

**AGREEMENT BETWEEN THE SECRETARY OF THE INTERIOR
AND THE STATE OF ARIZONA FOR THE
FIRMING OF CENTRAL ARIZONA PROJECT INDIAN WATER**

1. PREAMBLE: THIS FIRING AGREEMENT, hereinafter referred to as "Agreement" is made and entered into this 15TH day of NOVEMBER, 2007, pursuant to the Act of June 17, 1902, 32 Stat. 388, and acts amendatory thereof and supplementary thereto, including, but not limited to the Colorado River Basin Project Act of September 30, 1968 (82 Stat. 885) (P.L. 90-537), as amended, the Arizona Water Settlements Act of December 10, 2004, (118 Stat. 3478) (P.L. 108-451), Arizona Revised Statutes, Title 45 Section 2423, as amended, and Arizona Revised Statutes, Title 45, Section 2491, between the UNITED STATES OF AMERICA, acting through the Secretary of the Interior, hereinafter referred to as the "Secretary," and the STATE OF ARIZONA, acting through the Arizona Water Banking Authority, hereinafter referred to as the "Authority;"

WITNESSETH, THAT:

2. EXPLANATORY RECITALS:

2.1 WHEREAS, Paragraph 9 of the Arizona Water Settlements Agreement, effective September 20, 2006, (also known as the Master Agreement) among the United States of America, the State of Arizona, and the Central Arizona Water Conservation District, provided for the reallocation of 197,500 acre-feet per year of CAP NIA Priority Water to Indian tribes, subject to certain conditions, and further provided that the reallocated water retain the priority of CAP NIA Priority Water; and

2.2 WHEREAS, CAP NIA Priority Water is more vulnerable to reductions in times of shortage as compared to CAP Indian Priority Water or CAP M&I Priority Water; and

2.3 WHEREAS, Section 105 of P.L. 108-451 requires the Secretary and the State of Arizona to develop a firming program to ensure that 60,648 acre-feet of CAP NIA Priority Water shall, for a period of 100 years, be delivered during Water Shortages in the same manner as CAP M&I Priority Water; and

2.4 WHEREAS, Section 105(b)(1) of P.L. 108-451 requires the Secretary to firm 28,200 acre-feet of CAP NIA Priority Water reallocated to the Tohono O’odham Nation and to firm 8,724 acre-feet of CAP NIA Priority Water to be reallocated in the future to other Arizona Indian tribes; and

2.5 WHEREAS, Section 105(b)(2) of P.L. 108-451 requires the State of Arizona to firm 15,000 acre-feet of CAP NIA Priority Water reallocated to the Gila River Indian Community and to firm 8,724 acre-feet of CAP NIA Priority Water to be reallocated in the future to other Arizona Indian tribes, and further requires the State of Arizona to assist the Secretary in the Tohono O’odham Nation firming requirement; and

2.6 WHEREAS Section 207 of P.L. 108-451 requires the Secretary and the State of Arizona to enter into an agreement to carry out the obligation of the State of Arizona under Section 105(b)(2)(A) of P.L. 108-451 as a condition precedent to the enforceability of Title II of P.L. 108-451 and the Amended and Restated Gila River Indian Community Water Rights Settlement Agreement (“GRIC Settlement Agreement”); and

2.7 WHEREAS, Section 207 of the Gila River Indian Community Water Rights Settlement Act of 2004, Title II of P.L. 108-451, requires as a condition precedent to the enforceability of Title II of P.L. 108-451 and the GRIC Settlement Agreement that the State of Arizona enact legislation to authorize the firming required by section 105 of P.L. 108-451; and

2.8 WHEREAS, Section 306 of the Southern Arizona Water Rights Settlement

Amendments Act of 2004, Title III of P.L. 108-451, requires that the State of Arizona contribute \$3,000,000 toward the firming obligation identified in Section 105(b)(1)(A) of P.L. 108-451 either in the form of cash or in-kind goods and services in accordance with a schedule that is acceptable to the Secretary and the State; and

2.9 WHEREAS, Paragraph 8.23 of the GRIC Settlement Agreement confirms the State of Arizona's obligation to firm 15,000 acre-feet per year of CAP NIA Priority Water to the equivalent of CAP M&I Priority Water for a period of 100 years after the Title II Enforceability Date; and

2.10 WHEREAS, Paragraph 5.10 of the Tohono O'odham Settlement Agreement dated May 5, 2006, confirms the obligation of the Secretary to firm 28,200 acre-feet per year of CAP NIA Priority Water to the equivalent of CAP M&I Priority Water for a period of 100 years after the Title III Enforceability Date and confirms the requirement of the State of Arizona to provide assistance to the Secretary in firming that water; and

2.11 WHEREAS, in 2005, the Legislature of the State of Arizona enacted HB 2728 which created the Arizona Water Firming Program Study Commission ("Study Commission") and directed the Study Commission: (a) to study options for a water firming program to satisfy the State of Arizona's obligations under Section 105 of P.L. 108-451, (b) to identify appropriate mechanisms to firm water, (c) to study the existing powers and duties of the Authority and the general statutory authorities necessary to implement the firming program, and (d) to make recommendations regarding the appropriate statutory and regulatory provisions necessary to fully implement the water firming program; and

2.12 WHEREAS, the Study Commission met frequently in 2005 to perform technical studies and to discuss the issues related to Indian firming and the Study Commission then issued

its Final Report to the Legislature on January 6, 2006, which recommended that the Arizona State Legislature empower the Authority to include a variety of programs to address Indian firming needs within its Annual Plan of Operation and the 10-Year plan and identified the most feasible mechanism to satisfy the State's firming obligation and provide funding; and

2.13 WHEREAS, in 2006, the Arizona State Legislature enacted HB 2835, codified as amendments to Arizona Revised Statutes Title 45 Section 2423, which adopts the recommendations of the Study Commission and provides that the Authority shall be designated as the agent for the State of Arizona to carry out the obligations of the State under Section 105 of P.L. 108-451; and

2.14 WHEREAS, in 2006, the Arizona State Legislature enacted Arizona Revised Statutes Title 45 Section 2491 to provide statutory authority for the Authority to perform the measures necessary to satisfy the firming obligations; and

2.15 WHEREAS, in 2006, the State of Arizona enacted HB 2863 (Laws 2006, Chapter 344), which deposits \$13,500,000 from the General Fund into the Arizona Water Banking Fund in FY 2007 for the purposes of carrying out the firming obligations of the State beginning after the Enforceability Date of the P.L. 108-451.

NOW THEREFORE, in consideration of the mutual and dependent covenants herein contained, it is agreed as follows:

3. DEFINITIONS:

3.1 "Arizona Water Banking Authority" or "Authority" means the State entity created by the Arizona legislature codified as A.R.S. § 45-2401, *et seq*, and duly designated as the State of Arizona's agent for this Agreement.

3.2 "Central Arizona Project" or "CAP" means the federal reclamation project

authorized by the Colorado River Basin Project Act of 1968, 82 Stat. 885, as amended.

3.3 “CAP Indian Priority Water” means that CAP water having an Indian delivery priority.

3.4 “CAP M&I Priority Water” means that CAP water having municipal and industrial delivery priority.

3.5 “CAP NIA Priority Water” means that CAP water having non-Indian agricultural delivery priority.

3.6 “Delivery” means direct physical delivery of water, exchange of water, or delivery to a lessee.

3.7 “Title II Enforceability Date” means the date on which the Secretary publishes in the Federal Register a statement of findings as required by Section 207 of P.L. 108-451, as such section may be amended, providing full enforceability for the GRIC Settlement Agreement.

3.8 “Title III Enforceability Date” means the date on which the Secretary publishes in the Federal Register a statement of findings as required by Section 302 of P.L. 108-451, as such section may be amended, providing full enforceability for the Tohono O’odham Settlement Agreement dated May 5, 2006.

3.9 “Water Shortage” means available CAP water is insufficient to fully meet the demand of Arizona Indian Tribes and their lessees, if any, for that CAP NIA Priority Water reallocated to the tribes in accordance with P.L. 108-451.

4. EFFECTIVENESS AND TERMINATION: After execution by each of the respective parties, this Agreement shall become effective on January 1 of the next calendar year following the Title II Enforceability Date and shall terminate 100 years thereafter; provided, however, subsection 7.2(g) shall continue under its own provisions.

5. AUTHORITY'S RESPONSIBILITY FOR FIRING GRIC CAP WATER:

5.1 Subject to the provisions of subsection 5.2 below, the Authority shall, in each year of this Agreement in which there is a Water Shortage, firm 15,000 acre-feet of CAP NIA Priority Water reallocated to GRIC in accordance with P.L. 108-451, upon demand of GRIC. To satisfy this firming obligation the Authority shall cause to be delivered to GRIC up to 15,000 acre-feet of water in an amount determined as follows:

(a) Calculate the total water quantity that would have been available to GRIC as if it had received 15,000 acre-feet of CAP M&I Priority Water allocation with the remainder of its reallocated CAP water keeping its CAP NIA Priority Water status.

(b) Calculate the amount of CAP NIA Priority Water made available to GRIC that year.

(c) Subtract the amount calculated in (b) from the amount calculated in (a) to determine the amount of CAP water the Authority shall firm for GRIC.

5.2 In each year of this Agreement in which there is a Water Shortage, the Authority's obligation in subsection 5.1 above to firm CAP NIA Priority Water reallocated to GRIC under P.L. 108-451 shall commence at such time as GRIC entitlements to CAP Indian Priority Water and CAP M&I Priority Water for such year are fully exhausted. See Exhibit A, which is attached hereto and incorporated herein, for representative calculations.

5.3 The parties to this Agreement recognize that the Authority may enter into a separate contract with GRIC with respect to the conditions under which GRIC will demand and the Authority will cause to be delivered water firmed by subparagraph 5.1 of this Agreement, which contract may have the effect of modifying the extent to which GRIC will receive water otherwise available to GRIC under this Agreement, and further recognize that the Secretary need

not be a party to such contract.

6. AUTHORITY'S RESPONSIBILITY FOR FIRING CAP WATER FOR OTHER TRIBES:

6.1 Subject to the provisions of subsection 6.2 below, the Authority shall, in each year of this Agreement in which there is a Water Shortage, firm 8,724 acre-feet of CAP NIA Priority Water to the extent such water has been reallocated to other Arizona Indian tribe(s) in accordance with Section 104(a)(1)(A)(iii) of P.L. 108-451, upon demand of such tribe(s). To satisfy this firming obligation, the Authority will cause to be delivered to such tribe(s) a quantity of water up to that portion of the 8,724 acre-feet of water reallocated to that tribe in an amount calculated as follows:

(a) Calculate the total water quantity that would have been available to each tribe as if it had received a quantity of CAP M&I Priority Water equal to the amount of firmed water reallocated to that tribe, with the remainder of that tribe's reallocated CAP water keeping its CAP NIA Priority Water status.

(b) Calculate the amount of NIA Priority Water available to that tribe that year.

(c) Subtract the amount calculated in (b) from the amount calculated in (a) to determine the amount of CAP water the Authority shall firm for that tribe.

6.2 In each year of this Agreement in which there is a Water Shortage, the Authority's obligation in subsection 6.1 above to firm 8,724 acre-feet of NIA Priority Water reallocated to other Arizona Indian Tribes under P.L. 108-451 shall commence with respect to each such tribe at such time as the entitlements of each such tribe to Indian Priority Water and M&I Priority Water, if any, are fully exhausted. See, Exhibit A hereto, for representative

calculations.

6.3 The parties to this Agreement recognize that the Authority may enter into a separate contract with such other Arizona Indian Tribe(s) with respect to the conditions under which such tribes will demand and the Authority will cause to be delivered water firmed by subparagraph 6.1 of this Agreement, which contract may have the effect of modifying the extent to which such other tribes will receive water otherwise available to such other tribes under this Agreement, and further recognize that the Secretary need not be a party to such contract.

7. AUTHORITY'S RESPONSIBILITY FOR ASSISTING THE SECRETARY IN FIRING CAP WATER FOR THE TOHONO O'ODHAM NATION:

7.1 The Authority shall contribute \$3,000,000.00 in either cash or in-kind goods and services, which may include water, to assist the Secretary in fulfilling the federal obligation to firm 28,200 acre-feet of NIA priority water reallocated to Tohono O'odham Nation as set forth in P.L. 108-451.

7.2 The schedule for the Authority's \$3,000,000.00 contribution shall be as follows:

(a) Within the first year beginning January 1 after the Title III Enforceability Date, the Authority shall identify and reserve or create for the purpose of assisting the Secretary in fulfilling the federal obligation to firm the 28,200 acre-feet of NIA priority water reallocated to Tohono O'odham Nation sufficient Long Term Storage Credits (Credits) developed under Arizona state law to equal the number of Credits then in existence plus the number of Credits to be developed in that year by the Secretary that are available to be used to meet the federal firming obligation to the Tohono O'odham Nation, not to exceed a value of \$3,000,000.00 as calculated in accordance with subsection 7.2 (c) below.

(b) Within four years beginning January 1 after the Title III Enforceability

Date, the Authority shall identify and reserve or create for the purpose of assisting the Secretary in fulfilling the federal obligation to firm the 28,200 acre-feet of NIA priority water reallocated to Tohono O'odham Nation, such additional Credits as will, together with the Credits identified and reserved or created in subsection 7.2(a) above, equal a total value of \$3,000,000.00 as calculated in accordance with subsection 7.2(c) below.

(c) The total number of Credits reserved or created in subsections 7.2(a) and 7.2(b) shall be based upon the sum of: (i) the least expensive rate available to the Federal government for purchasing CAP water for storage from the CAWCD for the year in which the Credits were reserved or created; and (ii) any applicable fee specific to the facility where those credits are stored that may apply to the Authority; and (iii) an administrative fee equal to 5% of the cost of services which the Arizona Department of Water Resources provides to the Authority in any year in which Credits are transferred to the Authority's sub-account created under this Agreement.

(d) The Authority shall establish a separate sub-account to hold Credits reserved or created by the Authority under subsections 7.2(a) and 7.2(b). During the term of this Agreement, the Authority shall hold all such Credits in this sub-account until such time as the Secretary determines that a Water Shortage exists and that water deliveries are required to meet the federal firming obligation for the 28,200 af NIA priority water reallocated to the Tohono O'odham Nation.

(e) In any year of this Agreement in which the Secretary determines that a Water Shortage exists and that water deliveries are required to meet the federal firming obligation for the 28,200 af NIA priority water reallocated to the Tohono O'odham Nation, the Authority shall, upon request of the Secretary, direct Credits to be used to transfer water for that

purpose, not to exceed the number of Credits necessary to fulfill the federal firming obligation for that year for the 28,200 af NIA priority water reallocated to the Tohono O’odham Nation, until such time as the Credits held in the sub-account created under subsection 7.2(e) are exhausted.

(f) The Authority and the Secretary agree that assistance to the Secretary under this paragraph does not include recovery and delivery of water.

(g) If after 100 years from the Title III Enforceability Date, any Credits remain in the sub-account created under subsection 7.2(d) above, such Credits shall revert to the Authority and the requirement to assist the Secretary in meeting the federal firming obligation to the Tohono O’odham Nation shall be deemed satisfied.

7.3 In no event shall the Authority have any obligation under this Article 7 prior to the Title III Enforceability Date.

8. MISCELLANEOUS PROVISIONS:

8.1 OFFICIALS NOT TO BENEFIT: No member of or Delegate to Congress, Resident Commissioner, or official of the Authority shall benefit from this Agreement other than as a water user or landowner in the same manner as other water users or landowners.

8.2 CONTINGENT ON APPROPRIATION OR ALLOTMENT OF FUNDS: The expenditure or advance of any money or the performance of any obligation by the United States under this Agreement shall be contingent upon the appropriation or allotment of funds. Absence of appropriation or allotment of funds shall not relieve the Authority from any obligations under this Agreement. No liability shall accrue to the United States in case funds are not appropriated or allocated.

8.3 ASSIGNMENT LIMITED; SUCCESSORS AND ASSIGNS OBLIGATED: The provisions of this Agreement shall apply to and bind the successors and assigns of the parties hereto, but no assignment or transfer of this Agreement or any right or interest therein by either party shall be valid until approved in writing by the Contracting Officer.

8.4 PRIORITY OF CLAIMS OF THE UNITED STATES: Fiscal claims of the United States arising out of this Agreement shall have priority over all others, secured or unsecured, to the extent provided by applicable law.

8.5 EFFECT OF WAIVER OF BREACH OF AGREEMENT: All rights of action for breach of any of the provisions of this Agreement are reserved to each party as provided by

appropriate law. The waiver of a breach of any of the provisions of this Agreement shall not be deemed to be a waiver of any other provisions hereof, or any other subsequent breach of any provisions hereof.

8.6 REMEDIES UNDER AGREEMENT NOT EXCLUSIVE: Nothing in this Agreement shall be construed in any manner to abridge, limit, or deprive either party of any means to enforce any remedy either at law or in equity for the breach of any provisions hereof, or any other remedy which it would otherwise have.

8.7 BOOKS, RECORDS AND REPORTS: Subject to applicable Federal laws and regulations, each party to this Agreement shall have the right during office hours to examine and make copies of the other party's books, records and reports and relating to matters covered by this Agreement.

8.8 COMPLIANCE WITH CIVIL RIGHTS LAWS AND REGULATIONS: The Authority shall comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), Section 504 of the Rehabilitation Act of 1973 (Public Law 93-112, as amended), the Age Discrimination Act of 1975 (42 U.S.C. 6101, et seq.), Title III of the American's with Disabilities Act of 1990, and any other applicable civil rights laws, as well as with their respective implementing regulations and guidelines imposed by the U.S. Department of the Interior and/or Reclamation.

8.9 Each party shall comply with all applicable federal or state laws relating to equal opportunity and non-discrimination.

8.10 There are no third-party beneficiaries, express or implied, to this Agreement.

8.11 This Agreement shall be subject to the provisions of A.R.S. § 38-511.

9. NOTICES: Any notice, demand, or request authorized or required by this Agreement shall be deemed to have been given, when mailed, postage prepaid, or delivered to the below addresses. The designation of the addressee or the address may be changed by notice given in the same manner as provided in this section for other notices.

On behalf of the Authority, to both:

Regional Director
Bureau of Reclamation
Lower Colorado Region
PO Box 61470
Boulder City, NV 89006-1470

and

Area Manager
Bureau of Reclamation
Phoenix Area Office
6150 West Thunderbird Road
Glendale, Arizona 85306-4001

On behalf of the United States, to:

Chairman
Arizona Water Banking Authority
3550 N. Central Ave.
Phoenix, Arizona 85012

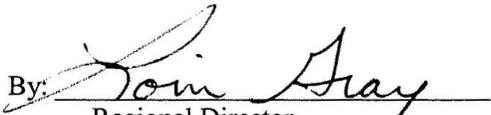
10. AGREEMENT DRAFTING CONSIDERATIONS: Section 1 through 10 of this Agreement have been drafted, negotiated, and reviewed by the parties hereto, each of whom is sophisticated in the matters to which this Agreement pertains, and no one party shall be considered to have drafted the stated sections.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, including Exhibit A, the day first above written.

Approved as to Legal Sufficiency:

THE UNITED STATES OF AMERICA

By: 
Field Solicitor

By: 
Regional Director
Lower Colorado Region
Bureau of Reclamation

**ARIZONA WATER BANKING
AUTHORITY**

By: 
Chairman

Attest: 
Secretary

**Exhibit A
Agreement**

EXHIBIT A

1. This Exhibit A, made this 15TH day of NOVEMBER, 2007, to be effective under and as a part of the Agreement shall become effective on the date of the Agreement's execution and shall remain in effect until superseded by another Exhibit A executed by the parties; Provided, That this Exhibit A or any superseding Exhibit A shall terminate with the termination of the Agreement.

**Exhibit A: Examples of Determination of State of Arizona Firming
Obligation to the Gila River Indian Community (GRIC)**

Assumption 1. GRIC's Entitlement to CAP Water

Indian Priority Water	
Original allocation	173,100 af
HVID re-allocation	<u>18,100 af</u>
Subtotal	191,200 af
M&I Priority Water	
Asarco re-allocation	17,000 af
NIA Priority Water	
RWCD re-allocation	18,600 af
Settlement re-allocation	<u>102,000 af</u>
Subtotal	120,600 af
Total CAP Water Entitlement	328,800 af

Assumption 2. The total annual amount of CAP NIA Priority Water is 364,698 acre-feet before 2044 and 317,395 acre-feet after 2044.

Assumption 3. The total annual amount of CAP Indian Priority Water is 343,079 acre-feet.

Assumption 4. The total annual amount of CAP M&I Priority Water is 638,823 acre-feet before 2044 and 686,126 acre-feet after 2044.

Assumption 5. The full CAP water supply that is the basis for long term contracts is 1,415,000 acre-feet per year, consisting of 68,400 acre-feet of Priority 3 water (Ak-Chin and Salt River Pima-Maricopa Indian Community water rights settlements) and 1,346,600 acre-feet of Priority 4 water.

Assumption 6: In those examples where it was necessary to allocate available CAP water between the Indian priority and M&I priority groups, it was assumed that the example occurred prior to year 2044 and that the allocation of CAP water between these two groups occurred in accordance with the appropriate formula contained in the Arizona Water Settlement Act agreements.

Assumption 7: In those examples showing an allocation of Arizona's shortage between the CAP and the fourth priority entitlement holders sharing the same priority as CAP, it was assumed these fourth priority entitlement holders would share 10.5 percent of Arizona's

shortage.

Example 1

Scenario: Assume that CAP receives less than a full water supply due to use by higher priority users in Arizona and not by a declared shortage on the Colorado River.

Assume the supply available to CAP is 1,365,000 acre feet (both priority 3 and priority 4 water) or 50,000 acre-feet less than that required to meet all long term contractor's needs (1,415,000 acre-feet). The water orders of contractors for all M&I and Indian priority water can be met without imposing a shortage on them.

The GRIC (or its lessees) order all of GRIC's 328,800 acre-foot entitlement.

Step a. Calculate the total water quantity that would have been available to GRIC as if it had received a quantity of CAP M&I Priority Water equal to the amount of firmed water reallocated to the Community, with the remainder of GRIC's reallocated CAP water keeping its CAP NIA Priority Water status.

- 15,000 acre-feet of M&I equivalent water would have been available without shortage
- The remainder of 105,600 acre-feet of NIA water would be subject to shortage sharing with the other NIA priority water supplies.
- The total NIA entitlements to CAP water = 364,698 acre-feet. GRIC's percentage of the NIA water would be equal to 28.96 percent.
- Since the CAP supply is 50,000 acre-feet under that required to meet all orders the NIA available supply = 314,698 acre-feet.
- GRIC's NIA share of the supply = $.2896 * 314,698$ or 91,137 acre-feet.
- GRIC's total quantity would be 15,000 acre-feet of M&I equivalent water plus 91,137 of NIA water or **106,137 acre-feet**.

Step b. Calculate the amount of NIA priority water available to GRIC that year.

- Without firming GRIC would have held 120,600 acre-feet out of a total of 364,698 acre-feet of NIA Priority Water or 33.07 percent of the total NIA Priority Water. Multiplying this percentage times 314,698 acre-feet equals **104,071 acre-feet**.

Step c. Subtract the amount calculated in (b) above from the amount calculated in (a) to determine the amount of CAP water the Authority shall firm for GRIC.

- **Firming requirement is 106,137 acre-feet minus 104,071 acre-feet or 2,066 acre-feet.**

- **If there is a redistribution of NIA Priority Water in this year resulting from one or more entities not using their full entitlement to such water, and such reallocation results in the GRIC receiving more than 106,137 acre-feet of NIA Priority Water, there would be no firming obligation on behalf of the Authority.**

Example 2

Scenario: Assume a shortage to CAP caused by a declared shortage to Lower Basin water deliveries.

Assume that the quantity of fourth priority water available to CAP water users is 897,000 acre-feet or about 85,000 acre-feet less than that required to meet the full needs of the Indian and M&I priority users (981,902 acre-feet). Assuming that the Indian and M&I Priority Water users ordered their full entitlements, these users would be required to take a reduction. All NIA deliveries would be reduced to zero.

Assume that GRIC (or its lessees) order all of GRIC's 328,800 acre-foot contract entitlement.

With 897,000 acre-feet of fourth priority water available, the Indian Priority Water users would receive 321,482 acre-feet and the M&I Priority Water users would receive 575,518 acre-feet per the priority formula contained in the Arizona Water Rights Settlement Act documents. The M&I Priority Water users would receive 90.09 percent of their total entitlement (575,518 acre-feet/638,823 acre-feet).

Step a. Calculate the total water quantity that would have been available to GRIC as if it had received a quantity of CAP M&I Priority Water equal to the amount of firmed water reallocated to the Community, with the remainder of GRIC's reallocated water keeping its CAP NIA Priority Water status.

- GRIC would have received 90.09 percent times 15,000 acre-feet or 13,514 acre-feet of M&I equivalent water.
- GRIC would have received zero acre-feet of its NIA priority water.
- The total quantity available to GRIC would be the **13,514 acre-feet** of M&I equivalent water.

Step b. Calculate the amount of NIA priority Water available to GRIC that year.

- The amount of NIA priority water available to GRIC that year = **zero**.

Step c. Subtract the amount calculated in (b) above from the amount calculated in (a)

above to determine the amount of CAP water the Authority shall firm for GRIC.

- **The firming requirement is 13,514 minus zero acre-feet or 13,514 acre-feet.**

Example 3

Scenario: Assume the same water supply conditions as Example 2, but also assume that GRIC (or its lessees) have only ordered 175,000 acre-feet of M&I and Indian priority water.

- Under the terms of the three step calculation for Example 2 the firming requirement would be 13,514 acre-feet.
- However, GRIC's order of 175,000 acre-feet is less than the sum of its entitlement to Indian and M&I priority water (191,200 acre-feet plus 17,000 acre-feet or 208,200 acre-feet). Had GRIC ordered all of its higher priority CAP water it would have been entitled to 15,315 acre-feet of M&I priority water (90.09 percent) and 170,403 acre-feet of Indian priority water (based on the formula contained in GRIC's Settlement Agreement). The sum of the water available under these two higher priority entitlements (185,718 acre-feet) is greater than GRIC's actual water order.
- **Therefore, under the provisions of Paragraph 5.2 of the Agreement, the Authority would have no firming obligation.**

Example 4

Scenario: Assume a 400,000 acre-foot Secretarial declared shortage to the Colorado River system and that Arizona's share of that shortage is 320,000 acre-feet. Assume the Colorado River entitlement holders River users (located along the Colorado River) sharing the 4th priority water with CAP take 33,600 acre-feet of that reduction, leaving the shortage to CAP at 286,400 acre-feet.

In this case, the water orders of contractors for all M&I and Indian priority water can be met without imposing a shortage on them. The overall CAP water supply is 68,400 acre-feet of Priority 3 water plus 1,060,200 acre-feet of 4th priority water or a total of 1,128,600 acre-feet.

The GRIC (or its lessees) order all of GRIC's 328,800 acre-foot entitlement.

Step a. Calculate the total water quantity that would have been available to GRIC as if it had received a quantity of CAP M&I Priority Water equal to the amount of firmed water reallocated to the Community, with the remainder of GRIC's reallocated CAP water keeping its CAP NIA Priority Water status.

- 15,000 acre-feet of M&I equivalent water would have been available without shortage

- The remainder of 105,600 acre-feet of NIA water would be subject to shortage sharing with the other NIA priority water supplies.
- The total NIA entitlements to CAP water = 364,698 acre-feet. GRIC's percentage of the NIA water would be equal to 28.96 percent.
- Since the CAP supply is 286,400 acre-feet under that required to meet all orders, the NIA available supply = 78,298 acre-feet.
- GRIC's NIA share of the supply = $.2896 * 78,298$ or 22,675 acre-feet.
- GRIC's total quantity would be 15,000 acre-feet of M&I equivalent water plus 22,675 of NIA water or **37,675 acre-feet**.

Step b. Calculate the amount of NIA priority water available to GRIC that year.

- Without firming GRIC would have held 120,600 acre-feet out of a total of 364,698 acre-feet of NIA Priority Water or 33.07 percent of the total NIA Priority Water. Multiplying this percentage times 78,298 acre-feet equals **25,893 acre-feet**.

Step c. Subtract the amount calculated in (b) above from the amount calculated in (a) to determine the amount of CAP water the Authority shall firm for GRIC.

- **Firming requirement is 37,675 acre-feet minus 25,893 acre-feet or 11,782 acre-feet.**

Example 5

Scenario: Assume a 500,000 acre-foot Secretarial declared shortage to the Colorado River system and that Arizona's share of that shortage is 400,000 acre-feet. Assume the River users sharing the 4th priority water with CAP take 42,000 acre-feet of that reduction leaving the shortage to CAP at 358,000 acre-feet.

The water orders of contractors for all M&I and Indian priority water can be met without imposing a shortage on them. The overall CAP supply is 68,400 acre-feet of Priority 3 water plus 988,600 acre-feet of 4th priority water or a total of 1,057,000 acre-feet.

The GRIC (or its lessees) order all of GRIC's 328,800 acre-foot entitlement.

Step a. Calculate the total water quantity that would have been available to GRIC as if it had received a quantity of CAP M&I Priority Water equal to the amount of firmed water reallocated to the Community, with the remainder of GRIC's reallocated CAP water keeping its CAP NIA Priority Water status.

- 15,000 acre-feet of M&I equivalent water would have been available without

shortage

- The remainder of 105,600 acre-feet of NIA water would be subject to shortage sharing with the other NIA priority water supplies.
- The total NIA entitlements to CAP water = 364,698 acre-feet. GRIC's percentage of the NIA water would be equal to 28.96 percent.
- Since the CAP supply is 358,000 acre-feet under that required to meet all orders the NIA available supply = 6,698 acre-feet.
- GRIC's NIA share of the supply = $.2896 * 6,698$ or 1,940 acre-feet.
- GRIC's total quantity would be 15,000 acre-feet of M&I equivalent water plus 1,940 acre-feet of NIA water or **16,940 acre-feet**.

Step b. Calculate the amount of NIA priority water available to GRIC that year.

- Without firming GRIC would have held 120,600 acre-feet out of a total of 364,698 acre-feet of NIA Priority Water or 33.07 percent of the total NIA Priority Water. Multiplying this percentage times 6,698 acre-feet equals **2,215 acre-feet**.

Step c. Subtract the amount calculated in (b) above from the amount calculated in (a) to determine the amount of CAP water the Authority shall firm for GRIC.

- **Firming requirement is 16,940 acre-feet minus 2,215 acre-feet or 14,725 acre-feet.**

Example 6

Scenario: Assume a 600,000 acre-foot Secretarial declared shortage to the Colorado River system and that Arizona's share of that shortage is 480,000 acre-feet. Assume the River users sharing the 4th priority water with CAP take 50,400 acre-feet of that reduction leaving the shortage to CAP at 429,600 acre-feet.

The overall CAP supply is 68,400 acre-feet of Priority 3 water plus 917,000 acre-feet of 4th priority water or a total of 985,400 acre-feet. Under the shortage sharing formula contained in the Arizona Water Settlements Act documents, there would be 326,569 acre-feet available to the CAP Indian Priority water users and 590,431 acre-feet of M&I Priority Water users. The CAP M&I Priority Water users would receive 92.42 percent of their water entitlement (590,431/638,823). There would be no water available for the NIA Priority Users.

The GRIC (or its lessees) order all of GRIC's 328,800 acre-foot entitlement.

Step a. Calculate the total water quantity that would have been available to GRIC as if it had received a quantity of CAP M&I Priority Water equal to the amount of firmed water

reallocated to the Community, with the remainder of GRIC's reallocated CAP water keeping its CAP NIA Priority Water status.

- 13,863 acre-feet of M&I equivalent water would have been available without shortage
- GRIC would have received zero acre-feet of its NIA priority water.
- The total quantity available to GRIC would be the **13,863 acre-feet** of M&I equivalent water.

Step b. Calculate the amount of NIA priority water available to GRIC that year.

- The amount of NIA priority water available to GRIC that year = **zero**.

Step c. Subtract the amount calculated in (b) above from the amount calculated in (a) to determine the amount of CAP water the Authority shall firm for GRIC.

- **Firming requirement is 13,863 acre-feet.**