indicator Metric (ecological vulnerability)



Some solutions might be too expensive and energy intensive and don't help rivers

- Pipelines that import water from other basins
- Massive ocean desalination in CA and MX
- Icebergs?



### Some solutions help water users and healthy rivers

# conservation and efficiency for urban, energy, and agriculture water uses



# **UPPER BASIN WATER BANK**

## Designed to:

- avoid Lee Ferry deficit
- protect water rights
- compensate water users for voluntary conservation
  - more efficient that individual buyer-seller transactions
  - more flexible than "buy and dry"
- has real costs, but costs are far less than pipelines or desalinization
- improve healthy river flows

 Basin Study assessed Upper Basin water bank at conceptual level

### Percent of Traces Exceeding Vulnerability Threshold At Least Once Ecological Indicator Metrics by Time Period

			Percent of Trac				
	Time Period	Baseline	Portfolio A	Portfolio B	Portfolio C	Portfolio D	0% 100%
Colorado River (ecological vulnerability)	2012-20	46%	45%	42%	46%	41%	
	2027-20	70%	61%	56%	62%	58%	
	2041-20	<mark>89</mark> %	79%	78%	79%	80%	
Green River (ecological vulnerability)	2012-20	27%	27%	27%	27%	27%	
	2027-20	41%	39%	39%	39%	41%	
	2041-20	73%	70%	70%	70%	72%	
San Juan River (ecological vulnerability)	2012-20	49%	%	46%	%	46%	
	2027-20	77%	66%	69%	66%	67%	
	2041-20	<mark>, 93</mark> %	<mark>8</mark> 3%	89%	, <mark>8</mark> 4%	87%	
Yampa River (ecological vulnerability)	2012-20	6%	6%	6%	6%	6%	
	2027-20	33%	3%	25%	3%	27%	
	2041-20	<mark>87</mark> %	15%	77%	15%	77%	
Hoover Dam to Davis Dam Flow Reductions (greater than 845 kaf in any one year)	2012-20	25%	19%	18%	18%	18%	
	2027-20	47%	37%	36%	38%	44%	
	2041-20	34%	35%	35%	47%	51%	
		50% 50% Percent Percent Traces Vuln Traces Vuln		50% Percent Traces Vuln	50% Percent Traces Vuln	50% Percent Traces Vuln	





Highlights 🔻

#### Community

The Colorado River as it existed a century ago, running free from the Rocky Mountains to Mexico, is today a distant memory. We're working to change that. Learn more at www.coloradoriverbasin.org.



₫ 5,425

About - Suggest an Edit

Photos

Likes



#### A Balanced Plan for the Colorado Riv

ABOUT THE RIVER	ABOUT US	THE STUDY	BLOG: COLORADO CURRENTS	CONTACT	FOR THE MEDI
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About the Basin: The Colorado River is a national treasure, the lifeblood of the arid West and essential to the economies of seven states and Mexico.

### VIDEO: AMERICA'S ENDANGERED RIV



As we enter a new era of unce the river's future, one fact is be reasonable dispute: we need to way we manage the Colorado



### LATEST BASIN NEWS



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