# 1AC

## Observation 1 Inherency

#### The Colorado River and its delta are in grave danger. Current efforts to save this essential environmental and economic resource are only a temporary solution.

University of Denver Water Law Review JULY 22, 2013

AT THE STURM COLLEGE of LAW ARON BRUNSKILL · JULY 22, 2013<http://duwaterlawreview.com/the-colorado-river-delta/> lmc

The Colorado River provides water to meet the needs of nearly 40 million people across seven US states and part of Mexico. Historically, the Colorado River ran 1,450 miles from the Rocky Mountains down to the Gulf of California in Mexico. However, within the last century the river has begun drying up just short of its Mexican delta. Before this change, the delta was a vast and diverse ecosystem that sustained over 300 species of birds, and provided lush spawning grounds for many species of fish. Today, the delta looks more like a desert.¶ The change came in 1944 when the US and Mexico signed a treaty titled “Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande.” The treaty allocated 90% of the Colorado River’s water to the US, and limited the amount of water the US was obligated to pass on to Mexico to 1.5 million acre-feet per year, not to exceed 1.7 million acre-feet per year.¶ This treaty allowed US citizens to use the Colorado River to establish large cities in otherwise desert climates by extracting drinking and irrigation water. Vast consumption of the river’s water slowly reduced the availability of water in Mexico for the same purposes. Eventually, the two countries grew to consume enough water from the river to keep it from reaching its natural termination.¶ MINUTE 319¶ On November 20, 2012, the US and Mexico signed “Minute 319,” an amendment to the 1944 treaty designed to address multiple issues on an experimental basis over the next five years. Minute 319 established a method by which the US and Mexico will share in the benefits of high water flow and the burdens of drought in the Colorado River. Mexico gained the right to defer some of its water delivery during times of surplus by temporarily storing water in Lake Mead. In proportion to Lake Mead’s water level, Mexico may then order the previously deferred water, up to 200,000 acre-feet per year, to make up for reductions in base flow during droughts. Reductions in base flow due to drought are also determined in proportion to Lake Mead’s water level, and return of Mexico’s stored water will be refused when the water level of Lake Mead is below 1,075 feet. These provisions will help increase water use efficiency and the reliability of Lake Mead’s water level.¶

#### And, change is necessary—only guaranteed river flow can save the delta.

Udall and Hinojosa ‘10

Brad Udall is the director of Western Water Assessment, based out of the National Oceanic and Atmospheric Administration (NOAA) offices in Boulder, Colo. Osvel Hinojosa works as director of the water and wetlands program from the Mexican environmental group Pronatura.http://grist.org/article/2010-07-30-how-to-restore-the-colorado-river/full/lmc

JW: So our audience can understand restoring whole flows to the delta, could you talk about that briefly, how much money it would take and what it would take to see the type of restoration that could bring us back — not to a completely restored delta — but a delta that at least has some natural function left to it.¶ OH: Right, well that’s one of the bases of the restoration work we’re doing for the delta, not just the planting of native trees, but restoring flows. And that has two components: one is that the base flow, which we think does not need to be a large amount — we’re talking something between 16,000 to 18,00 acre feet a year, we’re still refining that number. And we’re considering that we can get that water from purchasing water rights from the Mexicali valley. So that’s one of the ideas. The other component is a post-flow. So if we only have a base flow, the riparian system does not work as it should. It needs this flowing every certain amount of year, even if they are only for two or three months, but in a larger flow, maybe 700 cfs [cubic feet per second]. For that, that aspect needs to have international collaboration, because it needs release from the dams that go all the way to the delta. And that’s part of what’s happening now with international negotiations between the United States and Mexico, trying to figure out if we can make that happen.

#### Therefore, my partner and I present the following

#### PLAN: The United States federal government should substantially increase its economic engagement towards Mexico by extending the measures and projects of Minute 319 beyond 2017.

## Solvency

#### Observation 2 Solvency

#### Mexico recognizes the looming crisis. And, as a result, Mexico would say yes.

Buono ‘12

Minute 319: A Creative Approach to Modifying Mexico-U.S. Hydro-Relations Over the Colorado River

by Regina M. Buono, an associate attorney with the law firm of McGinnis, Lochridge, & Kilgore L.L.P in Austin, Texas. She can be reached at rbuono [at] mcginnislaw.com or found on Twitter as @ReginaBuono <http://www.internationalwaterlaw.org/blog/2012/12/10/minute-319-a-creative-approach-to-modifying-mexico-u-s-hydro-relations-over-the-colorado-river/LMC>

Minute 319 is limited to a term of five years. The short duration may have been necessary to facilitate the amendment’s acceptance by Mexican officials, as Mexico has long considered the 1944 Water Treaty to be inviolable and complained about American management practices. Nevertheless, officials on both sides have expressed the hope that the Minute’s implementation may be extended in the future.

#### And, creating a permanent agreement using the mechanism of 319 will allow continued investment to enhance water delivery and ultimately improve US/Mexican relations.

Gleik ‘12

Peter H. http://www.huffingtonpost.com/peter-h-gleick/an-historic-step-toward-s\_b\_2167513.html

¶ Earlier this afternoon, their prospects improved dramatically.¶ At the historic Hotel del Coronado in San Diego, the U.S. and Mexican commissioners of the [IBWC](http://www.ibwc.gov/home.html) -- the binational agency that manages water crossing the border -- signed Minute 319, an amendment to the 1944 treaty that allocates Colorado River water between the U.S. and Mexico. U.S. Secretary of the Interior Ken Salazar and Mexico's Ambassador to the United States Arturo Sarukhan also attended the signing ceremony, highlighting the importance of this new agreement to both countries.¶ Minute 319 brings material benefits to water users on both sides of the border. It guarantees that, for the first time ever, some water will regularly flow in the usually-dry Colorado River channel below Morelos Dam. The landmark agreement enables Mexico to store Colorado River water in the U.S., in Lake Mead, providing Mexico with reliable surface storage and a buffer against future shortages. Minute 319 creates a mechanism for U.S. water agencies to invest in improving the efficiency of Mexico's Colorado River canals, improving long-term reliability and on-farm deliveries for Mexico and generating short-term additional water for the U.S. investors. For the first time, Minute 319 sets clear criteria for reduced deliveries to Mexico in times of shortage, averting a potential diplomatic standoff while adding certainty and predictability to water managers' planning efforts. The agreement also establishes a strong foundation for future collaboration.¶

#### And, by ensuring predicable flow and delta restoration in the Colorado basin beyond 2017, the plan will restore water resources and ecosystems that result in 2 advantages.

Zamora '13

Francisco Zamora, Sonoran Institute, Minute 319 Colorado River Delta 1-11-13 lmc

On November 20, 2012, the United States and Mexico signed a landmark five-year agreement (Minute 319) that defines how the two countries will share the Colorado River amidst growing pressures on water resources. For the first time in history, the two nations made a collaborative commitment to dedicate water to the Colorado River for environmental purposes and to take conservation actions to restore the river’s delta, a globally significant ecosystem.¶ Minute 319 interprets and expands key¶ elements of the 1944 treaty between the U.S. and Mexico, which¶ guides the binational management of Colorado River water. The 1944¶ treaty initially established Mexico’s right to a 1.5 million acre-feet¶ share of the Colorado River’s flows. However, for the first time in¶ history, the new Minute incorporates measures to restore flows to the river in Mexico and to conserve the Colorado River Delta.¶ Under the Minute’s provisions, the U.S. and Mexico will implement¶ several new measures and cooperative projects over a 5-year pilot period lasting through December 31, 2017. The long-term goal is to revise, expand, and extend the measures and projects of Minute 319 through a new agreement that will extend beyond 2017.

## Advantage 1 Agriculture--

#### The Colorado Basin and agricultural water supply are at risk.

Doom 2012

Qualified reporter for Bloomberg news. He has also written for the 944 magazine.

<http://www.bloomberg.com/news/2012-11-20/u-s-mexico-sign-five-year-deal-to-improve-colorado-river-flows.html> EP

The Colorado River basin supplies drinking water to more than 35 million people in the United States and Mexico and irrigates more than 3.3 million acres in the two countries. The river, which flows through some of the most arid regions of the continent, has never been very large. Now it is so over-tapped that it usually dries up completely some 80 river miles north of its mouth atop the Gulf of California. The river's once-lush delta -- memorably described in Aldo Leopold's eloquent "[Green Lagoons](http://books.google.com/books?id=LICERWI0YJYC&pg=PA141&lpg=PA141&dq=green+lagoons+aldo+leopold&source=bl&ots=4s4NqwIzqG&sig=v37DWnKUQLQom3zKEXjKxo6uEqI&hl=en&sa=X&ei=A8yqUNazBaT2iwK88oDACg&ved=0CEQQ6AEwAw#v=onepage&q=green%20lagoons%20aldo%20leopold&f=false)" -- has been tamed and tilled and converted to irrigated agriculture, or else lies desiccated and barren, deprived of the water and sediment the river once carried in abundance.¶ That abundance is long gone.¶ Even with a massive reservoir system that can store four times the river's average annual flow, demand for the Colorado River now exceeds its total renewable supply (see figure). To make matters worse, the Bureau of Reclamation's soon-to-be-released [Colorado River Basin Study](http://www.usbr.gov/lc/region/programs/crbstudy.html) projects that climate change could further reduce total supply by nine percent or more in the coming decades, confirming [research published](http://www.sciencedirect.com/science/article/pii/002216949190030L) over 20 years ago on the vulnerability of the river to climate change. Within the next several years, Arizona and Nevada will likely see their total take of the river reduced as the falling elevation of Lake Mead triggers shortage declarations; a decade-long drought and low runoff in the upper basin states of Colorado, New Mexico, Utah, and Wyoming means that many have already seen supply fall well below demand.¶ But it is the Colorado's already-stressed delta that bears the brunt of the excessive demands on the river. Some hardy cottonwoods and willow trees still cling tenaciously to the river's banks, especially at the uppermost extent of the remnant delta, just below Morelos Dam (near Yuma, Arizona). The likelihood of an even drier future meant that these few remaining vestiges of a once-rich ecosystem faced a very grim future.¶

#### And, lack of water delivery risks $ ½ billion in agriculture losses per year in a single irrigation district.

NPR.org 9-4-13

Water Dispute Heightens Tensions Between U.S., Mexico¶ by MONICA ORTIZ URIBE¶ September 04, 2013 6:34 AM¶ from Arizona Public Media¶ http://www.npr.org/2013/09/04/218834216/water-dispute-heightens-tensions-between-u-s-mexico¶

Mexico and the United States are supposed to share water according to a 70-year-old treaty that aims to protect each nation's needs. But prolonged drought is testing that relationship. Mexico is behind by 38 percent on its deliveries¶ And we'll report next from the U.S.-Mexico border. A 70-year-old treaty pledges both countries to keep the Rio Grande flowing, but Mexico has fallen behind on its obligations, endangering agriculture in the river valley. From member station KJZZ, Monica Ortiz Uribe reports.¶ UNIDENTIFIED MAN: (Speaking Spanish)¶ MONICA ORTIZ-URIBE, BYLINE: At the end of a long hot work day, farm laborers heave heavy sacks of red jalapenos onto a metal scale. A supervisor calls out their weight.¶ UNIDENTIFIED MAN: (Speaking Spanish)¶ ORTIZ-URIBE: These peppers will be smoked into chipotle, a signature product of this area. We're near the city of Delicias in the northern Mexican state of Chihuahua. These dehydrated chiles - smoldered till they're brown and wrinkled - look like a cruel caricature of the soil.¶ HOMERO CHAVEZ: We've had a water shortage for the last two years.¶ NPR. org ORTIZ-URIBE: Homero Chavez is a farmer just outside Delicias. Drought knows no borders. Farmland in Northern Mexico is just as parched as parts of the Western United States. Farmers here only got one-third of the water they needed this year.¶ CHAVEZ: If you don't have no water, it will reflect on your prices, drastically sometimes. And your profits will go down, of course.¶ MONICA ORTIZ URIBE, BYLINE: To survive, Chavez had to buy water rights from other farmers who couldn't afford to plant this year.¶ (SOUNDBITE OF RAIN)¶ URIBE: The sky finally opened up in late July and delivered a much needed soaking. The excess rain caused this small local dam to overflow, sending a new gush of water into Chihuahua's Rio Conches. This Mexican river eventually flows downstream to the Texas border where it meets with the Rio Grande. That's how Mexico delivers most of its water to the United States, under a treaty signed by both countries in 1944. Currently, Mexico is behind by 38 percent.¶ SALLY SPENER: Mexico has an obligation to deliver a minimum annual average of 350,000 acre feet in cycles of five years.¶ URIBE: Sally Spener is with the International Boundary and Water Commission, the federal agency that oversees bi-national water treaties between the U.S. and Mexico. Under the same treaty, the U.S. delivers Colorado River water to the Mexican States of Sonora and Baja California.¶ SPENER: We basically set aside water in the United States reservoirs that will be released and delivered to Mexico. We do not believe that the Mexican system is managed in a similar fashion.¶ URIBE: In fact, it's not. Jesus Luevano works for the federal agency that represents Mexico under the bi-national water treaties. He confirmed that irrigation districts in Mexico do not set aside water to meet their yearly obligation.¶ JESUS LUEVANO: Because usually, with the rains, Mexico in the past we were be able to comply with Mexico's obligations under the treaty.¶ URIBE: But since the drought hit in 2011, Mexico could no longer rely on the weather. And their low water deliveries have struck a heavy blow to both sides of the Rio Grande Valley.¶ JOJO WHITE: I mean we're down to the bare bottoms of the bucket.¶ URIBE: JoJo White heads the Mercedes Irrigation District in South Texas. He drives his pickup past fallow fields checkered with wild sunflowers.¶ WHITE: Half of the farmland in the district was not planted because there wasn't any water. That has never happened.¶ URIBE: Another year with scarce water could wipe out the farming industry here. A study by Texas A&M University estimates the economic loss would be $400 million and some 5,000 jobs. Cities would also be in trouble since they depend on irrigation canals to deliver their water supply.¶ In an effort to turn things around, Mexican water officials are finalizing a new set of rules that would require Mexican irrigation districts to set aside water for the Rio Grande River. These new rules could go into effect as early as October. But both countries are still stretched thin for water, so the challenge of finding better ways to share and conserve remains.¶ For NPR news, I'm Monica Ortiz Uribe in El Paso.

#### And, Agricultural trade is key to the economy

Persaud 13 (Suresh Persaud, Agricultural Economist, United States Department of Agriculture, “Effects of Trade on the U.S. Economy” <http://www.ers.usda.gov/data-products/agricultural-trade-multipliers/effects-of-trade-on-the-us-economy.aspx#.Uew3zI3VCSo> 6-17-13)

U.S. agricultural exports generated employment, income, and purchasing power in both the farm and nonfarm sectors. ERS estimates that each dollar of agricultural exports stimulated another $1.29 in business activity in 2011. The $136.4 billion of agricultural exports in 2011 produced an additional $176 billion in economic activity for a total economic output of $312.3 billion. Every $1 billion of U.S. agricultural exports in 2011 required 6,800 American jobs throughout the economy. Calendar year 2011 agricultural exports required 923,000 full-time civilian jobs, which included 637,000 jobs in the nonfarm sector. The agricultural export surplus helped to offset some of the nonagricultural trade deficit.¶ Introduction¶ Trade has always been important to U.S. farm and rural economies, from early colonial days when tobacco and cotton were the most important export commodities, to today’s massive exports of grain, oilseeds, and processed foods. Even though farming today accounts for a relatively small share of U.S. GDP, U.S. agricultural trade is still a significant contributor to the overall U.S. economy, with impacts felt in countries worldwide. As the world’s economies become more integrated, global trade and the links between countries grow ever deeper. Trade agreements have expanded agricultural trade with developed and developing countries and, in turn, have created growth opportunities for U.S. agriculture. By lowering trade barriers, free trade agreements, such as the North America Free Trade Agreement, create demand for U.S. agricultural commodities in foreign markets. This demand is satisfied with purchasing power acquired, in part, by the ability of foreign nations to increase sales of other

products to the U.S. market.

#### Efficient irrigation can’t solve for looming water crisis.

Harvest Public Media, August 19, 2013

<http://harvestpublicmedia.org/article/farmers-look-do-more-less-water> lmc

“Farmers are probably better at conserving water than the average homeowner, because it’s a big economic issue to them,” said Brian Werner, a spokesman for Northern Water, one of Colorado’s largest water distribution systems.¶ The shift to more efficient irrigation is happening, however slowly. Between 2003 and 2008, about 800,000 acres of U.S. farmland were equipped with efficient irrigation technologies, like drip and sprinkler systems.¶ But these new systems won’t likely be a panacea to the looming water shortages. A study of irrigated land in western Kansas found that when farmers change their irrigation systems, they switch to crops that require more water and bring in more money. That switch can negate the entire water savings.¶ Fagerberg Produce farm manager Rod Weimer has no regrets about installing drip irrigation. He’s using less water and the quality of his onion crop only gets better.¶ “If we want to survive, that’s what we’re going to have to do,” Weimer said. “It’s not cheap, but in the long run it’s going to pay off.”¶ For farmers on the Great Plains, surviving means doing more with less.

#### And, Irrigation will be essential to prevent food shortages—rain fed agriculture will decrease by half.

KLARE , APR 22, 2013

Will water supplies provoke World War III?

Extreme climate change and a global scarcity of vital resources could prove to be an explosive combination BY MICHAEL KLARE http://www.salon.com/2013/04/22/could\_water\_supplies\_provoke\_world\_war\_iii\_partner/

No one can predict how much food, land, water, and energy will be lost as a result of this onslaught (and other climate-change effects that are harder to predict or even possibly imagine), but the cumulative effect will undoubtedly be staggering. In Resources Futures, Chatham House offers a particularly dire warning when it comes to the threat of diminished precipitation to rain-fed agriculture. “By 2020,” the report says, “yields from rain-fed agriculture could be reduced by up to 50%” in some areas. The highest rates of loss are expected to be in Africa, where reliance on rain-fed farming is greatest, but agriculture in China, India, Pakistan, and Central Asia is also likely to be severely affected.

#### Food crisis triggered the Arab Spring—conflict becomes more likely when people don’t eat.

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Like other experts on the subject, Chatham House’s analysts claim, for example, that climate change will reduce crop output in many areas, sending global food prices soaring and triggering unrest among those already pushed to the limit under existing conditions. “Increased frequency and severity of extreme weather events, such as droughts, heat waves, and floods, will also result in much larger and frequent local harvest shocks around the world… These shocks will affect global food prices whenever key centers of agricultural production area are hit — further amplifying global food price volatility.” This, in turn, will increase the likelihood of civil unrest.¶ When, for instance, a brutal heat wave decimated Russia’s wheat crop during the summer of 2010, the global price of wheat (and so of that staple of life, bread) began an inexorable upward climb, reaching particularly high levels in North Africa and the Middle East. With local governments unwilling or unable to help desperate populations, anger over impossible-to-afford food merged with resentment toward autocratic regimes to trigger the massive popular outburst we know as the Arab Spring.

#### Resource Wars are as great a risk to the US as prolif or terrorism.

KLARE , APR 22, 2013

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¶ Many such explosions are likely in the future, Chatham House suggests, if current trends continue as climate change and resource scarcity meld into a single reality in our world. A single provocative question from that group should haunt us all: “Are we on the cusp of a new world order dominated by struggles over access to affordable resources?”¶ ¶ For the U.S. intelligence community, which appears to have been influenced by the report, the response was blunt. In March, for the first time, Director of National Intelligence James R. Clapper listed “competition and scarcity involving natural resources” as a national security threat on a par with global terrorism, cyberwar, and nuclear proliferation.

¶ ¶ “Many countries important to the United States are vulnerable to natural resource shocks that degrade economic development, frustrate attempts to democratize, raise the risk of regime-threatening instability, and aggravate regional tensions,” he wrote in his prepared statement for the Senate Select Committee on Intelligence. “Extreme weather events (floods, droughts, heat waves) will increasingly disrupt food and energy markets, exacerbating state weakness, forcing human migrations, and triggering riots, civil disobedience, and vandalism.”¶ There was a new phrase embedded in his comments: “resource shocks.” It catches something of the world we’re barreling toward, and the language is striking for an intelligence community that, like the government it serves, has largely played down or ignored the dangers of climate change. For the first time, senior government analysts may be coming to appreciate what energy experts, resource analysts, and scientists have long been warning about: the unbridled consumption of the world’s natural resources, combined with the advent of extreme climate change, could produce a global explosion of human chaos and conflict. We are now heading directly into a resource-shock world.

## Advantage 2 Fresh Water

#### The river is in collapse, and will be 30 percent gone by 2050

Clarke April 17, 2013

History Writer KCET Chris, Taking the Long View on the Colorado River

<http://www.kcet.org/updaily/socal_focus/commentary/east-ca/taking-the-long-view-on-the-colorado-river.html>

The Colorado Delta's ecosystem, which includes the [probably doomed](http://www.kcet.org/news/the_back_forty/water/salton-sea-stench-get-used-to-it.html) Salton Sea, is in the free-fall stage of ecological collapse. Its once-thriving estuary, habitat for [billions of birds](http://www.kcet.org/news/the_back_forty/wildlife/white-pelicans-californias-charismatic-megafauna-in-the-sky.html) and nursery to the Sea of Cortez's fisheries, is basically teetering on the brink of extinction.¶ As American Rivers' 2013 report [America's Most Endangered Rivers](http://www.americanrivers.org/endangered-rivers/2013/)points out, that threat isn't limited to the river's delta. What the group terms "outdated water management" and an increasing likelihood of catastrophic drought threaten wildlife dependent on upstream reaches of the river as well -- and the human communities that use the river's water to boot. In the words of the report:¶ Climate change is expected to reduce Colorado River's flow by 10 to 30 percent by 2050. Warmer weather, less snow, a reduction in stream runoff, and changed timing of spring runoff are all likely impacts. Currently scheduled water deliveries from the Colorado system are not sustainable in the future if climate change reduces runoff even by as little as 10 percent. With snowpack once again below average, extreme drought conditions will likely persist when water is needed most.¶

#### And, extending 319 provisions creates more reliable and predictable water supplies in the US and Mexico.

SCHISSLER · APRIL 29, 2013

NATASHA, Monthly Archives Denver University Water Law Review: April 2013 Challenges of the Future in the Colorado River Basin http://duwaterlawreview.com/2013/04/lmc

UNIVERSITY OF DENVER WATER LAW REVIEW ANNUAL SYMPOSIUM 2013: ADDRESSING SUPPLY & DEMAND IMBALANCES IN THE COLORADO RIVER BASIN

Denver, Colorado April 12, 2013

The second Basin management development that Castle discussed was Minute 319 that interprets the Water Treaty. The Water Treaty, inter alia, regulates utilization of waters of the Colorado River across international boundaries. Pursuant to Minute 319, Mexico and the United States must share water shortages, as well as water surpluses. Prior to Minute 319, the two countries shared water shortages only. Sharing surpluses will allow for more reliability and predictability of water supply in the United States and Mexico. Minute 319 also extended Minute 318 by allowing Mexico to defer its water rights and store its Colorado River allotment in Lake Mead without losing its rights to the allotment. Such deferred delivery benefits both countries. On the one hand, it enhances Mexico’s water security and storage capacity. On the other hand, it increases the water levels of Lake Mead, ensuring predictable water storage levels for lower-Basin states. Another important provision of Minute 319 authorized establishment of an Intentionally Created Mexican Allocation, which enabled Mexico to adjust its water delivery schedule to allow for later use. Minute 319 also created a pilot program that provides water for planned environmental flows and a one-time high-volume pulse flow for the Colorado River delta. The goal of this pilot program is to create new wetland habitat in the dry and damaged delta and establish a foundation for further restoration projects. Castle emphasized that such productive collaboration between Mexico and the United States is especially remarkable in light of the fact that even US states often fail to cooperate with each other when it comes to water sustainability. Castle called Minute 319 a “breakthrough” and a historical example of a three-year cooperation of the US and Mexican federal governments, seven US states, International Boundary and Water Commission, and many non-governmental organizations.

#### And, access to water is a basic human right that disproportionately effects the most marginalized populations of the region.

Barcena in 2012  
Alicia Executive Secretar RIO +20 Conference LC/L.3346/Rev.1 • March 2012 • 2012-66 “SUSTAINABLE DEVELOPMENT 20 YEARs ON FROM THE EARTH SUMMIT” RIO +20 Conference for Sustainable Development http://www.eclac.org/publicaciones/xml/8/46098/riomas20-ingles.pdf

Nonetheless, no notable change has occurred in the development model to support simultaneous

advances in the social, economic and environmental dimensions. Thus, despite some achievements, the

region has not managed to reduce inequalities in any significant way, to eradicate poverty or to decouple

environmental pressures from economic growth. There are still many people living in poverty without access to basic utilities —including those defined as human rights, such as access to environmental health, water and sanitation, and housing— with serious implications for the security of the region’s inhabitants. Lack of access to these services, compounded by wide disparities in access to education, and hence to the labour market, mean that the characteristic inequality of Latin America and the Caribbean also renders disadvantaged groups more vulnerable to the effects of local and global environmental deterioration. Gender gaps and discrimination based on race, ethnicity, age and geographical location accentuate the disadvantages faced by large segments of the region’s population. This situation increases

the vulnerability of these groups to climate-related and other disasters. During the period 1970-2010,

floods and storms accounted for almost 70% of disasters recorded in the region leaving a toll of more than

467,000 deaths, an average of 4.5 million persons affected each year and estimated losses in the order of

US$ 160 billion.5 Disadvantaged groups are also vulnerable to diseases caused by exposure to toxic

products, garbage, polluted water and air, among other things; and the deterioration or scarcity of natural resources and water on which their survival depends

#### The United States must not be complicit in this water emergency. We have a moral obligation to address water contamination and unequal access.

Lexen, 2011 <Karin Lexén, Director, Swedish Water House, The human right to water and sanitation – From moral ¶ to legal obligation,

<http://www.swedishwaterhouse.se/swh/resources/1301387796848Seminar_Report_2011_Right_to_Water_and_Sanitation.pdf>>

The right to water and sanitation is one of the most important aspects of development, and¶ an important part of combating conflicts - during the humanitarian crises in the 90's, in Africa¶ for example, water and sanitation played a key role. But at the same time, people with access¶ to water do not seem to understand the magnitude of the problem; do not realize that¶ clean drinking water is a luxury and that a lot of people lack access to it. Children under the¶ age of five die of diarrhea, dehydration and dysentery – due to lack of access to clean¶ and safe water.¶ Financial crises and food crises makes it difficult to work with water and sanitation as a human¶ right; there is at the moment a lot of instability in the world and there have been some¶ negative trends, for example the flooding in Pakistan, which destroyed fresh water supplies¶ and storages. Lack of access to water is the source of bad health and conflicts - war and peace are both in the context of water. On all fronts, the role of water is central: the right to water, as a basic human right. It is stated in the Universal Declaration of Human Rights in article 3; the right to life, in article 21; the right¶ to adequate access to public service in his country, in article 25; the right to adequate¶ standard of living, etc. The Millennium Development Goals include the right to water and¶ sanitation, and in order to achieve all goals, access to water and sanitation is crucial. Access¶ to water affects all the other Millennium Development Goals; so it is crucial to put the¶ water issue at the centre of development.

### Advantage 3 Biodiversity

#### The Colorado Delta is key to Biodiversity, and only 10 % still exists.

Water Education Foundation ‘13

River Report, Winter 2012-2013, Water Education Foundation, California lmc

A significant effort will be focused on the¶ replenishment of riparian habitats and¶ wetlands in the Colorado River Delta¶ south of the border, the region where the¶ river flows into the Gulf of California.¶ Over time the Delta has been neglected¶ and is now only a fraction of its original¶ size, but it still provides vital habitat for¶ more than 380 bird species. Migratory¶ birds depend on the wetlands for wintering¶ habitat or as a stopover on their¶ journey northward through the Sonoran¶ Desert, Arizona and California.¶ However, upstream farming diverted¶ and dammed water flows in the United¶ States and Mexico, reducing natural flow¶ to the wetlands. Past Colorado River¶ agreements, which divided the river’s¶ waters among the seven U.S. states and¶ Mexico, did not require releases to sustain¶ the river ecosystem. As a result, more than 90 percent of the original wetland¶ areas have been lost. As part of the five-year restoration¶ pilot program, the United States, Mexico¶ and non-governmental groups (NGOs)¶ will jointly provide a total of 52,696¶ acre-feet of water as base flows to keep¶ water in the channels and Delta year round¶ for riparian vegetation. The base¶ flows will come from the NGOs, which¶ secure water via the trust acquired from¶ Mexico’s treaty delivery.¶ In addition a pulse flow – 105,392¶ acre-feet – will mimic a spring runoff¶ that scientists believe will ultimately¶ help replenish the Delta. This element¶ “is very important in that it’s not only¶ the delivery¶ of the water but a test to see¶ how the system responds hydrologically¶ and ecologically,” said Osvel Hinojosa,¶ director¶ of the Water and Wetlands¶ Program¶ for Pronatura Noroeste.¶ “Through this agreement water will¶ be flowing in the Colorado River in¶ Mexico, supporting thousands of acres¶ of riparian and marsh habitat, enhancing¶ the rich estuary near the mouth of¶ the river and connecting with the Gulf¶ of California,” Hinojosa said. “Building¶ on the resiliency of this ecosystem, these flows will support and regenerate habitat for hundreds of resident and migratory species. Minute 319 is a landmark for the restoration of the Delta.”¶ The base flow will be water available to keep vegetation along the river alive throughout the year. “One of the signature values of the Delta is its function as a critical link in the Pacific Flyway. Birds need habitat as they migrate,” said Jennifer Pitt, director of the Colorado River Project for the Environmental Defense Fund. “We’ve learned over the past 10 years the importance of open water. Birds need a place to rest their weary wings but also need a food source that is produced around the water.”¶ The pulse flow will replicate natural spring runoff. “When you think back historically to the Colorado River spring melt, the high flows lasted for an extended time. We want to inundate the floodplain and channel for a prolonged period to the greatest benefit possible,” she said.¶ The pulse flow will likely be the biggest challenge. Pitt said a dozen years ago there were efforts to quantify how much water the Delta needed as a minimum based on anecdotal observations. Today, however, that number likely is not accurate because it was never tested and through the years the area has continued to dry out. Moreover, the amount of water allocated in Minute 319 is less than the estimated pulse flow need from years ago.¶ To coordinate restoration efforts, a group of scientists and experts from the United States, Mexico and perhaps around the world will be convened to study the issues and develop a flow plan to use that water to its greatest effect for ecological restoration. The coalition will develop a plan for the use of the environmental water, including schedules, delivery points and amount of water for each of the components.¶ Peter Culp, attorney with the Phoenix office of Squire, Sanders & Dempsey who has assisted the Sonoran Institute and other NGOs with Colorado River Delta issues, said the key to making Minute 319’s restoration plan work was the recognition by Mexico of the need for ICMA storage for both the ecosystem and Mexican farmers.¶ “We view the agreement as a transition in the role of NGOs in river restoration and management,” he said. “The environmentalists were a part of this agreement. NGOs historically have had more of a confrontational role. Now they are more in a partnership role. There’s a recognition that we can sometimes accomplish more with collaboration. We view it [the Minute]as a real example of the basin-wide thinking that is beginning to emerge in the Colorado River Basin,” Culp said.¶ Pitt noted she is “extraordinarily pleased. This Minute is not the full deal on restoration but [the] first steps in restoration in this area that has been desiccated for so long,” she said. “Most important is the collaborative spirit. The absence of a collaborative spirit is what led to problems in the Delta. I don’t think restoration would be possible without this cooperation. I now see the pieces in place to succeed.” International Projects¶ In addition to the broad pilot program,¶ specific international projects were identified¶ with joint investment by both countries.¶ These projects are both conservation¶ and the generation of new water sources¶ to address the growing water demands¶ along the Colorado River now and potential¶ shortage conditions in the future.

#### And, the US & Mexico must act to solve environmental problems—only the plan guarantees necessary cooperation.

Margaret Wilder (University of Arizona) 2013 <http://swcarr.arizona.edu/sites/default/files/ACCSWUS_Ch16.pdf> lmc

Transboundary cooperation to address the impacts of climate variability and climate change is essential to promoting the best outcomes and to building regional adaptive capacity on both sides of the border. Despite formal agreements between the United States and Mexico to cooperate to resolve key transboundary environmental problems (e.g., La Paz Agreement; Minute 306), there are recent important examples where lack of cooperation has led to suboptimal (e.g., win-lose rather than win-win) outcomes.

Trans-border collaboration is playing a significant role in addressing environmental challenges

in the Colorado River delta. The Colorado River Joint Cooperative Process (CRJCP) formed under the auspices of the International Boundary and Waters Commission (IBWC) and its Mexican counterpart (Comisión Internacional de Límites y Agua, CILA) in 2008 to develop “binational processes for meeting municipal, agricultural, and environmental needs” in the delta Zamora-Arroyo and Flessa 2009).

#### And, loss of biodiversity poses an imminent threat to human survival.

Raj 12(Dr. P.J. Sanjeeva Raj, consultant ecologist and the Professor and Head of the Zoology Department of the Madras Christian College (MCC), “Beware the loss of biodiversity”, September 23, 2012, <http://www.thehindu.com/opinion/open-page/beware-the-loss-of-biodiversity/article3927062.ece>)

Professor Edward O. Wilson, Harvard visionary of biodiversity, observes that the current rate of biodiversity loss is perhaps the highest since the loss of dinosaurs about 65 million years ago during the Mesozoic era, when humans had not appeared. He regrets that if such indiscriminate annihilation of all biodiversity from the face of the earth happens for anthropogenic reasons, as has been seen now, it is sure to force humanity into an emotional shock and trauma of loneliness and helplessness on this planet. He believes that the current wave of biodiversity loss is sure to lead us into an age that may be appropriately called the “Eremozoic Era, the Age of Loneliness.” Loss of biodiversity is a much greater threat to human survival than even climate change. Both could act, synergistically too, to escalate human extinction faster.

Biodiversity is so indispensable for human survival that the United Nations General Assembly has designated the decade 2011- 2020 as the ‘Biodiversity Decade’ with the chief objective of enabling humans to live peaceably or harmoniously with nature and its biodiversity. We should be happy that during October 1-19, 2012, XI Conference of Parties (CoP-11), a global mega event on biodiversity, is taking place in Hyderabad, when delegates from 193 party countries are expected to meet. They will review the Convention on Biological Diversity (CBD), which was originally introduced at the Earth Summit or the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992. The Ministry of Environment and Forests (MoEF) is the nodal agency for CoP-11. Today, India is one of the 17 mega-diverse (richest biodiversity) countries. Biodiversity provides all basic needs for our healthy survival — oxygen, food, medicines, fibre, fuel, energy, fertilizers, fodder and waste-disposal, etc. Fast vanishing honeybees, dragonflies, bats, frogs, house sparrows, filter (suspension)-feeder oysters and all keystone species are causing great economic loss as well as posing an imminent threat to human peace and survival. The three-fold biodiversity mission before us is to inventorise the existing biodiversity, conserve it, and, above all, equitably share the sustainable benefits out of it.