

MINUTES
CHINO BASIN WATERMASTER
AGRICULTURAL POOL MEETING

May 14, 2020

The Agricultural Pool meeting was held by GoToMeeting (conference call and web meeting) on May 14, 2020.

AGRICULTURAL POOL MEMBERS PRESENT ON CALL

Bob Feenstra, Chair	Dairy
Jeff Pierson, Vice-Chair	Crops
Ron LaBrucherie, Jr.	Crops
Geoffrey Vanden Heuvel	Dairy
Nathan deBoom	Dairy
John Huitsing	Dairy
Henry De Haan	Dairy
Ron Pietersma	Dairy
Carol Boyd	State of California – CIM
Pete Hall	State of California – CIM
Jimmy Medrano	State of California – CIM

WATERMASTER BOARD MEMBERS PRESENT ON CALL

Bob Bowcock	CalMat Co.
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WATERMASTER STAFF PRESENT AT WATERMASTER

Peter Kavounas	General Manager
Janine Wilson	Senior Accountant
Vanessa Aldaz	Administrative Assistant

WATERMASTER STAFF PRESENT ON CALL

Joseph Joswiak	Chief Financial Officer
Edgar Tellez Foster	Water Resources Mgmt. and Planning Dir.
Anna Nelson	Executive Services Director
Justin Nakano	Water Resources Technical Manager

WATERMASTER CONSULTANTS PRESENT ON CALL

Brad Herrema	Brownstein Hyatt Farber Schreck, LLP
Andy Malone	Wildermuth Environmental, Inc.
Mark Wildermuth	Wildermuth Environmental, Inc.

OTHERS PRESENT ON CALL

Paul Hofer	Crops
Tracy Egoscue	Egoscue Law Group, Inc.
Marilyn Levin	State of California –DOJ
Tamer Ahmed	State of California – CDCR
Richard Rees	Wood plc
Gino Filippi	Crops
Rob Vanden Heuvel	California Dairies, Inc.
Courtney Jones	City of Ontario
Kate Richards	GSI Environmental, Inc.
Sorab Panday	GSI Environmental, Inc.
Liz Hurst	Inland Empire Utilities Agency

CALL TO ORDER

Chair Feenstra called the meeting to order at 1:38 p.m.

ROLL CALL

(0:03:54) Ms. Nelson conducted the roll call.

AGENDA – ADDITIONS/REORDER

The Agricultural Pool took its Confidential Session after the Consent Calendar.

I. CONSENT CALENDAR

Note: All matters listed under the Consent Calendar are considered to be routine and non-controversial and will be acted upon by one motion in the form listed below. There will be no separate discussion on these items prior to voting unless any members, staff, or the public requests specific items be discussed and/or removed from the Consent Calendar for separate action.

A. MINUTES

Approve as presented:

1. Minutes of the Agricultural Pool Meeting held on April 9, 2020
2. Minutes of the Agricultural Pool Special Meeting held on April 17, 2020

B. FINANCIAL REPORTS

1. Cash Disbursements for the month of March 2020
2. Watermaster VISA Check Detail for the month of March 2020
3. Combining Schedule for the Period July 1, 2019 through March 31, 2020
4. Treasurer's Report of Financial Affairs for the Period March 1, 2020 through March 31, 2020
5. Budget vs. Actual Report for the Period July 1, 2019 through March 31, 2020
6. Cash Disbursements for April 2020 (Information Only)

(0:05:33)

*Motion by Vice-Chair Pierson, seconded by Mr. Nathan deBoom, and by unanimous vote
Moved to approve the Consent Calendar as presented.*

II. BUSINESS ITEMS

A. WATERMASTER FISCAL YEAR 2020/21 PROPOSED BUDGET

Recommend Advisory Committee approval of the proposed FY 2020/21 budget as presented.

(0:10:52) Mr. Joswiak gave a presentation. A discussion ensued.

(0:36:31) A motion was introduced by Vice-Chair Pierson.

(0:38:18) Roll call vote taken.

Motion by Vice-Chair Pierson, seconded by Mr. Henry DeHaan, and by unanimous roll call vote as attached to these minutes

Moved to recommend to the Advisory Committee to approve Business Item II.A. as presented.

B. CONSIDERATION OF 2020 STORAGE MANAGEMENT PLAN

Recommend Advisory Committee support Watermaster Board approval of the 2020 Storage Management Final Report Section 2.1-2.6 as the Storage Management Plan providing direction for the preparation of the required documentation.

(0:39:20) Mr. Kavounas gave a report. A discussion ensued.

See reportable action under confidential session.

C. FIRST AMENDMENT TO TASK ORDER NO. 2 UNDER MASTER AGREEMENT FOR COLLABORATIVE PROJECTS (TECHNICAL SUPPORT FOR THE UPPER SANTA ANA RIVER GROUNDWATER INTEGRATED MODEL)

Recommend to the Advisory Committee to approve the First Amendment to Task Order No. 2 (Technical Support for Analysis of the Upper Santa Ana River Groundwater Integrated Model).

(0:41:16) Mr. Tellez Foster gave a report.

(0:42:24) A motion was introduced by Vice-Chair Pierson.

(0:43:05) Roll call vote taken.

Motion by Vice-Chair Pierson, seconded by Mr. LaBrucherie Jr., and by unanimous roll call vote as attached to these minutes

Moved to recommend to the Advisory Committee to approve Business Item II.C. as presented.

D. FIRST AMENDMENT TO TASK ORDER NO. 4 UNDER MASTER AGREEMENT FOR COLLABORATIVE PROJECTS (CHINO BASIN PROJECT SUPPORT)

Recommend to the Advisory Committee to approve the First Amendment to Task Order No. 4 Under Master Agreement for Collaborative Projects: Chino Basin Program

(0:44:36) Mr. Tellez Foster gave a report. A discussion ensued.

(0:50:41) A motion was introduced by Vice-Chair Pierson.

(0:51:23) Roll call vote taken.

Motion by Vice-Chair Pierson, seconded by Mr. Pietersma, and by unanimous roll call vote as attached to these minutes

Moved to recommend to the Advisory Committee to approve Business Item II.D. as presented.

E. 2020 SAFE YIELD RECALCULATION

Provide advice and assistance to Watermaster regarding the 2020 Safe Yield Recalculation.

(0:52:19) Mr. Kavounas offered to give a presentation. The Pool declined the presentation.

See reportable action under confidential session.

F. OLD BUSINESS

None

III. REPORTS/UPDATES

A. LEGAL COUNSEL REPORT

1. San Bernardino County Superior Court Emergency Order
2. June 26, 2020 Hearing
3. County of Maui v. Hawaii Wildlife Fund et al

(0:53:18) Mr. Herrema gave a report.

B. ENGINEER REPORT

1. Annual Report for the PBHSC
2. IEUA GWR 2019 Annual Report
3. SB88 Compliance
4. Potential Assistance to CDA with 97-005 Study Requirement

(0:54:58) Mr. Malone gave a report.

C. CFO REPORT

1. Fixed Rate Refunding of Series 2008B Variable Rate Demand Bonds

(0:59:27) Mr. Joswiak gave a report.

D. GM REPORT

1. OBMP Implementation Plan Update
2. OAP Contest Status
3. Work from Home Update
4. Other

(1:01:49) Mr. Kavounas gave a report.

IV. POOL DISCUSSION

1. Chairman's Update
2. Pool Member Comments

(1:05:34) Mr. Feenstra commented about a meeting with Scott Burton at the City of Ontario and opened it up to other members of the Pool who might wish to attend.

V. OTHER BUSINESS

None

VI. CONFIDENTIAL SESSION - POSSIBLE ACTION

A Confidential Session may be held during the Pool Committee meeting for the purpose of discussion and possible action.

Chair Feenstra called for a confidential session at 1:44 p.m. to discuss the following:

1. June 26, 2020 Hearing
2. Storage Management
3. Storage Contest
4. Safe Yield

(0:07:45) Confidential session concluded at 3:40 p.m. with the following reportable actions:

Business Item II.B. Consideration of 2020 Storage Management Plan

(0:07:55)

Motion by Mr. Henry De Haan, seconded by Ms. Carol Boyd, and passed

Moved to oppose the 2020 Storage Management Plan due to deficiencies in the interrelated Safe Yield Recalculation in addition to the lack of a storage implementation plan.

Business Item II.E. 2020 Safe Yield Recalculation

(0:08:28)

Motion by Mr. Ron LaBrucherie Jr., seconded by Ms. Carol Boyd, and passed

Moved to recommend that the Watermaster staff and Board review and consider the attached memorandum regarding deficiencies in the Safe Yield recalculation. These deficiencies are compounded by the failure to provide an annual peer review opportunity and related interim corrections as necessary and required pursuant to the Court ordered methodology.

ADJOURNMENT

Chair Feenstra adjourned the Agricultural Pool meeting at 4:45 p.m.

Secretary: _____

Approved: _____ June 11, 2020

Attachments:

1. 20200514 Roll Call Vote Outcome for Business Item II.A.
2. 20200514 Roll Call Vote Outcome for Business Item II.C.
3. 20200514 Roll Call Vote Outcome for Business Item II.D.
4. Ag Pool Closed Session 051420 Reportable Actions (Business Items II.B. and II.E.)

Attachment 1 to 20200514 OAP Minutes

<p>May 14, 2020 Agricultural Pool Meeting Roll Call Vote for Business Item II.A. Watermaster Fiscal Year 2020/21 Proposed Budget</p>
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Member	Alternate	Vote
Feenstra, Robert, Chair		yes
Pierson, Jeff, Vice-Chair		yes
LaBrucherie, Jr., Ron		yes
Vanden Heuvel, Geoffrey		yes
deBoom, Nathan		yes
Huitsing, John		yes
DeHaan, Henry		yes
Pietersma, Ron		yes
Page, Bob		yes
Boyd, Carol		yes
Hall, Pete		yes
Medrano, Jimmy		yes
	OUTCOME:	Passed Unanimously

Attachment 2 to 20200514 OAP Minutes

May 14, 2020 Agricultural Pool Meeting Roll Call Vote for
Business Item II.C. First Amendment to Task Order No. 2 Under Master Agreement for Collaborative Projects
(Technical Support for the Upper Santa Ana River Groundwater Integrated Model)

Member	Alternate	Vote
Feenstra, Robert, Chair		yes
Pierson, Jeff, Vice-Chair		yes
LaBrucherie, Jr., Ron		yes
Vanden Heuvel, Geoffrey		yes
deBoom, Nathan		yes
Huitsing, John		yes
DeHaan, Henry		yes
Pietersma, Ron		yes
Page, Bob		yes
Boyd, Carol		yes
Hall, Pete		yes
Medrano, Jimmy		yes
	OUTCOME:	Passed Unanimously

Attachment 3 to 20200514 OAP Minutes

**May 14, 2020 Agricultural Pool Meeting Roll Call Vote for
Business Item II.D. First Amendment to Task Order No. 4 Under Master Agreement for
Collaborative Projects (Chino Basin Project Support)**

Member	Alternate	Vote
Feenstra, Robert, Chair		yes
Pierson, Jeff, Vice-Chair		yes
LaBrucherie, Jr., Ron		yes
Vanden Heuvel, Geoffrey		yes
deBoom, Nathan		yes
Huitsing, John		yes
DeHaan, Henry		yes
Pietersma, Ron		yes
Page, Bob		yes
Boyd, Carol		yes
Hall, Pete		yes
Medrano, Jimmy		yes
	OUTCOME:	Passed Unanimously

Ag Pool Closed Session 051420 Reportable Actions

Business Item B. Consideration of 2020 Storage Management Plan

Motion by Henry DeHaan

Second by Deputy Attorney General Carol A.Z. Boyd

The Ag Pool opposes the 2020 Storage Management Plan due to deficiencies in the interrelated Safe Yield Recalculation in addition to the lack of a storage implementation plan.

Motion passed.

Business Item E. 2020 Safe Yield Recalculation

Motion by Ron LaBrucherie

Second by Deputy Attorney General Carol A.Z. Boyd

The Ag Pool recommends that the Watermaster staff and Board review and consider the attached memorandum regarding deficiencies in the Safe Yield recalculation. These deficiencies are compounded by the failure to provide an annual peer review opportunity and related interim corrections as necessary and required pursuant to the Court ordered methodology.

Motion passed.

Preliminary Recommendations on Safe Yield Reset

GSI Environmental's recommendation to the Agricultural Pool of the Chino Basin is to oppose the Safe Yield reset at this time. The procedures used currently are not reasonable, prudent, stable, responsible, sustainable, or fair, as outlined in the Peace Agreement and within the standard of practice for groundwater basin management. In addition, the current Safe Yield Reset has not been prepared in accordance with the Court Ordered Methodology or the 1999 OBMP which had anticipated model errors or prediction uncertainties and included procedures to address these anticipated errors in future planning. Also, there is no Court-ordered methodology to adjust Storage Accounts later in a Storage Implementation Plan, so it may not be possible to correct errors later if the Safe Yield reset has already been accepted. The supporting bases for this recommendation are discussed below.

1. There is no accounting for actual basin conditions compared to forecasts, thus mis-managing natural basin storage

The Watermaster notes that,

"The 10-year forecast takes into account projected conditions that are expected to occur over the ensuing 10 years. While it is possible to extend the period for additional increments of time, longer forecasting entails further speculation. Historical experience in evaluating trends in the Chino Basin suggests that the projections become less reliable as they extend beyond the 10-year horizon. It is considerably easier to adjust to discrepancies between set expectations over a 10-year period than longer periods of time and consequently there is less risk to the parties and to the basin." (*Response to Questions and Comments on the April 2, 2020 Safe Yield Recalculation Report April 23, 2020 Letter from Overlying (Agricultural Pool) re Safe Yield Recalculation for Chino Basin Questions*).

This statement is correct, and we agree that expectations should be set over 10-year periods for planning purposes of the Parties within the basin. That is exactly the reason why: (a) the Safe Yield reset should include the actual hydrology of the basin over the last 10-year period; and, (b) the Court-ordered Safe Yield reset methodology prescribed in the 1999 OBMP required such an evaluation.

The probability argument provided by Wildermuth in its response to GSI's April 23, 2020 comments is incorrect. Specifically, the probability of future hydrology is not related in any way to conducting a Safe Yield reset that includes what actually happened over the past 10 years. Future planning should account for the unforeseen natural basin storage that was depleted over these past 10 drought years and allow for that amount to catch up in planning over the next 10 years. Kicking the can down the road for 10 years due to that drought (or 20 years for a 20-year drought) is not fair to future users of the basin and not prudent, responsible, sustainable, or stable as it does not consider the natural storage depletions that have actually occurred. Conversely, if the next 10 years are more wet than current predictions and actual water use was less than or equal to that predicted, then further planning will add that to the future Safe Yield. That way, you close your accounts for the previous 10 years as you plan for the next 10. Finally, as noted by the Watermaster, planning for longer periods is less reliable, so expecting some

wet distant future conditions to balance the recent drought involves speculation and should not be part of a planning process for reasonable, prudent, reliable, responsible, sustainable, and stable management of the basin.

Furthermore, the probability of future wet conditions is not in any way higher because of the recent 20-year drought. Just because a coin toss lands “heads” 10 times, does not mean it will land “tails” the next time; the probability of either heads or tails is still 50% - with a significantly smaller probability of landing on “tails” the next 10 times to average out those unfortunate 10 “heads.” Even with granting all that, the predictions of Safe Yield are dependent not only on predictions of average recharge, but also on predictions of water demand and pumping. Inferring that use of an average recharge for the forecasts would balance out the Safe Yield in the long term is further incorrect since pumping plans may not pan out.

The response to Ag Pool Member Geoff Vanden Heuvel on the same issue, states that, “as a result of fullness of time, the difference will be offset in future years when wet periods occur.” As noted above, that is not the case. There is no comparison being made in this issue between past and present conditions as noted in the response, rather it is a simple issue that *hoping* for “sometime in the future” to compensate for loss of Safe Yield of the previous 10 years involves speculation and is not a reasonable, responsible and prudent management strategy, nor is it fair to current users of the basin. Hope is not a strategy; however, and the Watermaster should follow a strategy that is reasonable and sustainable over the long-term.

To put this issue in an analogy that we all can relate to would be the example of our personal finances. A projected Safe Yield over 10 years is like one’s anticipated earnings going into a checking account over the next 10 years. Such a projection helps to plan net spending (pumping) from the checking account over that 10-year planning period. If you earn more than you spend, you put the money into a savings account that is akin to a groundwater storage account. If you earn less than you spend, you pay the extra from your savings account, similar to taking the additional needed water from your groundwater storage account.

If 10 years later, your actual net spending (pumping) was more than your actual net earnings (net recharge) for whatever reason, you are in debt for the difference, regardless of your earlier projected income and spending amounts. To provide a stable planning environment, the bank allows you 10 years of buffering by providing you a line of credit to the checking account. When planning your finances for the subsequent 10 years, you may again project your future earnings and planned spending; you may “recalibrate” your planning according to the actual conditions over the past 10 years; however, you cannot ignore that debt from the earlier 10 years. Either you pay back that amount immediately from your savings account (an immediate adjustment to the groundwater storage account), or you include that debt payment as an earnings deduction in your checking account over the subsequent 10 years (i.e., to include the difference between projected and actual Safe Yield into the next reset). But you cannot move from a planned projection to a subsequent projection without paying for past reduced income or overspending, just by promising to have more accurate and recalibrated estimates of future income and spending. Of course, a consumer would like that, but a bank cannot operate under that condition,

passing on losses to future generations in the *hopes* that future spending will not exceed income, or taking a direct loss on its reserves.

2. It is incorrect to say that the Court Ordered methodology does not provide a mechanism for looking backwards at actual basin conditions for the next Safe Yield Reset.

In response to the Ag Pool's comment 1(b) Watermaster states that "[t]he Court-ordered Safe Yield reset methodology does not provide for any retroactive adjustments to Safe Yield or storage accounts." The "no retroactive accounting" provision at paragraph 4.8 is specific to "production years prior to July 1, 2014." This paragraph of the Order contains no language prohibiting a future correction if necessary for managing basin storage. The Language in 4.8 is that "the Watermaster will not in any manner seek to change prior accounting of the prior allocation of safe yield and operating safe yield among the parties to the Judgment for production years prior to July 1, 2014." This does not mean that future Safe Yield resets should not consider historical conditions. Instead, it specifically refers to the 140,000 afy reset to 135,000 afy that occurred in 2015 for the 2010 through 2020 timespan and that value should not be changed to account for the 5,000 afy discrepancy.

The Court-ordered Safe Yield reset methodology in the 1999 OBMP was reasonable and designed to sustainably, stably, responsibly, and prudently manage the basin. It considered that a 10-year planning period timespan was reliable, but that projections may not be accurate, and that models themselves have errors and uncertainties that need to be adjusted over time. Therefore, the 1999 OBMP prescribed that the Safe Yield reset consider what actually happened in the past 10 years and adjust for actual conditions rather than jump from one projection to another knowing that the previous projection was incorrect.

Specifically, under implementation Actions and Schedules in Section 4, the 1999 OBMP clearly states:

In year 2022/23, compute safe yield and storage loss rate for period 2012/13 through 2021/22, and reset safe yield and storage loss rates for the next the next ten-year period 2022/23 to 2031/32. Reassess storage management plan and modify Watermaster UGRR, if needed.

Similar language is used for future resets in 10-year increments up to the year 2051/52. The language clearly states that the past safe yield and storage loss rates should be computed to reset them for the next 10-years. This has not changed in further updates or Court orders. The 2015 Safe Yield Reset Methodology indicates that:

Watermaster's OBMP Implementation Plan called for an initial redetermination of Basin's Safe Yield in 2010/2011, using monitoring data that would be gathered for the first time during 2000/01 through 2009/10. This requirement is additionally carried forward in Section 6.5 of Watermaster's Rules and Regulations, which states that the "Safe Yield shall be recalculated in year 2010/11 based upon data from the ten-year period 2000/01 to 2009/10."

As noted, the requirement was to calculate Safe Yield for the next 10 years **based upon data from the previous 10 years**. The 1999 OBMP also clearly indicated that a Safe Yield should be computed for the historical period to reset the safe yield for the next 10-year period. The Reset Technical Memorandum of 2015 indicates that the 2015 Safe Yield Reset methodology is consistent with the definition of Safe Yield

in the Judgement and the Physical Solution, specifically that "**Safe Yield shall be recalculated in year 2010/11 based upon data from the ten-year period 2000/01 to 2009/10**". The approach then indicates a model recalibration as noted below:

Use the data collected during 2000/01 to 2009/10 (and in the case of subsequent resets newly collected data) in the re-calibration process for the Watermaster's groundwater-flow model.

The approach does not specifically list the safe yield recalculation detail of the Physical Solution that indicates looking back at the previous 10 years, however, nothing the Court has ordered prevents this action. Rather, the Judgement requires stable basin management and as natural basin storage declines, it is prudent for the Watermaster to act appropriately to set a sustainable Safe Yield for the Basin.

3. There is no transparency in reporting to evaluate model results or possible errors

Model behavior cannot be clearly understood by what is reported in the 2020 Safe Yield Recalculation Final Report. Requests for additional information are not being addressed, and examples of such responses are summarized herein.

Figures in the draft report (Figures 7-6 and 7-7 in draft report) were valuable in understanding future behavior, especially if additional information on precipitation of future conditions was also added (as was shown for historical conditions) as requested. Instead, these figures were removed entirely from the final document. They are not replaced with figures that "more clearly communicate trends in DIPAW" as noted in the May 8, 2020 response to comments #3 to the Ag Pool's April 23rd comments. Comment #10 asked for more information on precipitation and the total water budget, which is a reasonable request to holistically understand water in the basin. This is not more work, but something that should be done as part of the modeling effort that evaluates both surface and subsurface water. GSI's request for a total water budget was denied.

Comment #5a asked about the discrepancy between the statement in the draft document regarding "**reduction** in net recharge during the 2021 through 2030 period" and the Figure 7-7, which showed a net **increase**. Instead of a response, the figure was removed and not included in the final report.

GSI comments #6 and #7 were specifically regarding differences between the 2013 model and the 2020 model that are greater in earlier time than in later times. The lengthy response does not address that issue. If the 2020 model update is more accurate, then that would be the case throughout the simulation time period. This was not addressed and request for additional mass balance information that may help understand this issue was also not provided.

The response to Comment #7b indicates that there were errors in the past that were corrected. Model inputs can have errors as noted here. That is why when things do not seem to add up, we request additional information to satisfy ourselves that things are correct. Withholding such information or the model is not helpful or transparent.

Response to Comment #8 is also non-responsive. The comment questions why there is an increase in water levels in the earlier model but a decrease in water levels in the model update. Instead of providing

an answer to our query, the response was focused on the semantics of the comment as to whether it was one model or more models. The additional statement that “the model-estimated storage change for the 2013 model and the 2020 CVM for the period 2000-2018 closely track each other” is not a response to why the models were showing opposite trends between 1978 and 2020. Instead, it raises additional questions regarding the model and its update, since the 2013 model used projected average conditions for recharge, while the 2020 update was operating under an extended drought between 2000 and 2018. Yet, both models are reported to “closely track each other” during that period.

The response to Comment #9 tries to separate the Safe Yield from the Storage Management Plan; however, they are intimately interlinked and depend on each other.

Lack of transparency is also noted in the response to the State of California’s comments at the April workshop and their written comments. Uncertainty of the model is not acknowledged, let alone probed. There is uncertainty in model parameters as well as in recharge and pumping projections, which are input to the model for the forecasts. Modeling standards require conducting sensitivity analyses at a minimum to help understand the aquifer better, determine significant data gaps, and improve on a model whether a Court requires it or not. These procedures are outlined in the ASTM D5611 - 94(2016) Standard Guide for Conducting a Sensitivity Analysis for a Groundwater Flow Model Application. Transparency involves addressing stakeholders concerns instead of discussing semantics of one or multiple models, and providing responses to comments that are essentially evasive, even if the Court does not obligate you to do so.

4. There are items in the current Safe Yield Reset that are not entirely clear and may have substantial consequences

The Optimal Storage Requirement (OSR) was estimated at ~ 5.3 million af, which was the estimated storage computed for the state of the basin in 1997. Of that amount, 236,000 af was already in Managed Storage around that time (in 2000). The estimated amount in Managed Storage for End-of-Year 2019 was 503,275 af, as described in the 2020 Safe Yield Reset report. Note that a complete picture of managed storage and basin storage has not been provided in one location, however, adding up these amounts, the total basin storage is about 5.6 million af.

The 2020 Safe Yield report indicates that total groundwater in storage was 12.3 MAF. However, the Safe Yield report does not provide the final values used for specific yield in the model. Only initial estimates are provided, which were changed upon calibration so it is not clear how the total basin groundwater storage is different from the OSR. Did the model “find” this extra water (up to 12.3 MAF) by increasing the specific yield? How does this 12.3 MAF affect the 5.6 MAF OSR and how are the two numbers related? It is not clear how these numbers will be used in the future so accepting the Safe Yield report with such unresolved issues is not advisable at this time.

5. Current basin operations are projected to cause MPI, and unplanned future management of storage accounts can cause MPI

As presented to the Agricultural Pool, current basin operations are projected to cause Material Physical Injury (MPI) in the future (after 2040). Also, unplanned future management of storage accounts can

cause MPI. The figures below indicate both of these possibilities. Of particular concern is the amount of water in Storage Accounts that has already reduced Basin Groundwater amounts to be below the OSR. Without some adjustment that brings Basin Storage back to OSR levels, there will definitely be MPI. It is GSI's opinion, that a management plan would be subject to legal challenges that would likely follow if the Watermaster did not allow removal of water from storage accounts. A "Leave Behind" action should be implemented at this stage to ensure fair and sustainable operation of the basin.

In the analogy of personal finances, not allowing water to be extracted from a valid Storage Account would be akin to a bank plan that would never allow clients to remove money from their savings account because it would be detrimental to the bank to ever do so. If I had vast sums of money in a savings account and the bank said I had every right to it but can never withdraw it, I would consider that as illogical and would sue the bank to get back my money. That is exactly what should be anticipated in the current situation unless rectified by a plan that is executed with basin sustainability in mind.

