The Availability of Wheeling Capacity on the Colorado River Aqueduct For the Cadiz Project

By

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June 23, 2015

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Executive Summary

This report is prepared in response to a request by Cadiz Inc (Cadiz) to evaluate the probability that the Colorado River Aqueduct (CRA) will have space available to convey water for beneficial use by the Santa Margarita Water District and others within the Metropolitan Water District of Southern California (Metropolitan) over the 50 year term of the Cadiz Project. The CRA is owned and controlled by Metropolitan, which it is expected to establish terms and conditions for the conveyance of Cadiz Project water on the CRA.

If the terms include a requirement that the conveyance of water from Cadiz for the benefit of beneficial uses within Metropolitan be made on a condition that "space available" capacity exists, this report concludes that there is a nominal risk (1 or 2 years in 50) that capacity will not be available. Those years will always be in extremely wet years when Cadiz Project water can be safely stored at Cadiz and delivered in subsequent years in which capacity is available or by extending the term of deliveries as required. Given the Cadiz Project's operational flexibility, the ability to conduct make-up deliveries when wheeling capacity is available enables the project to deliver a cumulative total of 2.5 million acre feet ("AF") over the initial 50-year term of the project's agreement.

About Stratecon Inc.

Stratecon Inc. is a strategic planning and economics consulting firm specializing in water and other natural resources, providing advisory services (including due diligence on water projects and investments), proprietary research and testimony in legal proceedings. Stratecon combines a unique combination of disciplines with a proprietary database of water transactions throughout the western United States since the 1980s to provide cost-effective, timely and creative solutions to water resource management problems and legal disputes. For over 23 years, Stratecon published *Water Strategist*, a recognized monthly journal that provided analysis of water finance, legislation, litigation and water marketing. Stratecon launched is new web-based information service covering these issues in January 2014—www.JournalOfWater.com. The author of the report, Rodney T. Smith, Ph.D. is a renowned economist that has extensively studied, written and lectured on Western water issues and participated in major water transfers and projects throughout the western United States and Mexico.

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Introduction

Cadiz requested Stratecon Inc. analyze the availability of wheeling capacity on the Colorado River Aqueduct ("CRA") for water from the the Cadiz Valley Water Conservation, Recovery and Storage Project. Because the CRA is owned and operated by the Metropolitan Water District of Southern California ("Metropolitan"), Cadiz understands that it will only be able to use the aqueduct to deliver water to Southern California if it is allowed by Metropolitan and, further, that it will be allowed to use the CRA only if capacity is available.

With the implementation of the Quantification Settlement Agreement ("QSA") in 2003, the amount of Colorado River water available to Metropolitan has been less than the capacity of the CRA. The question for the Cadiz Project, however, is not about the recent past or availability of wheeling capacity this year. The question is about the availability of wheeling capacity in future years.

In other words, Stratecon's analysis is a forecast of the future availability of CRA wheeling capacity using reasonable assumptions based on available information. No forecast is certain. There is variability in critical underlying conditions. The forecast of available CRA wheeling capacity is no exception. Key variable factors include the variability in California agricultural water demands and hydrology:

- Metropolitan's underwriting the risk of Priority 1, 2 and 3b agricultural users of Colorado River water exceeding 420,000 acre-feet ("AF") per year;
- Availability of unused Colorado River water from agricultural users of Colorado River Water;
- Availability of surplus Colorado River water in the Lower Colorado River Basin

Fortunately, these risks can be quantified. Therefore, one may think in "probabilistic terms", not absolute statements.[1] That is, identify the statistical frequency of available wheeling capacity in terms of the likelihood and amount.

Thinking in probabilistic terms naturally leads to risk management. How should the Cadiz Project manage the risk that there may be insufficient CRA wheeling capacity depending on the character and timing of potential risks? There are two risk management tools. First, Cadiz can engage in make-up deliveries during the initial 50-year term of the project agreement in years when available capacity equals the project's operational capacity to deliver up to 75,000 AF per year, provided that the yearly average of deliveries over 50 years is 50,000 AF. For any years when unused agricultural water or surplus water for example fills the CRA, the storage of Cadiz Project water at Cadiz makes sense for Cadiz Project participants. Second, the term of the

[1] For an insightful discussion of how forecasts/predictions that are not presented in probabilistic terms perform poorly for decision-making, see *The Signal and The Noise*, Nate Silver, Penguin Books (paperback edition), 2015. Silver recommends that forecasts should be presented probabilistically and display the range of potential outcomes.

Cadiz Project agreement could be extended as necessary until the project's cumulative water deliveries reach the target specified in the agreement, 2.5 million AF.[2]

Within this framework, Stratecon assesses the availability of CRA wheeling capacity with the following criteria:

- How many years during the term of the Cadiz Project would there be no available CRA wheeling capacity?
- What is the annual probability of successful conveyance of Cadiz Project water within the CRA over the 50-year initial term?
- What is the time profile of expected annual Cadiz project deliveries?
- How many years would the original term of the Cadiz Project agreement be extended to achieve the project's cumulative water deliveries if make-up deliveries during the initial term were not sufficient to cure the shortfall in deliveries during years when there is no available CRA capacity?

These questions are addressed within the complexities regarding the use of the CRA. The CRA is used to convey:

- Colorado River water available under Metropolitan's Priority 4 entitlement;
- Long-term water transfers involving the Imperial Irrigation District ("IID") with both Metropolitan and the San Diego County Water Authority ("San Diego") and water conserved from the lining of the All American Canal and the Coachella Canal;
- Water Metropolitan receives water from the Lower Colorado Water Supply Project;
- Water available under Metropolitan's land fallowing agreement with the Palo Verde Irrigation District ("PVID"). Under that agreement's terms, the amount of water available varies annually;
- Metropolitan underwrites the risk of Priority 1, 2 and 3b annual use of Colorado River water fluctuating above or below 420,000 AF;
- Unused agricultural use of Colorado River water under Priority 3;
- Creation and recovery of Intentionally Created Surplus ("ICS") Credits;
- An interstate storage agreement with Nevada; and
- Surplus Colorado River water for the Lower Colorado River Basin.

[2] As discussed below, the Cadiz Project proposes the delivery of 50,000 AF per year of water for a term of 50 years. Therefore, cumulative project deliveries are 2.5 million AF. An extension beyond the 50-year term, even if total project deliveries are less than 2.5 million AF would require approval by San Bernardino County.

Therefore, some of Metropolitan's future uses of the CRA are well-defined schedules found in agreements and water rights. Other uses are variable as they depend on future circumstances.

As with any study, Stratecon makes assumptions about future circumstances: (i) Metropolitan's use of its PVID agreement, (ii) creation and recovery of ICS credits and (iii) Nevada's water banking activity in California.[3] The availability of unused Colorado River water from Priority 3 is based on the historic record since the QSA. The availability of surplus water to Metropolitan uses the Bureau of Reclamation's most recent projections for the availability of surplus water to Metropolitan through 2060.

After taking into account the variability and complexity of uses of Metropolitan's CRA, Stratecon concludes that any concern about the availability of CRA wheeling capacity for the Cadiz Project is misplaced. This is not a material risk. Over the entire term of a 50-year agreement, there may only be unavailable wheeling capacity in a couple of years. However, the Cadiz Project's operational flexibility to engage in make-up deliveries enables the project's cumulative deliveries to reach 2.5 million AF over the 50-year term of the project agreement. There is no material risk that the initial term of the agreement must be extended. The expected amount of project water wheeled falls a few thousand acre-feet annually short of 50,000 acre-feet in the early years due to a "flood control release" bubble in the Bureau of Reclamation projections of future surpluses. Even if this bubble is not the phantom as discussed below, expected annual project deliveries will subsequently exceed 50,000 acre-feet to enable the project's deliveries to catch up after the bubble passes.

Availability of CRA wheeling capacity is on a favorable trend. The key drivers for this favorable trend are:

- Reductions in Metropolitan's Priority 4 entitlement from increasing use of Colorado River water by miscellaneous Present Perfected Rights and Indians;
- Transition of Nevada's water banking activity from storage in the short term (which increases use of the CRA) to recovery in the long term (which decreases use of the CRA); and
- The long-term declining trend in the expected availability of surplus water.

[3] Please see discussion below for analysis and data supporting the assumptions about these factors.

Cadiz Project Description

The Cadiz Project proposes to extract and deliver 50,000 AF per year of indigenous groundwater to municipal customers in Southern California for a term of 50 years. Total cumulative deliveries would total 2.5 million AF. The project is designed to have operational capacity to deliver up to 75,000 AF annually to the CRA subject to the limit on cumulative project deliveries over the 50-year term of the agreement.

Groundwater extraction is subject to a Groundwater Management, Monitoring and Mitigation Plan ("Groundwater Plan").[4] The Groundwater Plan is designed to avoid significant adverse impacts and "undesirable results" to critical resources within the region, including:[5]

- Groundwater aquifers tapped by the project
- Local springs in the Fenner Watershed
- Brine resources of Bristol and Cadiz Dry Lakes
- Air quality in the Mojave Desert region
- Vegetation in the Mojave Desert region
- Adjacent areas, including the Colorado River and its tributary sources of water

The Groundwater Plan utilizes a network of monitoring facilities and data collection to track the impact of the Cadiz Project.[6] Mitigation will occur if and when "action criteria" are triggered by deviations from baseline conditions and groundwater model predictions.[7]

For the purpose of accessing the availability of wheeling capacity for the project, Stratecon assumes that the Cadiz Project will operate as intended and can extract 2.5 million AF of indigenous groundwater over the project's 50-year term.

The other issue about the project involves the delivery of Cadiz Project water to customers in Southern California. There are two considerations: Metropolitan's Administrative Code and state law.

Section 4209 of Metropolitan's Administrative Code provides that Metropolitan may join or enter into agreements with member agencies for the wheeling, exchange or banking of water. Section 4207(c) authorizes the General Manager to exchange up to 50,000 AF per year where there is a water quality benefit to Metropolitan by completing the exchange. A contract for conveyance of Cadiz Project water by Metropolitan may, in Metropolitan's discretion all for the use of the CRA capacity, which has a maximum historic use of 1.3 million AF.

A more conservative definition of "space available" can be found under Water Code 1810-1814, whereby Cadiz may receive access to the CRA in which up to 70 percent of any used CRA capacity may be used to convey Cadiz Project water. Assuming that Cadiz water meets the other conditions under California law and Metropolitan policy to gain access to Metropolitan's

[4] *Groundwater Management, Monitoring and Mitigation Plan for the Cadiz Valley Groundwater Conservation, Recovery & Storage Project*, Cadiz Inc., September 2012 (hereinafter cited "Groundwater Plan").
[5] *Ibid*, pp. 2-3.
[6] *Ibid.*
[7] *Ibid*, p. 77

CRA, unused CRA capacity must be at least 71,429 AF to wheel 50,000 AF of Cadiz Project water.[8]

Uses of the Colorado River Aqueduct

Metropolitan's use of the CRA reflects its Colorado River water rights as supplemented by agreements and programs. The discussion distinguishes between uses that are effectively known in the future, "firm uses of the CRA", versus other uses that, by their own circumstances, are variable and, as such are "non-firm" uses of the CRA.

Firm Uses of the CRA

Metropolitan has a Priority 4 right to Colorado River water and additional available water supplies from agreements with IID and PVID. The CRA is also used for conveying Colorado River water made available from a long-term agreement between IID and San Diego County Water Authority ("San Diego") and canal lining projects. Further, Metropolitan has a small residual claim on available water supplies from the Lower Colorado River Water Supply Project.

Metropolitan's Priority 4 Right to Colorado River Water

Under the Seven Party Agreement of 1931, the first 3.85 million AF of Colorado River water available under California's 4.4 million AF entitlement is made available to agricultural water users. Within the 3.85 million AF agricultural right, PVID has Priority 1, the reservation division of the Yuma Project has Priority 2, and IID and the Coachella Valley Water District ("CVWD") Priority 3.[9] Metropolitan's Priority 4 right, 550,000 AF, is the difference between California's 4.4 million AF entitlement and agriculture's 3.85 million AF entitlement.

The 1931 Agreement division of California's 4.4 million AF entitlement did not address the use of "Miscellaneous Present Perfected Rights" and Indian water rights subsequently recognized by the U.S. Supreme Court in its decision *Arizona v. California*. As part of the QSA, IID, CVWD and Metropolitan agreed to share the cutbacks from the use of miscellaneous Present Perfected Water Rights and use of Indian reserved rights as follows:

- Responsibility for the first 14,500 AF of use charged against the Priority 3 rights of IID and CVWD, respectively, 11,500 AF and 3,000 AF
- Use in excess of 14,500 AF charged to Metropolitan

The current use charged against Metropolitan is 5,500 AF.[10] Metropolitan estimates the charge will increase to 47,000 AF by 2030.[11]

[8] 71,429 AF = 50,000 AF/70%
[9] Under a separate 1934 Compromise Agreement, IID's Priority 3 rights are senior to CVWD's Priority 3 rights.
[10] Private communication with Gordon Hess.
[11] *The Regional Urban Water Management Plan, 2010*, Metropolitan Water District of Southern California (hereinafter cited as "Urban Water Management Plan"), Table 3-1, p. 3-9.

Therefore, the amount of Colorado River water available to Metropolitan under its adjusted Priority 4 right is as follows:

- Current: 544,500 AF
- 2030: 503,000 AF

Metropolitan's rights to surplus Colorado River water are discussed below.

Metropolitan's Conservation Agreement with Imperial Irrigation District

IID and Metropolitan entered into a long-term water conservation agreement in 1988. Since the QSA was adopted in 2003, the annual amount of water conserved has averaged 103,835 AF (see Table 1). Pursuant to a 1989 agreement between Metropolitan and CVWD, a portion of the water savings is made available to CVWD. Since the QSA, the amount made available to CVWD has averaged 14,268 AF. Therefore, the amount of water available to Metropolitan under its agreement with IID has averaged 89,566 AF.

Table 1
Water Conservation under the IID/Metropolitan 1988 Agreement

Year	*Conserved Water*	*To CVWD*	*Net Supply*
2004	101,900	20,000	81,900
2005	101,940	20,000	81,940
2006	101,160	20,000	81,160
2007	105,000	20,000	85,000
2008	105,000	16,000	89,000
2009	105,000	12,000	93,000
2010	105,000	8,000	97,000
2011	103,940	4,000	99,940
2012	104,140	10,463	93,677
2013	105,000	6,693	98,307
2014	104,100	19,795	84,305
Average	103,835	14,268	89,566

Source: Compiled from *Colorado River Accounting and Water Use Report: Arizona, California, and Nevada*, 2004-2014

As part of the QSA, the term of the IID/Metropolitan agreement runs with the term of the QSA. See discussion in the next section regarding the term of the QSA and assumptions used in Stratecon's analysis.

Use of Colorado River Aqueduct for IID/San Diego Transfer

IID and San Diego entered into a long-term water conservation and transfer agreement that became effective with the signing of the QSA in October 2003. Table 2 shows the actual volumes of water transferred from 2004 and 2014 and the scheduled volumes of water specified in the agreement in 2015 and thereafter (shaded cells). As with the IID/Metropolitan agreement, the term of the IID/San Diego agreement runs with the term of the QSA. Under an Exchange Agreement entered into by Metropolitan and San Diego, Metropolitan takes delivery of the water made available to San Diego and delivers via exchange a like volume of water to San Diego. As such, this volume of water represents a "firm use" of the CRA for the duration of the underlying agreements.

Table 2
Conserved Water Made Available by the IID/San Diego Agreement

Year	*Acre-Feet*
2004	35,000
2005	30,000
2006	40,000
2007	50,000
2008	50,000
2009	60,000
2010	70,000
2011	63,278
2012	106,733
2013	100,000
2014	100,000
2015	100,000
2016	100,000
2017	100,000
2018	130,000
2019	160,000
2020	193,000
2021	205,000
2022	203,000
post 2022	200,000

Source: Compiled from *Colorado River Accounting and Water Use Report: Arizona, California, and Nevada,* 2004-2014 and delivery schedule of IID/San Diego Agreement

Use of Colorado River Aqueduct for Conveying Canal Lining Water

Related agreements to the QSA also addressed the lining of the All American Canal and Coachella Canal. The lining of the All American Canal was completed in 2010 when conserved water reached its annual yield of 67,700 AF. The lining of the Coachella Canal was completed in 2009 when conserved water reached its annual yield of 30,850 AF. The table below shows the actual volumes conserved through 2014. Pursuant to an Allocation Agreement entered into in 2003, all of the conserved water from the All American Canal project and the amount of conserved water available to San Diego and supplemental water from the Coachella Canal project is allocated to San Diego and parties to the San Luis Rey Indian Water Rights Settlement. The agreement has a 110 year term (starting with delivery of conserved water). As such, this volume of water represents a "firm use" of the CRA for the duration of the underlying agreement.

Table 3
Availability of Canal Lining Water for the CRA
(acre feet)

		All American			*Coachella*		
Year	*San Diego*	*Supplemental*	*Total*	*San Diego*	*Supplemental*	*Mitigation*	*Total*
2004	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-
2006	-	-	-	687	172	155	1,014
2007	-	-	-	23,125	4,500	225	27,850
2008	7,385	1,513	8,898	23,197	4,500	153	27,850
2009	54,429	11,148	65,577	25,759	4,500	591	30,850
2010	56,200	11,500	67,700	25,307	4,500	1,043	30,850
2011	56,200	11,500	67,700	23,765	4,500	2,585	30,850
2012	56,200	11,500	67,700	23,939	4,500	2,411	30,850
2013	56,200	11,500	67,700	24,056	4,500	2,294	30,850
2014	56,200	11,500	67,700	23,923	4,500	2,427	30,850
Average*	56,200	11,500	67,700	24,198	4,500	2,152	30,850

* At full build out: All American Canal (2010-2014) and Coachella Canal (2009-2014)

Source: Compiled from *Colorado River Accounting and Water Use Report: Arizona, California, and Nevada*, 2004-2014

Metropolitan's Transfer with Palo Verde Irrigation District and Related Adjustments

Metropolitan and PVID entered into a 35-year land fallowing agreement in 2004 providing for a minimum of 33,000 AF and a maximum of 133,000 AF of conserved Colorado River water.[12] Table 4 provides the annual amount of water conserved under the program. In 2009, Metropolitan and PVID entered into a one-year supplemental fallowing program that conserved an estimated 24,100 AF of Colorado River water in 2009 and an estimated 37,900 AF of Colorado River water in 2010.[13] The annual amount of water conserved by land fallowing agreement has averaged 93,489 AF.

Table 4
Water Conserved by Metropolitan/PVID Land Fallowing Program

Year	*Acre Feet*
2005	108,666
2006	102,039
2007	65,300
2008	94,303
2009	144,325
2010	148,614
2011	122,216
2012	73,662
2013	32,750
2014	43,010
Average	93,489

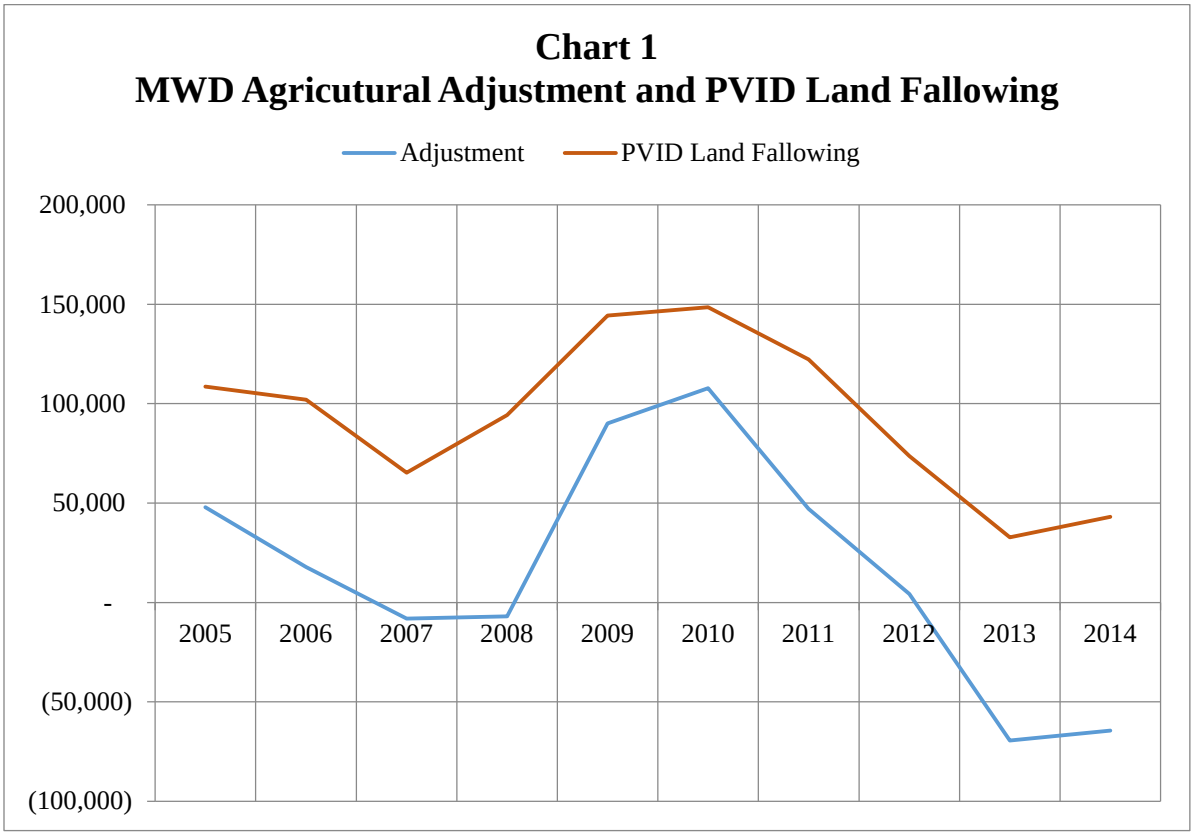
Source: Compiled from *Colorado River Accounting and Water Use Report: Arizona, California, and Nevada*, 2004-2014

Under the QSA, Metropolitan's available Colorado River water is adjusted annually depending on whether the consumptive use of Colorado River water under Priority 1, 2 and 3b is below or above 420,000 AF. Priority 1, 2 and 3b are, respectively, the consumptive use of Colorado River water by PVID, the Reservation Division of the Yuma Project and the Lower Palo Verde Mesa.[14] By reducing PVID's use of Colorado River water, PVID land fallowing increases the amount of Colorado River water available to Metropolitan.

Chart 1 below illustrates how land fallowing under Metropolitan's agreement with PVID is a key driver of Metropolitan's Adjustment. The annual variation of the amount of water conserved by land fallowing explains 95% of the annual variation in Metropolitan's Adjustment for available Colorado River supplies from the consumptive use of Priority 1, 2 and 3b. For the

[12] Urban Water Management Plan, p. 3-6.
[13] *Ibid*
[14] The Bureau of Reclamation also includes the use of Colorado River water on Yuma Island in the calculation.

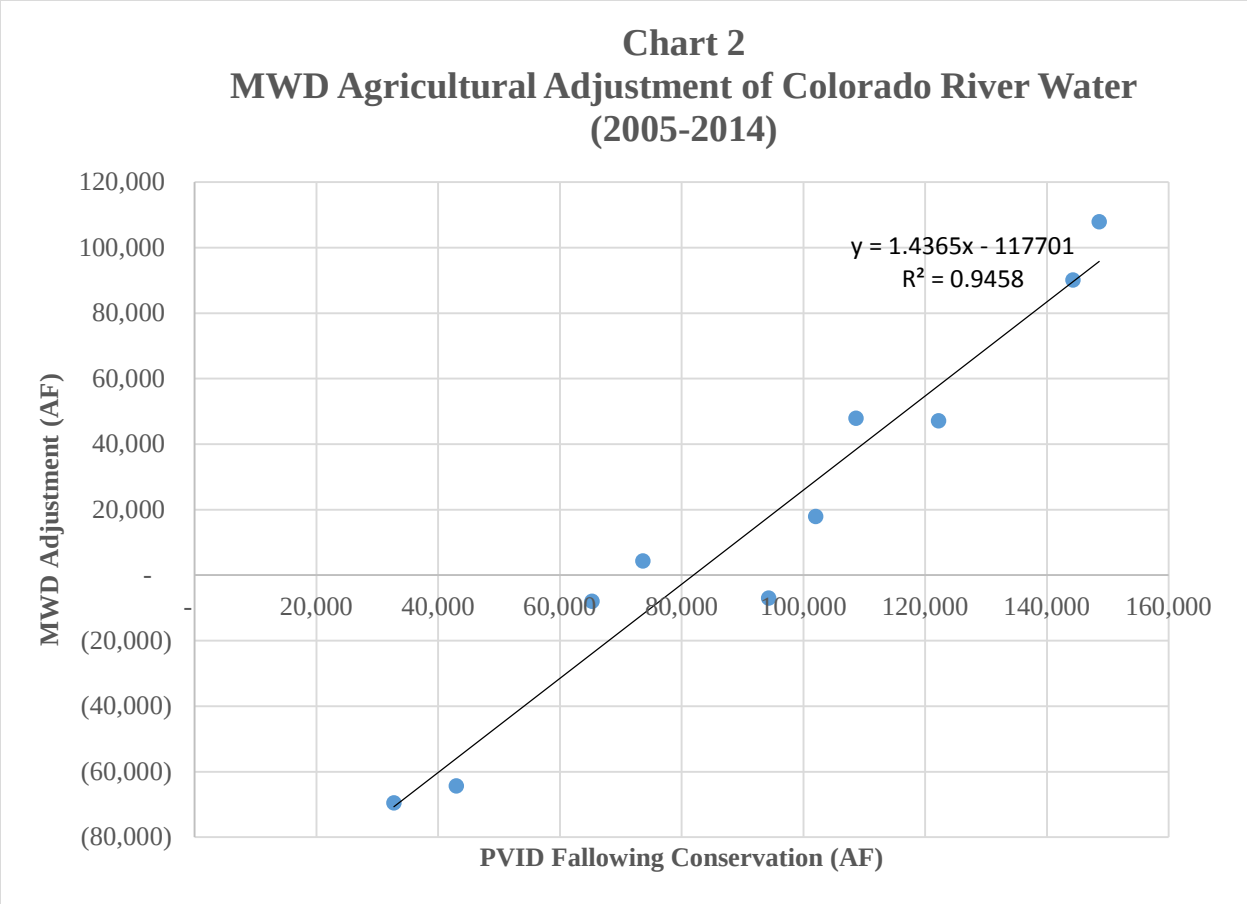
period 2005-2014, "Metropolitan Agricultural Adjustment" has averaged 16,596 AF. With PVID land fallowing averaging 93,489 AF during this time period, there has been sustained overruns by Priority 1, 2 and 3b relative to the 420,000 AF benchmark. Metropolitan must engage in significant land fallowing to offset its liability for underwriting the risk that the consumptive use of Colorado River water by Priority 1, 2 and 3 b (plus Yuma Island) exceeds 420,000 AF per year.



Source: Compiled from *Colorado River Accounting and Water Use Report: Arizona, California, and Nevada*, 2004-2014

To avoid a supply reduction resulting from the consumptive use of Colorado River water by Priority 1, 2 and 3b exceeding 420,000 AF, Metropolitan must conserve about 82,000 AF of water by land fallowing (see Chart 2).[15]

[15] The value of "x" that yields an estimated MWD Adjustment of zero.



Metropolitan's Share of Lower Colorado Water Supply Project

The Lower Colorado Water Supply Project ("LCWSP") is enacted under federal legislation authorizing an exchange of water pumped from the project's well field for Colorado River water.[16] The program is intended to help meet the domestic, municipal, industrial and recreational water needs of users adjacent to the Colorado River in Imperial, Riverside and San Bernardino Counties. The legislation authorizes construction of wells with a total annual capacity of 10,000 AF. In 2007, the Bureau of Reclamation entered into a contract with Metropolitan to use LCWSP project water unused by the City of Needles and other entities with no rights or insufficient rights to Colorado River water in California.[17]

LCWSP pumping has increased significantly in the past two years, increasing from 4,208 AF in 2012 to 7,195 AF in 2014 (see Table 5). The share of pumping available to Metropolitan fluctuates annually, reflecting the fact that Metropolitan's rights are junior to federal and non-federal parties to the project.

[16] *Colorado River Accounting and Water Use Report: Arizona, California, and Nevada*, 2014, p. 34

[17] Urban Water Management Plan, p. 3-7.

Table 5
LCWSP Pumping and Water Available to Metropolitan
(Acre Feet)

Year	*Project Pumping*	*Available to Metropolitan*	*Metropolitan's Share*
2004	1,259	-	
2005	1,036	-	
2006	1,412	-	
2007	5,989	5,011	83.7%
2008	7,350	6,300	85.7%
2009	3,684	2,349	63.8%
2010	5,104	3,872	75.9%
2011	4,460	3,611	81.0%
2012	4,616	4,208	91.2%
2013	5,510	5,114	92.8%
2014	7,195	6,109	84.9%

Source: Compiled from *Colorado River Accounting and Water Use Report: Arizona, California, and Nevada*, 2004-2014

Long-Term Firm Uses of the CRA and Potentially Available Wheeling Capacity

The firm uses of the CRA leave significant unused capacity (see chart below).[18] There is about 400,000 AF of CRA capacity available in 2015 for Metropolitan's non-firm uses discussed below and potential wheeling. The potentially available capacity declines in the next few years with the build-up of water deliveries under the IID/San Diego agreement. In 2022, when those deliveries stabilize at their long-term level of 200,000 AF per year, the potentially available capacity declines to 318,984 AF. The continued growth in potentially available capacity

[18] **Net Priority 4 right**: Metropolitan's 550,000 AF Priority 4 right less deduction for Metropolitan's charge for use by miscellaneous PPR's and Indians water use, starting at 5,500 AF in 2014 and increasing to 47,000 AF by 2030.

The IID/Metropolitan conservation agreement: yield 89,556 AF annually (the average for 2004-2014).

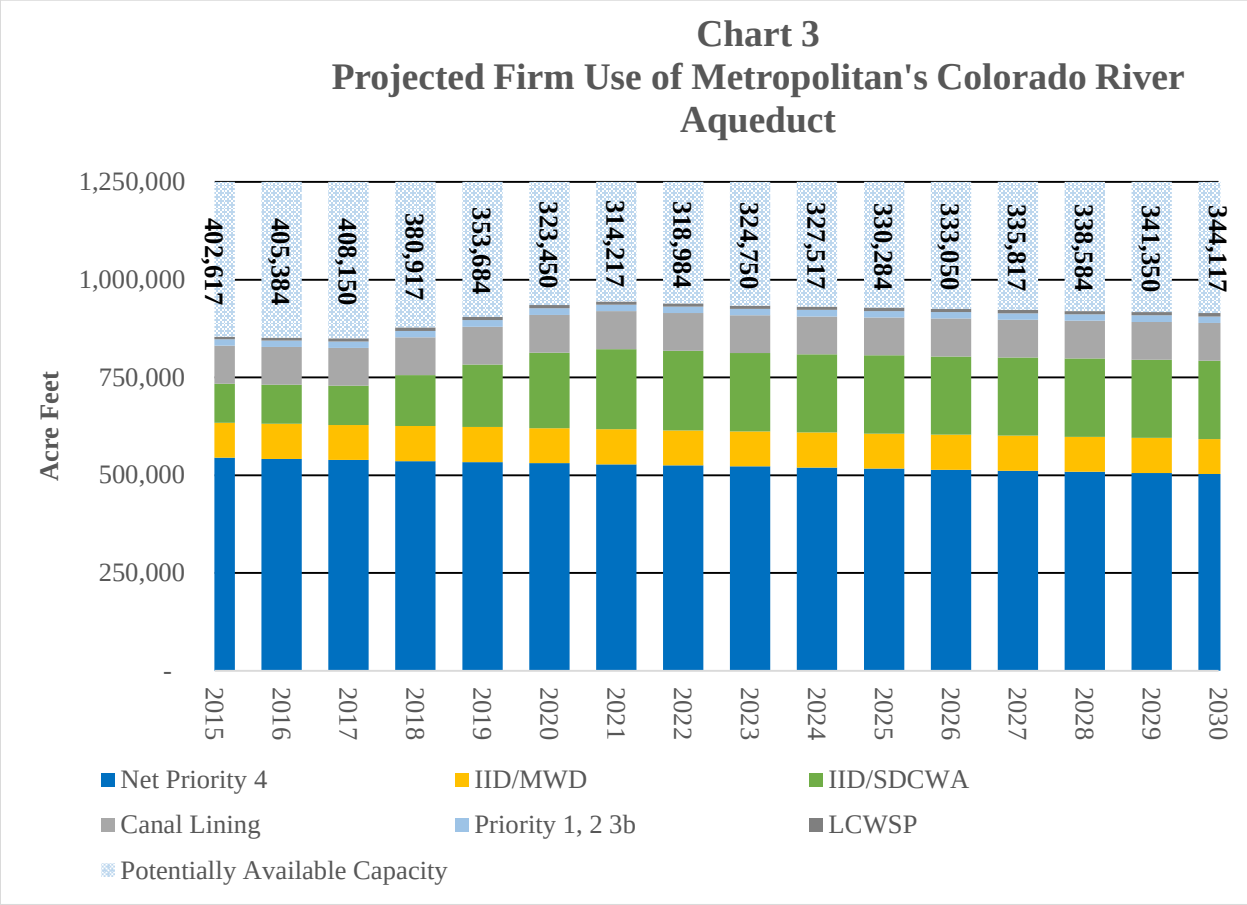
IID/San Diego agreement: per scheduled deliveries

Canal lining: 67,700 AF per year for the All American Canal and 28,958 AF per year for the Coachella Canal (average available since 2009 when the project was completed)

Priority 1, 2, 3b: 16,596 AF per year, the predicted Metropolitan Adjustment when water conserved by land fallowing equals 93,489 AF per year (the average for 2005-2014).

LCWSP: projection assumes that pumping equals its authorized amount of 10,000 AF per year by 2018 and the water available to Metropolitan equals 85% of pumping (the share of cumulative pumping made available to Metropolitan since 2007).

thereafter reflects the growing deduction from Metropolitan's Priority 4 right as use by miscellaneous PPR's and Indians reaches 47,000 AF per year by 2030.



Non-Firm Uses of CRA

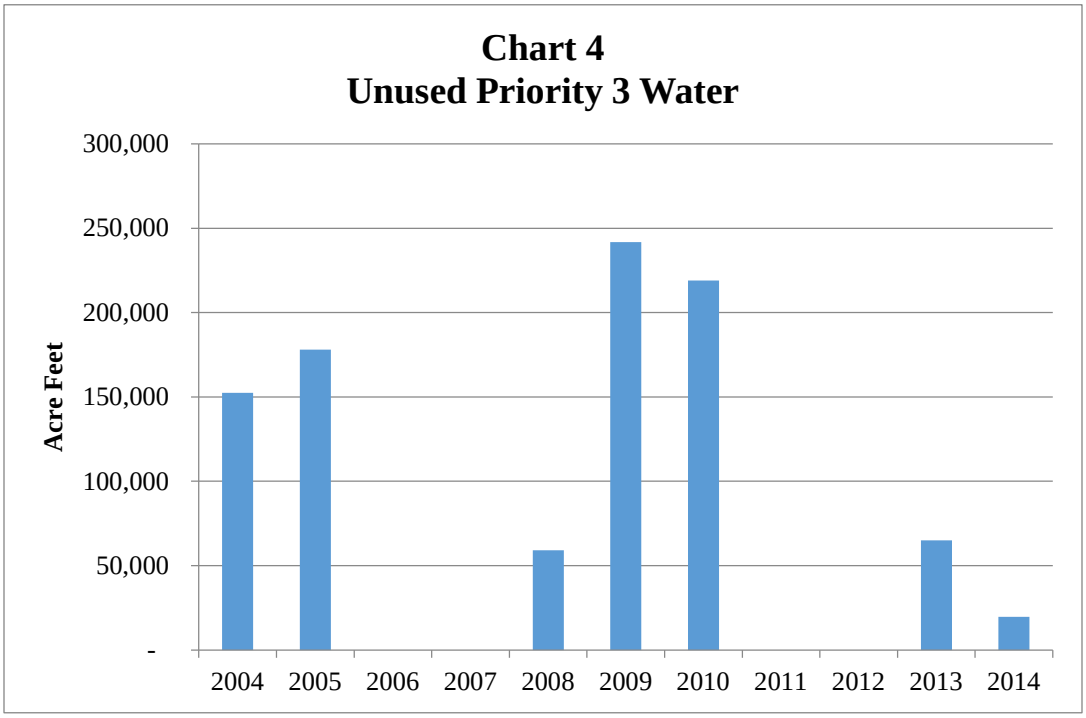
There are four uses of the CRA that are non-firm:

- Unused Priority 3 water
- Metropolitan's ICS Credits
- Interstate Banking Programs
- Metropolitan's Right to Surplus Water

Unused Priority 3 Water

IID and CVWD, respectively, have a Priority 3 right to 3.1 million AF and 330,000 AF of consumptive use of Colorado River water. These quantifications are adjusted for transfers, including canal lining projects. To the extent that the actual consumptive use of Colorado River water is less than the adjusted entitlements, the "underruns" become unused Colorado River water available to Metropolitan.

Chart 4 shows the record of unused Priority 3 water for 2004-2014.[19] In four of the eleven years, there was no unused Priority 3 water. In three other years, the volume of unused Priority 3 water was minor (approximately 50,000 AF or less). In the remaining four years, there were significant blocks of unused Priority 3 water (ranging from 150,000 AF to almost 250,000 AF). Note that even the maximum amount of unused Priority 3 water left at least 72,000 AF of unused CRA capacity (using the minimum estimate of potentially available capacity in the figure above). While the historic record has "runs" of successive years of either no unused Priority 3 water or positive amounts of unused Priority 3 water, the correlation between the amounts of unused Priority 3 water in successive years is weak.[20]



[19] Calculated as the amount, if any, IID's and CVWD's consumptive use of Colorado River water is below IID's and CVWD's Priority 3 entitlement (3.43 million AF), less 14,500 AF for Colorado River water use by miscellaneous PPR's and Indians, less IID transfers to Metropolitan (net of amount used by CVWD) and San Diego, less mitigation water to the Salton Sea, less canal lining water, less IID and CVWD paybacks of overruns, less IID creation of ICS credits, plus IID recovery of ICS credits, less amount of LCWSP water exchanged with IID for Colorado River water. Data compiled from *Colorado River Accounting and Water Use Report: Arizona, California, and Nevada*, 2004-2014.

[20] The correlation in the amount of unused Priority 3 water in successive years is 0.28. With 9 data points, the standard deviation of the estimated correlation coefficient is 0.33 (under the null hypothesis of no correlation). The resulting T-statistic (estimated correlation/standard deviation of correlation coefficient) is 0.85. A T-statistic of 0.85 with 9 degrees of freedom has a significance level of only 42%.

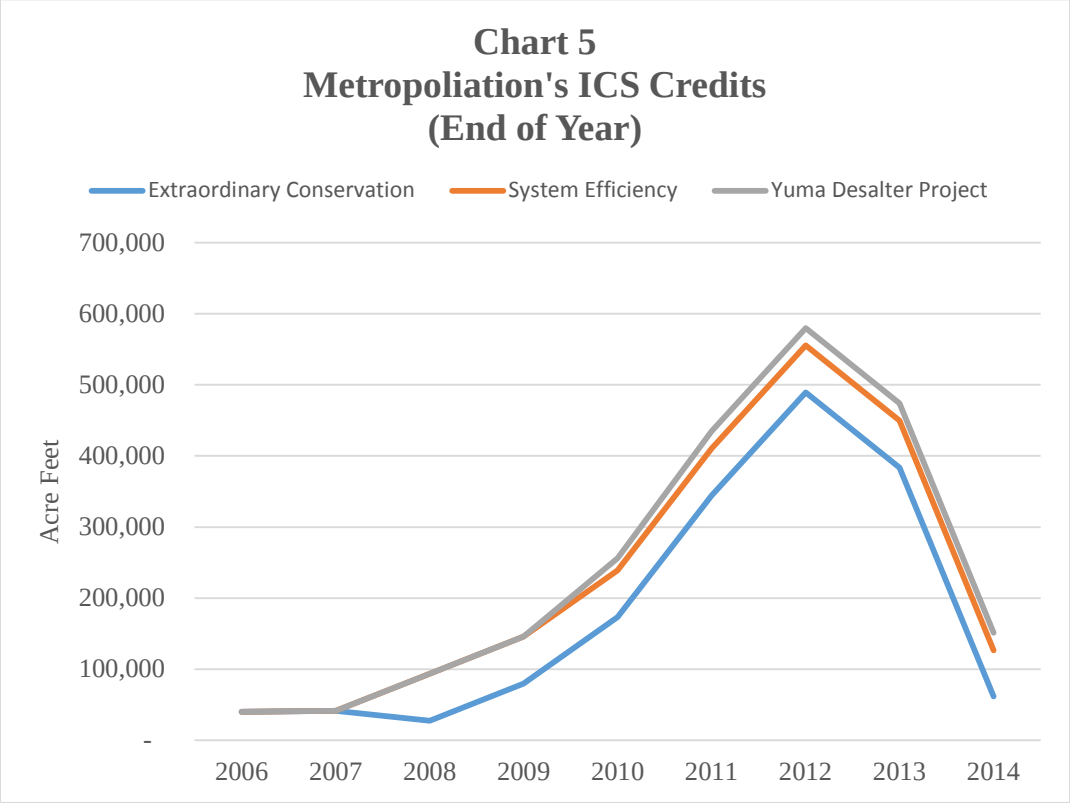
Metropolitan's ICS Credits

In 2007, the Bureau of Reclamation approved implementation of Intentionally Created Surplus ("ICS") credits, which would become available when a Colorado River water user undertook specified actions to reduce their use of Colorado River water. If the water "created" by the actions is not used in the year the water is created, it can be stored in Lake Mead for use in future years. Water stored is subject to a one-time 5% system assessment and an annual evaporation loss of 3%. ICS water stored in Lake Mead is lost when there are flood control releases from Lake Mead. ICS credits may not be recovered during the declared shortages in the Lower Colorado River Basin.

Metropolitan has created and used ICS credits from three activities:

- Extraordinary conservation (PVID land fallowing and canal lining water)
- System conservation
- Pilot run of Yuma Desalter Project.

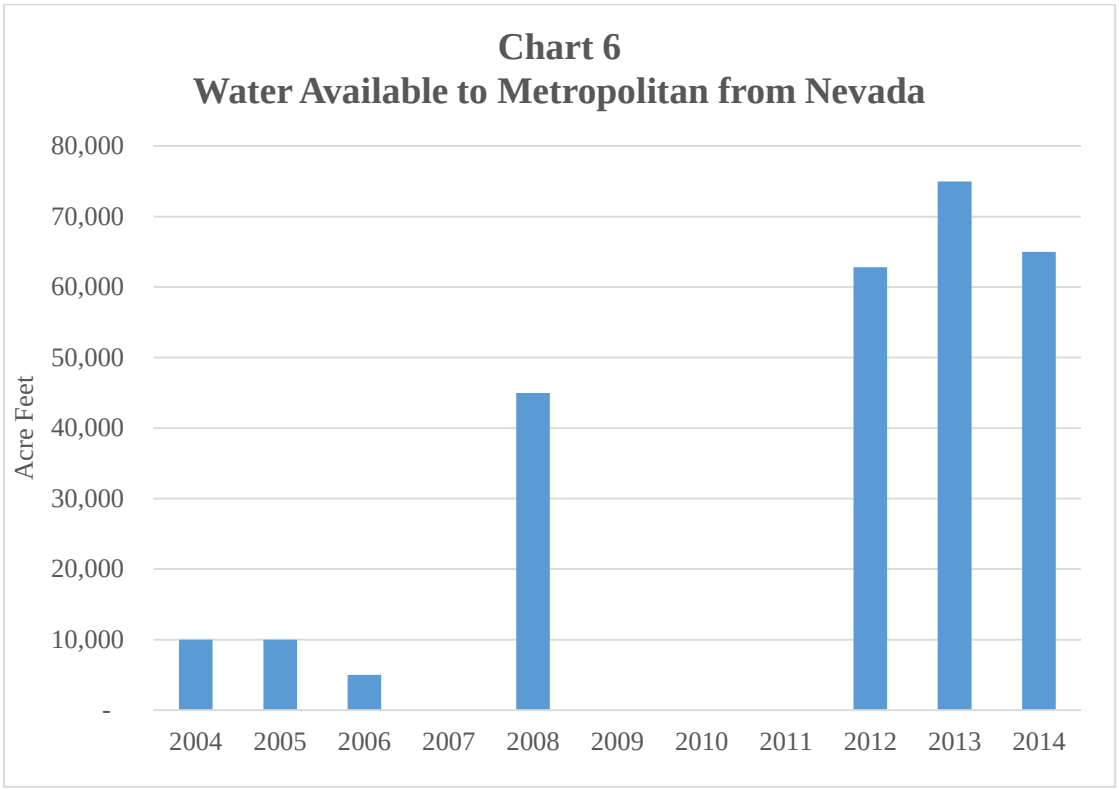
Chart 5 shows the ending balance of Metropolitan's ICS credits in each year since the program was initiated in 2006. Metropolitan's ICS credits peaked in 2010 at almost 600,000 AF. Since then, Metropolitan has been recovering ICS credits, especially from the extraordinary conservation account.



Interstate Water Banking

Metropolitan, the Southern Nevada Water Authority and the Colorado River Commission of Nevada entered a Storage and Interstate Release Agreement in 2004. Under the agreement, Metropolitan stores unused Colorado River entitlement of Nevada for subsequent recovery by Metropolitan through development of Intentionally Created Unused Entitlement for Southern Nevada Water Authority. Pursuant to a 2012 amendment to the agreement, Nevada will store a minimum of 200,000 AF and a maximum of 400,000 AF through 2016. The maximum amount of water Nevada may recover is 30,000 AF in any year. The maximum amount of water Nevada may make available is 75,000 AF in any year. Of the amount of water made available, two-thirds is added to Nevada's storage account and one-third becomes Metropolitan's water.

Chart 6 shows water made available to Metropolitan under the Nevada Storage Agreement. When Nevada stores water, this represents another use of the CRA. However, when Nevada recovers water from storage, Metropolitan will reduce its use of the CRA either by assigning water made available under its agreements with IID or PVID to Nevada or by undertaking new extraordinary conservation measures that reduces its use of Colorado River water.



Metropolitan Surplus Colorado River Water

Metropolitan has two rights providing them access to Colorado River water: (i) Priority 5 right to 662,000 AF and (ii) Priority 6(a) to 38,000 AF. Water is available under these priorities

when the Bureau of Reclamation declares the availability of surplus water under its Interim Guidelines. The Bureau of Reclamation has not declared a surplus during the period 2004-2014.

Assumptions of Analysis

As stated in the introduction, the question about the availability of wheeling capacity for the Cadiz Project involves a forecast of the future availability of CRA capacity. This requires assumptions about the future circumstances of each of the uses of the CRA discussed in the prior section. The key assumptions involve the term of water conservation agreements, Metropolitan's future decisions regarding land fallowing in PVID, availability of unused Priority 3 water, Nevada's water banking activity, future ICS credits and the availability of surplus water.

Some of the factors are, by their very nature, subject to variation. In those instances, the assumptions involve specification of the statistical distribution generating the conditions. That is, due to the underlying variability of factors, a pattern may be analyzed statistically but may not be predicted precisely.

Term of Water Conservation Agreements

A significant portion of the existing uses of the CRA involves the movement of water under various conservation agreements. Many of these agreements, such as the IID/Metropolitan, IID/San Diego and Metropolitan/PVID agreements are tied to the QSA. Stratecon assumes that the QSA will run through 2077.

If the QSA terminates earlier than assumed, there would be significant increases in available CRA wheeling capacity until subsequent agreements are developed.

Metropolitan's Land Fallowing Program in Palo Verde Irrigation District

The historical record shows that Metropolitan must conserve about 80,000 AF per year of Colorado River water to offset its expected liability for agricultural water use under Priority 1, 2 and 3b exceeding 420,000 AF per year. Therefore, Metropolitan must conserve more than 80,000 AF under the PVID agreement before it can reasonably anticipate that their land fallowing program combined with its obligations concerning Priority 1, 2 and 3b represents a net contribution to Colorado River water conveyed through the CRA. Metropolitan must push forward aggressively on PVID land fallowing to avoid falling behind in its Colorado River supply. Stratecon assumes that PVID land fallowing will range between 80,000 AF and 120,000 AF per year.

To capture the annual variability in Metropolitan's land fallowing, Stratecon assumes that in any given year, Metropolitan is equally likely to conserve by land fallowing 80,000 AF, 90,000 AF, 100,000 AF, 110,000 AF or 120,000 AF of Colorado River water. Stratecon's prediction of MWD's Agricultural Adjustment uses the statistical model in Chart 2. To

incorporate the variability in the consumptive use of Priority 1, 2 and 3b, Stratecon takes random draws from the statistical distribution of the residual of the MWD adjustment model.[21]

Availability of Unused Priority 3 Water

Stratecon uses the data from 2004-2014 to define the cumulative statistical distribution for the availability of unused Priority 3 water in any year (see Table 6).[22] That is, there is a 36% probability of no unused Priority 3 water in any year. There is a 45% probability that unused Priority 3 water will be 19,665 AF or less in any year. In other words, unused Priority 3 water will be in the range of up to 19,665 AF 9% of the time.[23]

Table 6
Cumulative Probability Distribution for Unused Priority 3 Water

Threshold Amount	*Cumulative Probability*
0	36%
19,665	45%
59,104	55%
64,909	64%
152,341	73%
178,036	82%
219,054	91%
241,778	100%

Nevada's Water Banking Activity

Nevada's water banking activity in California has increased significantly in recent years with the post-2008 decline in Nevada's consumptive use of Colorado River water. Until a complete post-2008 recovery emerges, Nevada can be expected to continue banking water in California. In the short-term, Nevada's banking activity represents another use of the CRA. In the longer-term, Nevada will recover banked water; which will require Metropolitan to forego diversions of Colorado River water and increase the available capacity for CRA wheeling.

[21] The residuals of the model are not normally distributed. Instead, they follow a LaPlace distribution with parameters 781.037,15481.4924.

[22] The simulations assume that there are independent draws from this cumulative distribution. For the 2004-2014 period, the serial correlation of unused Priority 3 water was .28. The standard error of the estimate is .33. Therefore, the estimated serial correlation coefficient is not statistically different from zero.

[23] For the cumulative distribution in the text, the probability that unused Priority 3 water will fall in the range defined by the numbers in the row above and in the row equals the difference in the cumulative probability of the rows. Therefore, the probability that unused Priority 3 water will fall in the range of 219,054 AF and 241,778 AF is 9%.

Stratecon assumes that Nevada's recovery will start between 2018 and 2022, and it will be from 5 to 10 years until Nevada's use of Colorado River water returns to pre-2008 levels. In other words, Stratecon's analysis includes a range for when Nevada will start withdrawing water from storage (reducing the use of the CRA) between 2022 and 2032.[24]

ICS Credits

Stratecon assumes that Metropolitan will coordinate its creation and recovery of ICS credits with management of its other storage programs. Metropolitan will store water when there are high allocations from the State Water Project ("SWP"), or when there is surplus Colorado River water or unused Priority 3 water available. Metropolitan will withdraw water from storage when there are low SWP allocations so that available SWP and Colorado River water supplies cannot meet member agency water demands. The modeling of ICS Credits assumes that Metropolitan's member agency demands are 1.8 million AF.

MWD has 1.9 million AF Table A SWP entitlement. The supply reliability challenges of the SWP are legendary. As part of its analysis of the Bay Delta Conservation Plan, DWR has completed an updated analysis of the deliverability of the SWP project. Table 7 shows the results for the existing conveyance—High Delta Outflow Scenario.[25] Ninety-nine percent of the time, the SWP allocation will exceed 12%. About half the time, the SWP Allocation will exceed 41%. The minimum allocation is 7.2% and the maximum allocation is 91%. Stratecon uses this cumulative distribution in its Monte Carlo analysis of the availability of CRA wheeling capacity to generate sequences of SWP allocations in the future.[26]

Table 7
SWP Allocation and Probability of Exceedance

SWP Allocation	*Probability of Exceedance*
12%	99%
29%	86%
34%	74%
36%	62%
41%	49%
43%	37%

[24] Stratecon further assumes that Nevada will not bank any water in California during declared shortages in the Lower Colorado River Basin.
[25] See Appendix 9.A Economic Benefits of the BDCP and Take Alternatives, May 2013, p. 9.A-12. The data are readings from the figure titled "Total SWP Deliveries (Probability of Exceedance).
[26] Note that the 5% SWP Allocation in 2014 was below the 7.2% minimum.

SWP Allocation	*Probability of Exceedance*
48%	25%
53%	12%
91%	0%

With the variability in SWP supplies, storage is a critical component of supply reliability. Table 8 presents the capacity and water stored in MWD water storage programs.[27]

Table 8
MWD Water Storage Programs, June 30, 2014

	Water	*Capacity*	*Take Limit*
Semi-Tropic	224,482	350,000	223,000
Arvin-Edison	183,705	350,000	75,000
Kern Delta	162,963	250,000	50,000
Mojave	39,404		
Conjunctive Use	59,047	211,889	50,000
Total	669,601	1,161,889	398,000

Stratecon assumes that Metropolitan follows an operational rule of first store available water in its water storage programs and second store water via new ICS credits. This priority reflects the following disadvantage of ICS credits:

- Water cannot be recovered during declared shortages in the Lower Colorado River Basin, which is an increasingly likely prospect
- ICS credits also pay a one-time assessment of 5% of water stored, 3% annual loss and the risk of complete loss during flood control releases

Concerning recovery, Stratecon assumes that Metropolitan will first draw down ICS credits (when it can). Again, the increasing risk of declared shortages in the Lower Colorado River Basin means that Metropolitan runs a risk that water stored in Lake Mead could be "locked in" for a substantial time period. Metropolitan does not face this inflexibility in its other storage opportunities.

[27] Metropolitan Water District Annual Report, 2014, pp. 30-33, 39-40.

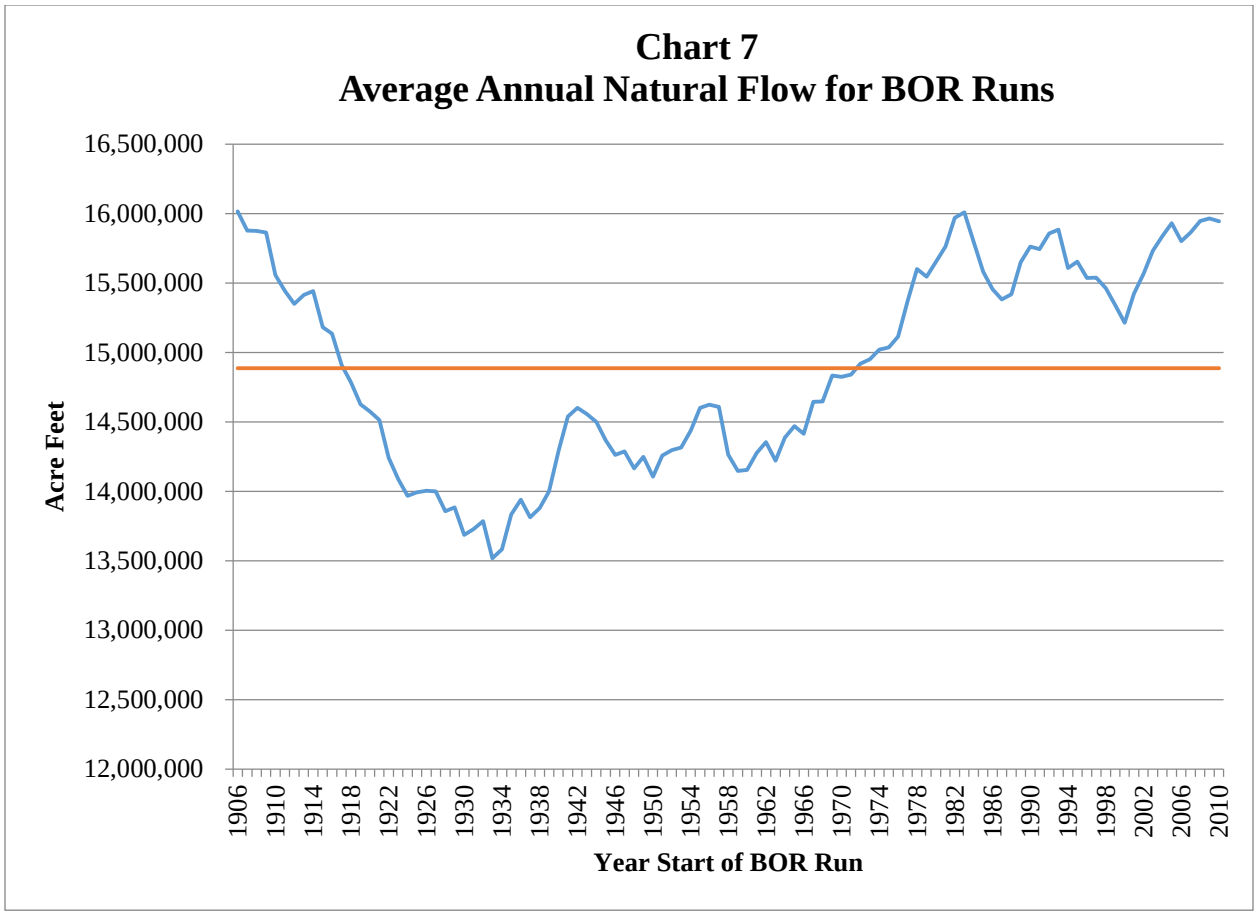
Future Status of the Colorado River

The Bureau of Reclamation forecasts the future status of the Colorado River with the Colorado River Simulation System ("CRSS"). Simulations are available for 2015 through 2060. The future flows of the Colorado River are based on the 1906-2010 historic record of Colorado River flows using the "Index Sequential Method." Under this method, there are a total of 105 runs where the flow for 2015 is assumed to start at one of the years in the 1906-2010 record and proceed for 46 years. If the end of the historic record is reached before 46 years, then the method uses the flows starting in 1906 and thereafter as needed to obtain flows for 46 years.

The Bureau of Reclamation provided Stratecon with spreadsheets that provided the year-by-year forecasts for Lower Basin shortages and surplus water available to Metropolitan for the 105 runs. The probability of a shortage in the Lower Colorado River basin can be computed for each year by counting the number of runs for a year with a shortage divided by the total number of runs. The probability of surplus water for Metropolitan can be computed each year by counting the number of runs for a year with a positive quantity of surplus water divided by the total number of runs. The probability of a normal year for each year can be computed by counting the number of runs for a year without a shortage or surplus divided by the total number of runs.

Implications of the Index Sequential Method

Chart 7 shows the average annual natural flow of the Colorado River at Lees Ferry for the Bureau of Reclamation runs starting in each of the years of the 1906-2010 historic record. The average flow for the 1906-2010 period is 14.9 million AF. Note that average flows for runs starting with the years 1906-1916 and 1974-2010 are in excess of 14.9 million AF. That is, in 48 of the Bureau's 105 runs (or 46% of the runs), the Bureau is assuming that the average flows in the Colorado River between 2015 and 2060 will be *greater* than the average flows during the 1906-2010 historic record.



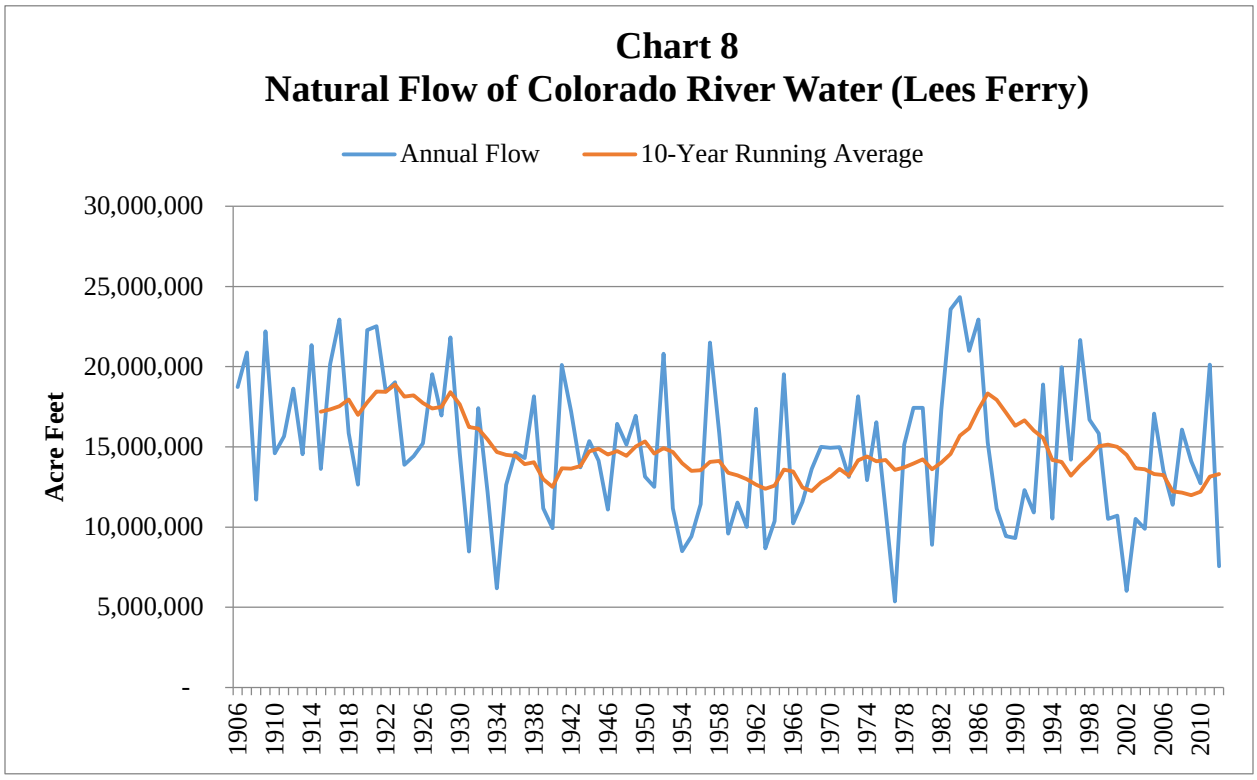
Stratecon believes that any assumption that Colorado River flows going forward will be greater than historic flows is inconsistent with an emerging consensus that the 20th century hydrologic conditions were unusually wet. The hydrologic record speaks for itself (see Chart 8). Since the early 20th century, the 10-year running average of natural flows peaked in the mid-1920s (during negotiations of the Colorado River Compact) and has been on a steadily declining trend interrupted only by the large floods in the 1980s and some favorable flows in the late 1990s. The current 10-year running average is now around the 13.5 million AF, the long-term average flow measured by tree ring studies. The current drought may be a return to long-term hydrologic conditions.[28]

Stratecon only analyzes the Bureau runs that have average annual flows below the historic average.[29] It makes this assumption because those runs are generally agreed to be most representative of future conditions. On the other hand, including information from runs that have higher average annual flows than the historic average will overstate the likelihood of surpluses and understate the presently acknowledged high risk of shortage. As illustrated by the figure

[28] For further discussion, see *Increasing Hydrologic Risk in the Colorado River Basin*, Rodney T. Smith, Hydrowonk Blog, January 28, 2013. http://hydrowonk.com/blog/2013/01/28/increasing-hydrologic-risk-in-the-colorado-river-basin/

[29] These are Bureau runs 11 through 67.

above, only one of the Bureau runs (starting in 1933) has an average annual flow of 13.5 million AF, the long-term average flow indicated by original tree-ring studies.

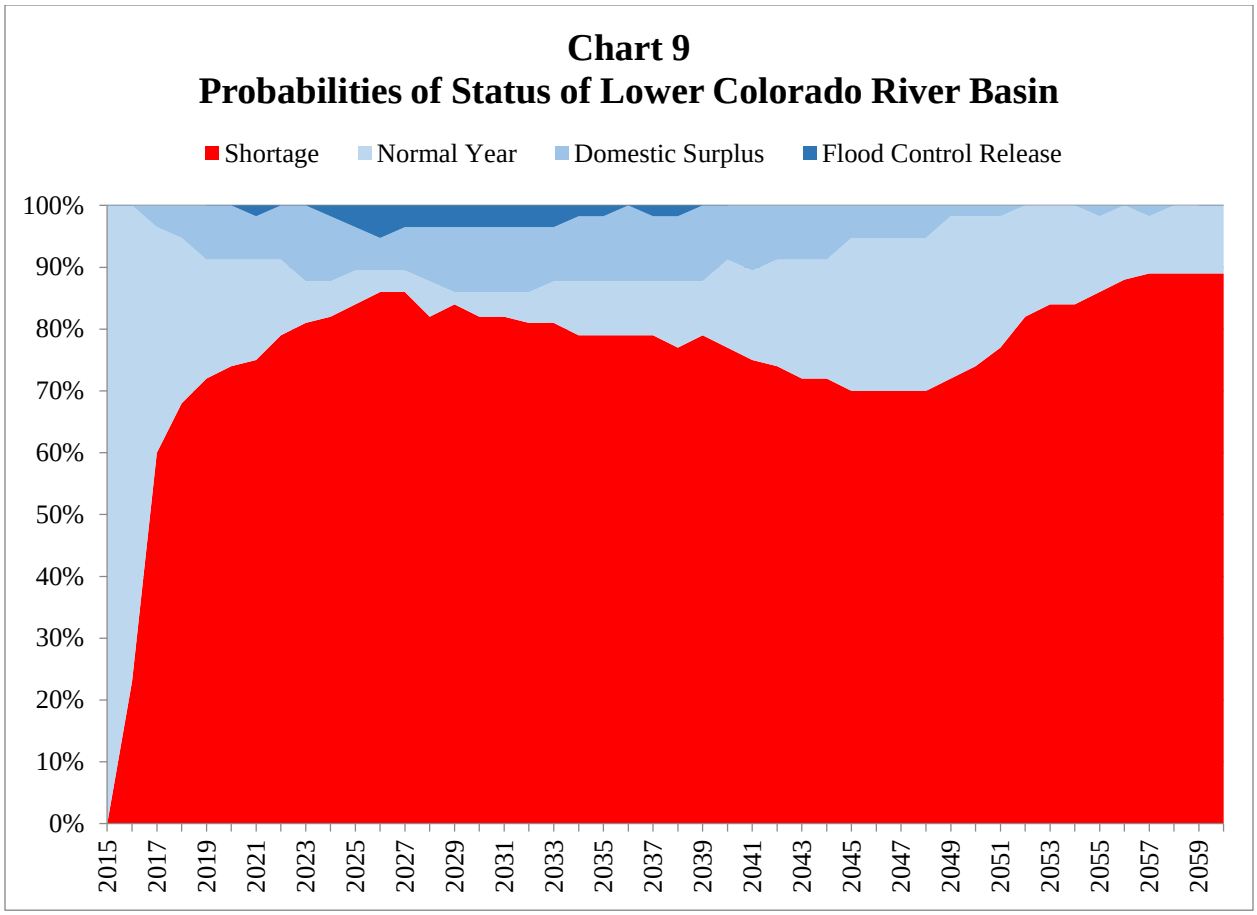


Probabilities of Surplus and Shortages

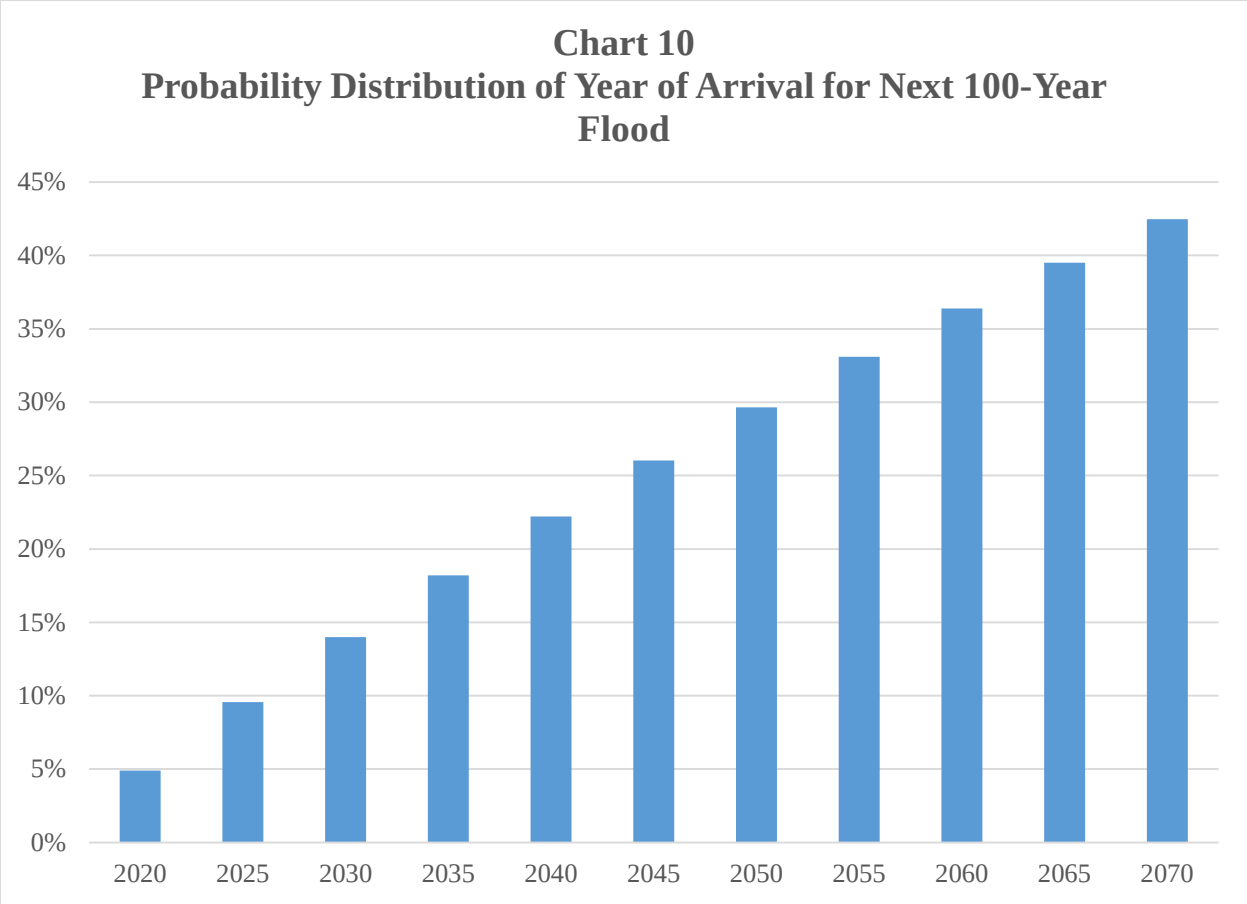
Chart 9 shows the probabilities of shortage, normal year, domestic surplus and flood control releases.[30] The broad hydrological consensus is that the future of the Lower Colorado River Basin is one of shortage. By 2019, the annual probability of a shortage is 72% and the probability of a normal year is 19%. The probability of a domestic surplus is 9%. The probability of a shortage continues to increase through the 2020's when there is a small risk of flood control releases. Since flood control releases are a low probability event (once in a hundred years or so) with no time trend, the time dimension in the Bureau runs may reflect the fact that the Index Sequential Method takes the temporal realizations of the 20th century and superimposes them on the 21st century. This may be the case of being "fooled by randomness."[31] The bubble of flood control risk may be illusionary.

[30] When Stratecon inspected the yearly surpluses occurring for Metropolitan, it was found that there were really two numbers: 250,000 AF (domestic surplus) and 395,000 AF (which Stratecon terms flood control releases).

[31] Nassim Nicholes Talet argues that humans do not understand randomness and tend to see patterns that don't exist. See his book *Fooled by Randomness: The Hidden Role of Chance in Life and in the Markets* (2005).



Flood control releases occur during extremely high flow years on the Colorado River. For example, suppose they occur during 100-year floods. By definition, a 100-year flood occurs with an expected frequency of once in a century. The probability of the flood occurring in any year is 1%. From the perspective of 2015, there is (about) a 5% chance that the next 100-year flood will occur by the year 2020 (see chart below). There is not quite a 15% chance that the next 100-year flood will occur by the year 2030. There is about a 35% probability that the next 100-year flood will occur by the year 2060—only seven years before the end of the Cadiz Project's 50-year term. The concentration of the probabilities in the 10-year period 2025 through 2035 reflects the assumption of the Index Sequential Method that the precise sequence of realization of flows in the 20th Century will be replicated in the 21st Century.



Availability of Wheeling Capacity for the Cadiz Project

The availability of wheeling capacity for the Cadiz Project uses a CRA Monte Carlo simulation model developed by Stratecon. The model generates time profiles of available capacity on the CRA in the face of the trends discussed above and the statistical variability in MWD's land fallowing program with PVID, overruns and underruns by Priority 1, 2, and 3b, underruns by Priority 3, the variability in the creation and recovery of ICS credits by MWD in the face of the variability in SWP allocations, the uncertainty regarding the timing of recovery of stored water by Nevada and the likelihood of shortages, normal years, domestic surpluses and flood control releases.[32] For purposes of this analysis and as a conservative assumption, available capacity is defined as seventy percent of the difference between 1.25 million AF and all the uses

[32] Use of probability distributions and Monte Carlo analysis are recommended to incorporate uncertainty into analysis of water projects. See *Principles and Guidelines for Evaluating Federal Water Projects: U.S. Army Corps of Engineers Planning and the Use of Benefit Cost Analysis*. A Report for the Congressional Research Service, August 2009, pp. 46-49

listed in previous sections.[33] The model is developed in Microsoft Excel using the add-in @Risk.[34]

How Many Years of Unavailable Capacity?

Chart 11 shows the probability distribution of the number of years one can expect the Cadiz Project to have no wheeling capacity.[35] The most likely outcome is that, over the term of the Cadiz Project, there may be <u>two</u> years of no available capacity for Cadiz Project water. The expected number of years is 1.8. The risk that there are more than five years of no available capacity is remote. There will be capacity available in future years to make-up deliveries for the few years of no access to the CRA.

The finding about only a few years of unavailable capacity reflects the following factors:

- The large volume of CRA capacity lacking a firm use (more than 300,000 AF)
- A domestic surplus or even the largest underrun by Priority 3 (250,000 AF) will not in isolation eliminate wheeling capacity for the Cadiz project
- The long-term recovery of Nevada's water stored with Metropolitan will make further unused capacity available
- Metropolitan's liability for growing use by miscellaneous PPR's and Indians will about equal the size of the Cadiz Project by 2030

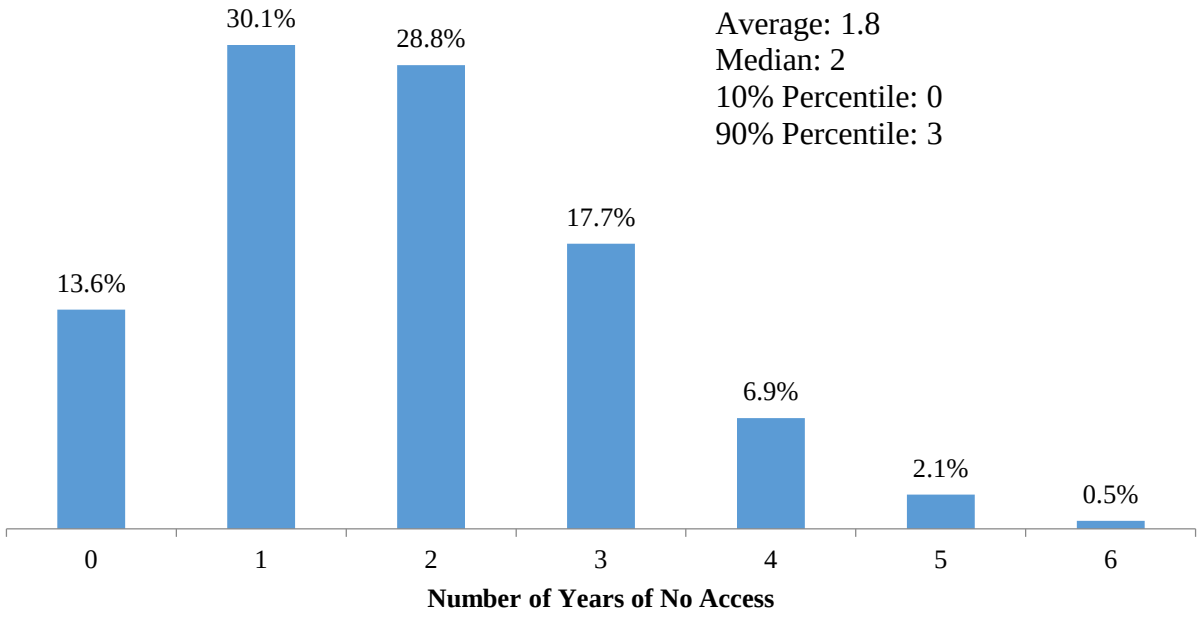
From a risk assessment perspective, the lack of wheeling capacity is really a bet on either a 100-year flood or a combination of extreme events with domestic surplus and large underruns by California agricultural water users. Based on the quantification of risks for these various factors, the lack of significant wheeling capacity for any period of time is remote. The range defined by the 10% percentile and the 90% percentile indicates that the total number of years without wheeling capacity is between no years and three years.

[33] Metropolitan may wheel water pursuant to its Administrative Code as discussed above. Further, Metropolitan's historic use of the CRA has reached 1.3 million AF. As a result, the analysis assuming that only 70% of unused CRA capacity is available to the Cadiz Project is conservative.

[34] The "Latincube" sampling method is used to assure that the statistical distribution of draws conform with their stated distribution. To assure that the results of Monte Carlo analyses ran under different scenarios about Nevada's recovery of stored water, the Monte Carlo study samples from the statistical distributions with the "fixed seed" method. This option uses the same sequences of random draws from the statistical distributions. The study uses 10,000 iterations.

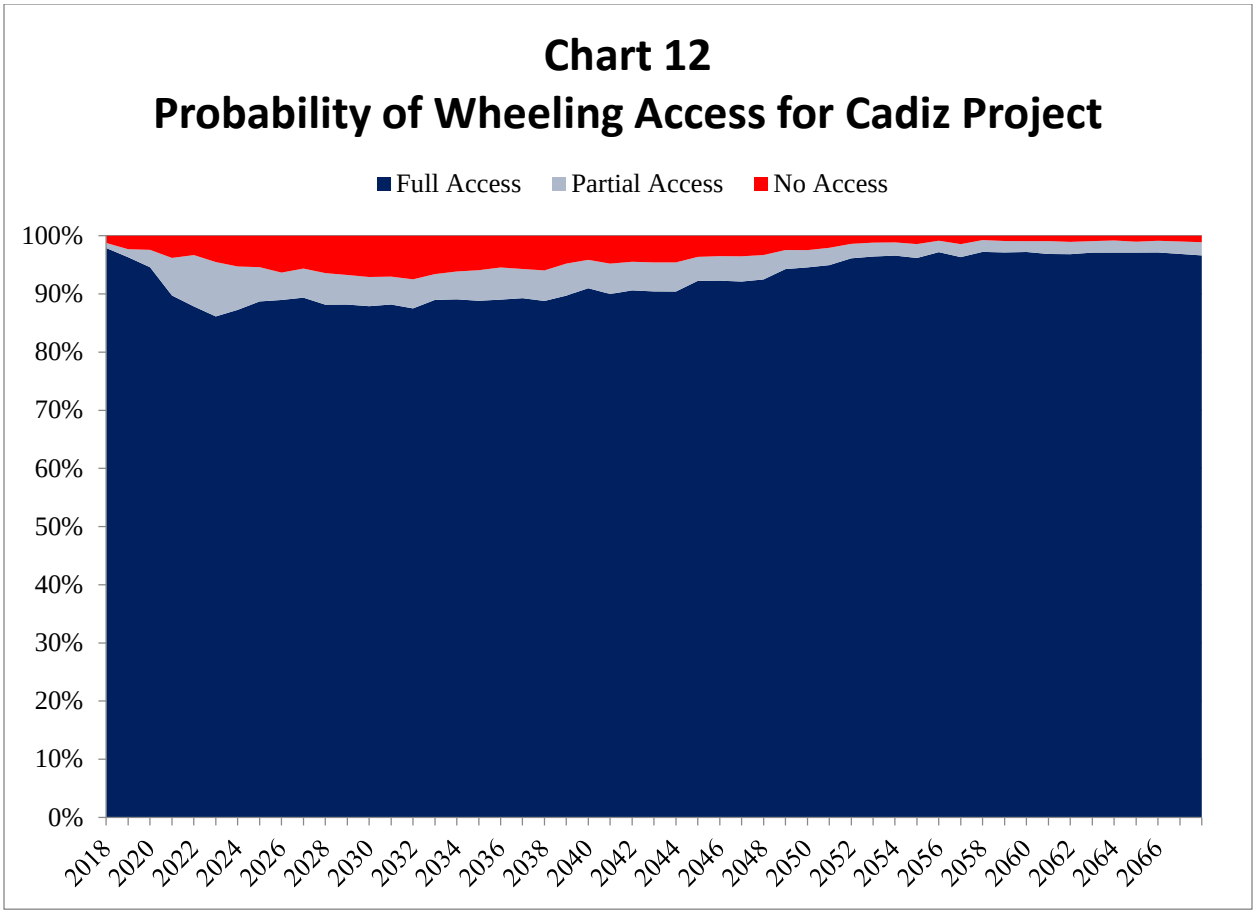
[35] Analysis assumes that the wheeling capacity available to Cadiz is 70% of unused CRA capacity in any year.

Chart 11
Probability Distribution of Number of Years with No Wheeling Access During Term of Cadiz Agreement



Probabilities of Wheeling Access for the Cadiz Project

Chart 12 shows the probability of wheeling access for the Cadiz Project. Assuming that the project starts in 2018, the probability of full access (ability to wheel 50,000 AF in a year) is 98% and partial access (ability to wheel less than 50,000 AF but more than zero) is 1%. These probabilities of access fall slightly in the first half of the 2020's due to the build-up in deliveries in the IID/San Diego Agreement and due to the flood control release bubble in the Bureau of Reclamation of projections of surpluses. After this bubble, the probability of wheeling access steadily increases with the increased likelihood that Nevada is recovering water stored with Metropolitan and the continued decline in Metropolitan's Priority 4 right due to increased use of Colorado River water by miscellaneous PPR's and Indians. Long-term, full wheeling access is almost a certainty given the declining long-term prospects for surplus Colorado River water.

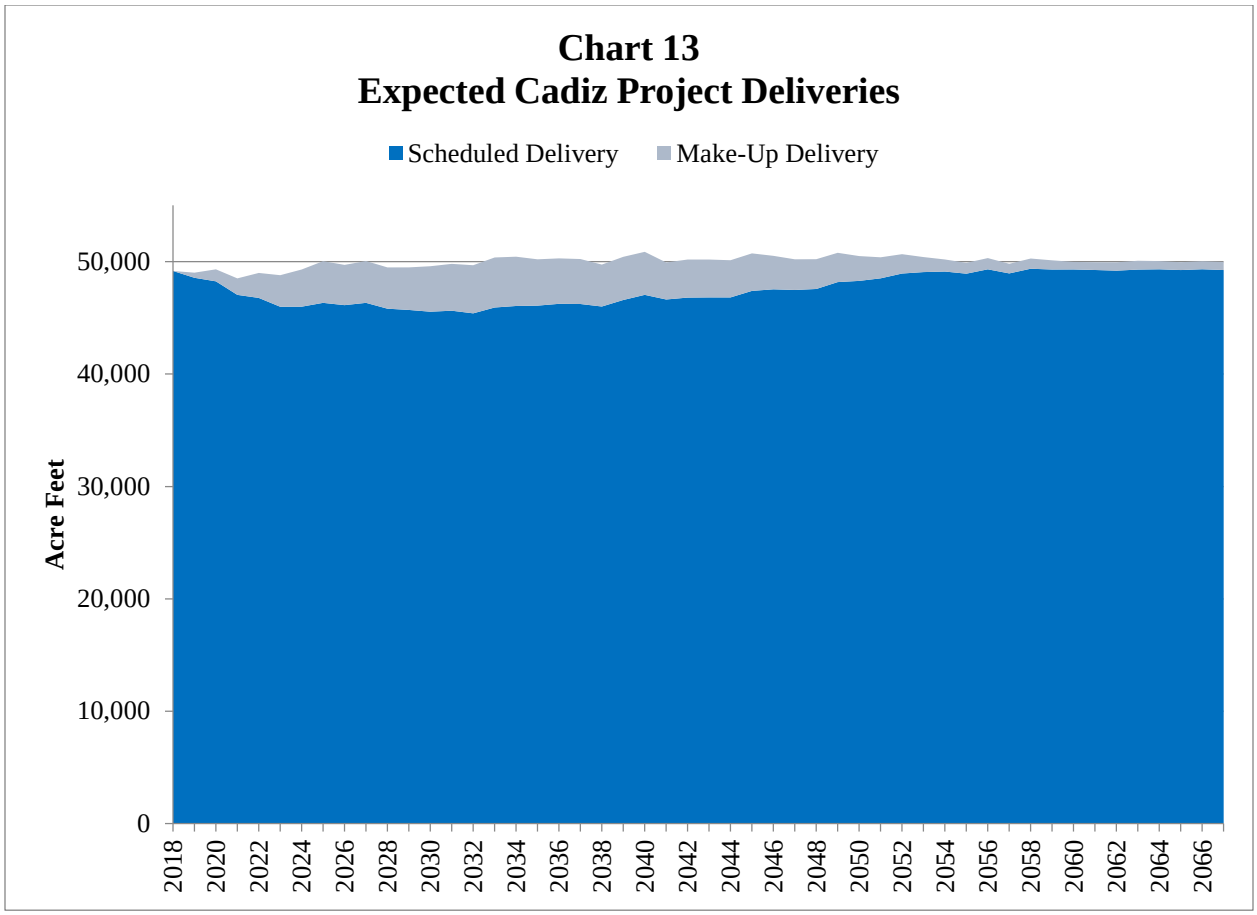


What are expected Cadiz Project Deliveries over the Term of the Cadiz Project?

Chart 13 shows time profile of expected Cadiz Project deliveries. Expected annual deliveries start in excess of 49,000 AF and steadily increase thereafter. This time profile reflects the dynamics discussed above as well as the "flood control risk bubble" in the Bureau of Reclamation runs. Note that expected make-up deliveries are an important source of project deliveries in the short term.

What is the economic significance of this profile of expected deliveries relative to moving 50,000 AF per year for 50 years? For any given inflation-adjusted, economic value of water, the present value of expected project deliveries equals 99.5% of the present value of certain project deliveries.[36] In other words, wheeling risk defers some project deliveries relative to a fixed delivery schedule. The "cost of wheeling risk" may be on the order of 0.5%.

[36] Calculation based on a risk free interest plus 250 basis point risk premium. Risk free rate is inflation-adjusted interest rate of 2.0%, a rate assumption consistent with long-term rates in the capital markets. See *Project Evaluation II: Thoughts on Interest Rates*, Rodney T. Smith, Hydrowonk Blog, January 11, 2013 http://hydrowonk.com/blog/2013/01/11/project-evaluation-ii-thoughts-about-interest-rates/



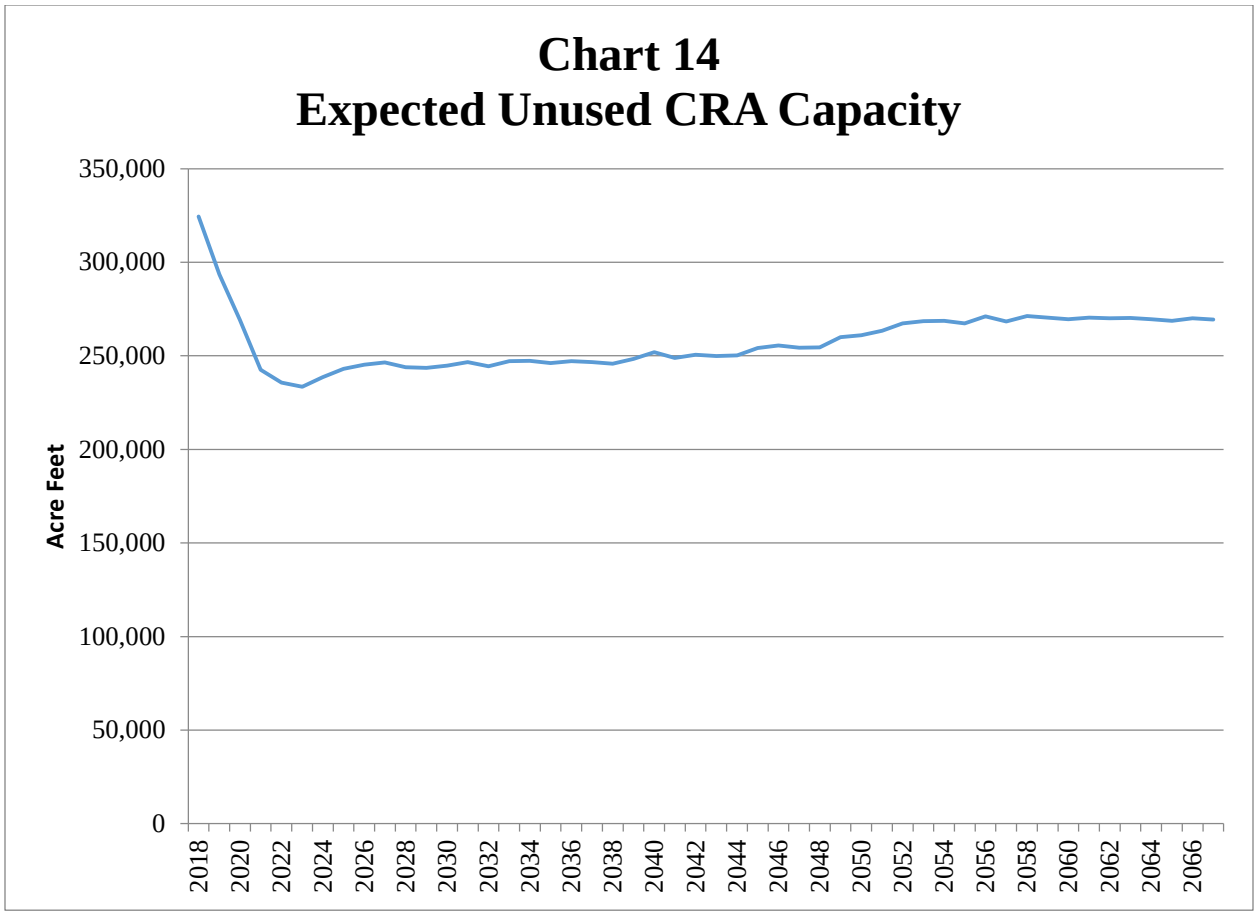
How Long Will the Initial Project Term Be Extended?

The probability of a contract extension is zero. None of the 100,000 iterations had a termination date beyond 2067.

Expected Unused CRA Capacity

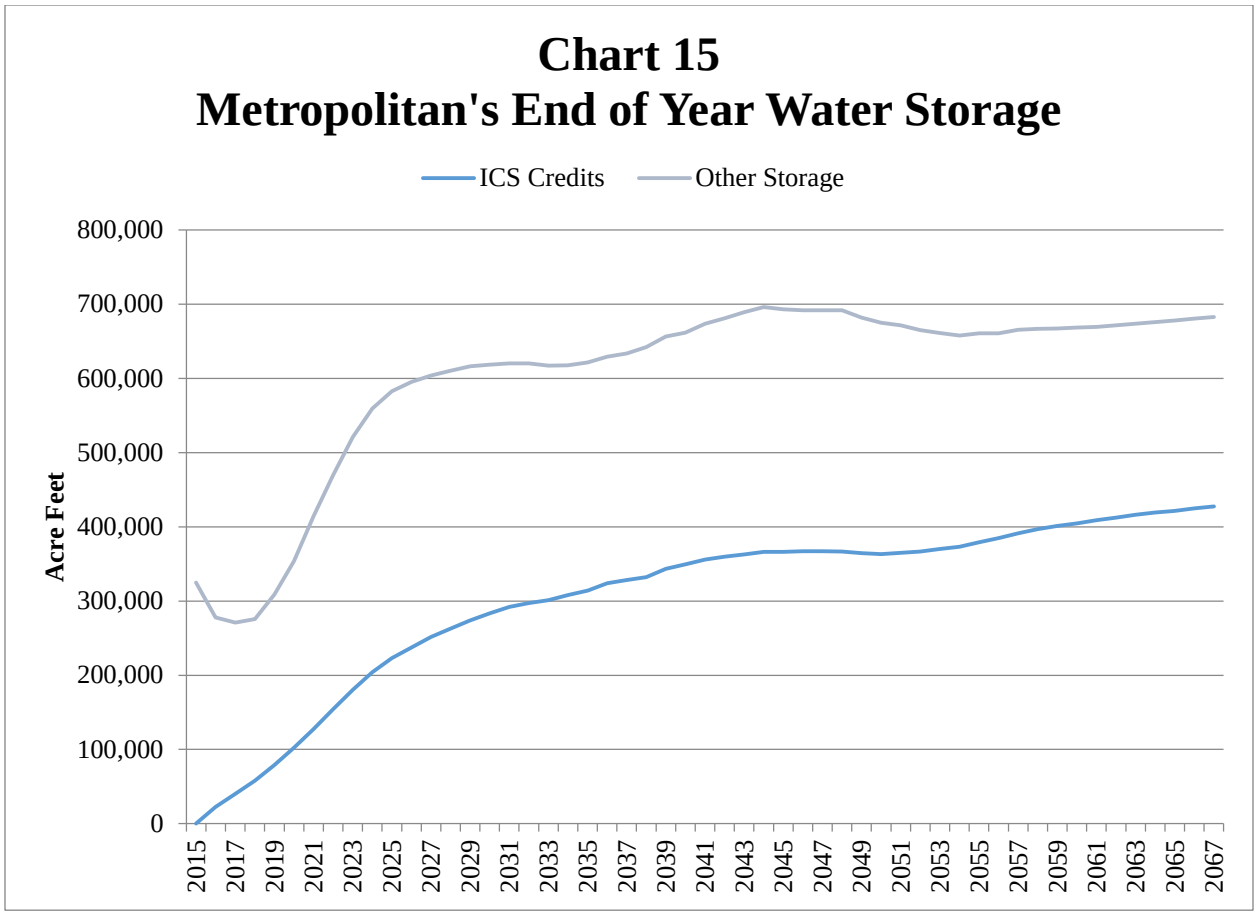
The ability of the Cadiz Project to manage the risk of wheeling access reflects two factors. First, as discussed above, the firm use of the CRA leaves more than 300,000 AF of potentially available capacity long-term and in excess of 400,000 AF at the start of the Cadiz Project. This unused capacity is available for non-firm uses of the CRA: unused Priority 3 water, ICS credit activity, interstate banking and surplus water.

Chart 14 shows the expected unused CRA capacity given these non-firm uses. Expected unused CRA capacity falls after 2018 with the build-up of deliveries under the IID/San Diego Agreement. Thereafter, expected unused capacity is about 250,000 AF per year and steadily increasing long-term with the declining long-term probabilities of surplus water.



Metropolitan Water Storage

Chart 15 shows the expected time profile of Metropolitan's ICS Credits and water stored in other Metropolitan programs. Metropolitan is projected to draw down storage significantly in 2015, especially ICS credits in advance of a declared water shortage in the Lower Colorado River Basin when ICS credits cannot be recovered. Over the longer term, Metropolitan's expected storage levels recover to reach slightly less than 700,000 AF (recall that Metropolitan had 669,601 AF on June 30, 2014). The expected total puts into ICS credits is about 1,453,000 AF (after 5% system assessment). The expected loss from flood control releases is about 114,000 AF. Therefore, the "storage risk" of ICS credits is 7.8%.



Concluding Thoughts

The availability of CRA wheeling capacity in the future depends on future trends in the firm use and non-firm use of the CRA. Key uncertainties about the future include:

- Metropolitan's underwriting risk of Priority 1, 2, and 3b fluctuating around 420,000 AF per year
- Availability of unused Priority 3 water
- Availability of surplus Colorado River water

These risks can be quantified based on post-QSA data and Bureau of Reclamation studies of shortages and surpluses in the Colorado River basin using runs where average flows in the 21st century are below average flows in the 20th century. Other unknown factors include the timing of Nevada's recovery of water stored with Metropolitan. For the range of assumptions made about this timing and combined with the quantification of the other risks, Stratecon's risk assessment finds that the risks regarding the availability of CRA wheeling capacity for the Cadiz Project is not material.

Stratecon believes that its risk assessment *overstates* the wheeling risk for a variety of reasons. The critical risk factor involves the availability of surplus water. In its study, Stratecon uses Bureau of Reclamation runs based on the historic record of the 20th century. There is growing acceptance in the water industry, including Stratecon's own analysis that future surplus water availability will be less than predictions based on 20th century data because of consideration of tree-ring reconstructed streamflows and global climate models reflecting anticipated climate change.

The absence of capacity in the CRA is not problematic for the Cadiz Project if it occurs in a wet year. Project Participants are likely to find the carry-over of Cadiz Project water in a wet year to be very desirable; allowing them to benefit from storage and the subsequent delivery of the stored water in years in which conditions are normal or dry when with CRA capacity is available.

Finally, in the exercise of its discretion and in consideration of benefits conferred by the Cadiz Project and as an accommodation to the Project Participants within its service area, Metropolitan can agree to move the water within the limits of the CRA's capacity whose maximum historic use has been 1.3 million AF.