

Appendix K
Responses to the Raymond Basin Management Board Comments

**PASADENA WATER AND POWER RESPONSES TO
THE RAYMOND BASIN MANAGEMENT BOARD COMMENTS
DATED APRIL 27, 2021
REGARDING PUBLIC DRAFT WATER SYSTEM AND RESOURCES PLAN**

The Raymond Basin Management Board's ("RBMB") letter, dated April 27, 2021 expressed the following concerns regarding the Public Draft Water System and Resources Plan ("WSRP").

1. A serious concern is the exclusion of the RBMB (court-appointed manager of the Raymond Basin Judgment) from the entire WSRP process, even though Pasadena sits as a voting member of the RBMB and its Pumping and Storage Committee.

Response:

The 2020 WSRP is a planning document that updates both the 2002 Water System Master Plan ("WSMP") and the 2011 Water Integrated Resources Plan ("WIRP"). It was not PWP's intention to exclude the RBMB from the process, rather to get community input on priorities for the updated document. The document does not present any new projects requiring RBMB's technical input and any implementation of projects will be coordinated with the RBMB.

2. It is inappropriate for Pasadena's WSRP to criticize the RBMB's management of the basin, while being represented as a voting member of the RBMB and Committees.

Response:

In preparation for the WSRP, PWP hired a consultant to independently look at the water system and water resources needs and provide recommendations on what programs PWP would need to implement in the next 25 years. The goal of the WSRP report was not to criticize, but to plan for adequate supply and facility upgrades, for the betterment of PWP and the Raymond Basin. PWP envisions working with RBMB to implement specific projects identified to replenish the basin.

3. This WSRP suggested concepts and programs to increase Pasadena's rights to pump groundwater. Any concepts or programs relating to increased pumping must be consistent with the Raymond Basin Judgment and approved by the RBMB.

Response: Yes, PWP agrees.

4. The WSRP in some areas is based on flawed logic, when it supports restoration of the Basin groundwater levels, and at the same time, prioritizes Pasadena's Long-Term Storage (LTS) as the "key underpinning Pasadena's water supply resiliency".

The RBMB staff considers the water in LTS accounts to be "paper water", while Basin groundwater levels are declining. Pumping LTS water has been documented to exacerbate declining water levels.

Response:

Thank you for the comment. During the past several years PWP has not pumped out of LTS, but has contributed to it thereby not causing further decline to groundwater levels in this manner.

5. Page 1 – The WSRP emphasizes greater dependency on local water and groundwater basin sustainability. This is the role and responsibility of the RBMB. This WSRP should have been coordinated for review by the RBMB.

Response:

The improvement of the groundwater basin water levels should be the goal of all RBMB pumpers and the RBMB. Implementation of programs aimed to replenish the basin as identified in the WSRP will be coordinated with RBMB and other pumpers in the basin. Just as with the 2002 Water System Master Plan and the 2011 Water Integrated Resources Plan, PWP did not seek RBMB's input for the planning of specific programs as no new projects were presented.

6. Page 1 – The Stakeholder Advisory Group (SAG) did not include the RBMB. Typically agency planning involves outside entities, and some mechanism included in the process for technical review by those agencies, such as the RBMB.

Response:

SAG was not created as a technical committee. The purpose of SAG was to obtain community input from a diverse group of individuals representing Pasadena's residential, commercial, and large water customers to determine the priority of nine ranking criteria, such as reliability, cost, community values, adaptability, etc.

7. Page 3 – The WSRP indicates that Pasadena's water use likely to decline from 28,500 AFY to 23,500 AFY by 2030, the Preferred Portfolio is 50% GW, assuming reduced demand, and groundwater is declining and must be revived. The assumption of significant water conservation is not a given and will artificially influence water resources planning. The RBMB has presented several concepts to revive groundwater levels in both the Pasadena and Monk Hill Subareas. However

RBMB concepts require producer participation, producer consensus, and funding.

Response:

The estimated demand reductions in the WSRP are based on California law, specifically the requirements of SB 606 and AB 1668, and include an additional 10% outdoor conservation. While the additional 10% conservation is optional, meeting the State's conservation laws are mandatory for water suppliers. PWP agrees that participation, consensus, and funding are needed for programs that replenish the basin.

8. Page 4 – The WSRP indicates Pasadena is planning for “banking” wet-year discounted imported water. RBMB believes there is no basis for the assumption of “discounted” imported water on an ongoing basis. Plans for storing imported water must assume at a minimum, some purchases at full-service rates.

Response:

PWP agrees that wet year discounts may be sporadic, but it is important to take advantage of those opportunities as they become available.

9. Page 5 – The WSRP suggests “retooling of policies” to manage the basin. RBMB has not been advised of “new concepts” during the regular meetings with Pasadena.

Response:

Now that WSRP is finalized, PWP intends to share with RBMB any new concepts developed and implement them as mutually agreed upon.

10. Page 1-1 – The WSRP describes Pasadena's surface diversion rights, which are not unlimited. RBMB suggests more detail be included on “limits” to surface diversions based on water rights.

Response:

The limits of Pasadena's surface water diversion rights for Eaton Wash are 8.9 cubic feet per second (“cfs”) and for Arroyo Seco and Millard Canyon streams are 25 cfs. Discussions about the spreading credits are included in the WSRP specifically on pages 2-14, 4-2 through 4-4, and page 5-10 (December 2020 Report).

11. Page 1-1 – The WSRP describes the 30% reduction of pumping rights. RBMB suggests adding context and history to the water rights adjustment – Decreed rights were raised too high in 1955 and not reevaluated since then as suggested in 1955.

Response:

Duly noted. Thank you. This statement was included in the 2020 Urban Water Management Plan.

12. Pages 1-3 and 1-4 – The WSRP indicates defined Goals and Objectives were developed in partnership with SAG. The RBMB should have been included, at a minimum, from a technical perspective, in these discussions in addition to SAG. The omission of the RBMB is significant, and challenges the application of this WSRP.

Response:

As stated previously, the goals and objectives of the WSRP were community driven, not technically oriented.

13. Page 2-1 – The WSRP indicates Pasadena purchased portions of Arroyo Seco and Eaton Wash watersheds. More detail is needed, including a description of additional associated surface water rights. New recharge facilities will require Board approval and adoption of measurement and reporting procedures.

Response:

The referenced purchases are historical, not new. We agree that any new recharge facilities will require approval, adoption, and reporting procedures.

14. Page 2-12 – The WSRP indicates approximately 6,000 to 10,000 AFY are estimated to leak from the eastern portion (primarily Santa Anita Subarea) of this basin to the Main San Gabriel Basin (MSGB), and that pumping to historically low groundwater levels in MSGB increases leakage. These statements are not supported with current information and data. No technical information is provided. The statement on leakage should be significantly “qualified” and the statement regarding groundwater levels in MSGB increasing leakage be removed.

Response:

The statements that (1) higher groundwater levels in the Raymond basin relative to MSGB will cause more groundwater to flow across the fault and (2) the range of the estimated leakage across Raymond Fault are from Geoscience Support Services, Inc. “Raymond Basin Ground Water Flow Model Predictive Simulations” report, dated December 10, 2004, section 5.4 Outflow across Raymond Fault. Yes, PWP agrees that more technical studies need to be completed to better understand the interaction between the Raymond Basin and the MSGB. The statement regarding groundwater levels in MSGB increasing leakage was removed from the final report.

15. Page 2-13 – The WSRP indicates Pasadena will be implementing projects in

Raymond Basin to reduce loss of groundwater to MSGB, revising policy on basin sustainability, and developing basin protection policies/guidelines for basin adoption. These are the roles and responsibilities of the RBMB. Pasadena is on the RBMB and all committees. Pasadena has not introduced any concepts to the RBMB.

Response:

Yes, PWP agrees and is looking forward to working with RBMB to implement specific projects that help the basin be more sustainable.

16. Page 2-14 – The WSRP indicates “...on July 1, 2009, the RBMB implemented a resolution that voluntarily reduced pumping from the Pasadena subarea for a term of five years.” This statement is incorrect. In order to meet the goal of 30% reduction, water production reductions were implemented incrementally at a rate of 1,070 AFY for over a five year period. The 30% reduction plan is still in place and there is no term limit of five years. The WSRP needs to include more details on why the 30% reduction plan was implemented. The RBMB determined the re-determination of the Safe Yield in 1955 and the adoption of the Long-Term Storage (LTS) Policy by the RBMB in 1993 played a major role in lower overall groundwater levels that the Pasadena subarea was experiencing.

Response: *Yes, PWP agrees. Thank you for the clarification.*

17. Pages 2-16, and 4-3 – The WSRP states PWP’s current LTS is 13,400 AF in Monk Hill and 20,600 AF in Pasadena subareas and LTS is the key underpinning Pasadena’s water supply resiliency. The RBMB suggests this discussion be clarified to include termination of long-term storage when accounts are exhausted (no new storage), and current declining water levels while water is “stored” in LTS accounts. RBMB determined the LTS Policy adopted in 1993 was one factor in lower overall groundwater levels the Pasadena subarea was experiencing.

Response: *Duly noted. Thank you.*

18. Page 2-17 – The WSRP states “...governing practices confound groundwater pumping capacity in the area.” The RBMB is unaware of the “practices” referred to in the WSRP. The RBMB was not included in the SAG and has not been advised of these Pasadena concerns at any RBMB or Committee meetings where Pasadena is a voting member. Pasadena suggesting the RBMB has “failed” to address sustainability of the basin in the WSRP, is totally inappropriate while Pasadena sits on the Board and Committee and has never expressed these concerns or provided alternative suggestions.

Response:

PWP values the efforts made by RBMB over the years to support the groundwater basin. This statement has been removed from the final report.

19. Page 2-17 – The WSRP includes “Historic Pasadena Area Groundwater Levels” and indicates source is from RBMB Draft Opportunities to Enhance Groundwater Levels in Pasadena Subarea. RBMB does not recognize this graph. Please indicate where the graph was obtained and which well(s) the water levels represent and provide a location map of why this is a good representation of the Pasadena Subarea.

Response: *PWP’s consultant developed the graph based on data from RBMB.*

20. Page 4-1 – RBMB would like the opportunity to review the data from the Pasadena simulation model including inputs and outputs data.

Response:

PWP does not have the model developed by PWP’s consultant which was used for the WSRP assessment.

21. Page 4-2 – In the WSRP discussion on Groundwater Supply, there are several assumptions made for “modeling”. Any party to the RBMB can certainly make internal management assumptions and model different scenarios; however, the provisions of the RBMB Judgment must be followed and water rights be respected. The WSRP also appears to not recognize the inconsistency of reliance on LTS (declining WLs) and the stated goal of restoring basin water levels and basin sustainability.

Response: *Thank you for the comment.*

22. Page 4-5 – Figure 4-1 stops in 2009, why is the most recent drought not included?

Response:

Figure 4-1 illustrates that diversions fluctuate over time depending on rainfall and increased flows. The 2009 Station Fire in the Angeles National Forest and the subsequent storms damaged PWP’s diversion facilities in the Arroyo Seco, rendering more recent data inaccurate. Historical spreading and available flows provide enough data to present the correct message.

23. Page 5-8 – The WSRP describes a potential Raymond Basin imported water storage project. The RBMB has always supported review and consideration of new groundwater storage projects that will benefit the Basin. Similar to efforts to “revive” water levels throughout the Basin, in order for RBMB to implement new groundwater storage projects, we need producer participation, producer consensus and funding sources. In the Monk Hill Subarea, there has been no progress in pushing forward defined projects and storage agreements with MWD, even though Pasadena is a

MWD member agency, the majority water rights holder and owner of the spreading facilities in that subarea.

Response: *Yes, those projects require participation, consensus, and funding.*

24. Page 5-10 – The WSRP discusses various options to enhance Pasadena’s groundwater pumping rights through improved conservation of local water supplies. The RBMB fully supports increased conservation of local water supplies to benefit the Basin. RBMB also advises that all storage credits must comply with the RBMB Judgment. In addition, all beneficial uses of surface water (groundwater storage, potable and non-potable use) must comply with the RBMB Judgment. This includes centralized capture of stormwater, Low Impact Development Programs, MS-4 programs and compliance with Enhanced Watershed Management Plans.

Response: *Yes, PWP agrees. Thank you for the comment.*



RAYMOND BASIN MANAGEMENT BOARD

City of Alhambra

April 27, 2021

City of Arcadia

California-American
Water Company

East Pasadena
Water Company

H.E. Huntington Library
and Art Gallery

Kinneloa Irrigation
District

La Canada Irrigation
District

Las Flores Water
Company

Lincoln Avenue
Water Company

Pasadena Cemetery
Association

City of Pasadena

Rubio Canon Land and
Water Association

San Gabriel County
Water District

City of Sierra Madre

Sunny Slope
Water Company

Valley Water Company

City of Pasadena
Water and Power Department
150 South Los Robles Avenue, Suite 200
Pasadena, California 91101

Re: Public Draft - Water System and Resources Plan

Raymond Basin Management Board staff was recently made aware of the City of Pasadena’s Public Draft Water System and Resources Plan (WSRP), dated May 2020 (Woodard & Curran), and asked by representatives of the Arroyo Seco Foundation to respond to specific references in the plan to Basin resources and overall management.

The Raymond Basin Management Board (RBMB) staff performed an initial review of the City of Pasadena’s WSRP. The RBMB provides general comments here, and more specific comments below.

The WSRP is a very extensive and detailed plan to guide Pasadena’s future water supply. The RBMB applauds and supports Pasadena’s efforts to maintain and improve Pasadena’s future water supplies.

1 The RBMB would like to express serious concerns with multiple parts and provisions of this WSRP relating to supply and resource planning. Probably the most serious concern is the “exclusion” of the RBMB (court-appointed manager of the Raymond Basin Judgment) from the entire WSRP process, even though Pasadena sits as a voting member of the RBMB and its Pumping and Storage Committee (P & S Committee). This oversight manifests itself in multiple areas of misstatements and incomplete presentation of the efforts and work by the RBMB and staff.

2 It is inappropriate for Pasadena’s WSRP to criticize the RBMB’s management of the Basin, under the Judgment, while being represented as a voting member of the RBMB and Committees. There is no record of Pasadena’s criticisms or suggested alternative solutions at the RBMB. On the contrary, the RBMB staff has made multiple attempts and efforts to identify, characterize basin issues, and present alternative solutions to water supply concerns on all three Basin subareas. Pasadena has participated, and at times, supported, and opposed, RBMB-presented alternative solutions. At no time has Pasadena presented a reasonable and viable Basin management alternative that was not fully presented and vetted by the RBMB and staff.

3 Throughout this WSRP, there are suggested concepts and programs to “increase” Pasadena’s “rights” to pump groundwater. It must be clear, any concepts or programs relating to increased pumping must be consistent with the Raymond Basin Judgment and approved by the RBMB.

4 The WSRP in some areas is based on flawed logic, particularly when it supports restoration of the Basin groundwater levels, and at the same time, prioritizes Pasadena’s Lon-Term Storage (LTS) as the “key underpinning Pasadena’s water supply resiliency”.

4 The RBMB staff has consistently emphasized that significant water in LTS accounts, and declining groundwater levels, are inconsistent. The RBMB staff considers the water in LTS accounts to be “paper water”, while Basin groundwater levels are declining. Pumping LTS water has been documented to exacerbate declining water levels.

RBMB Staff has performed an initial review of the WSRP with the following comments noted below:

5 **Page 1** – The Pasadena WSRP emphasizes, “greater dependency on local water” and “groundwater basin sustainability”. This is the role and responsibility of the RBMB. This WSRP should have been coordinated for review by the RBMB, by the City of Pasadena as an internal “draft”, before public release.

6 **Page 1** – The Pasadena WSRP Stakeholder Advisory Group (SAG) did not include the RBMB. Typically when agency planning involves outside entities, there is some mechanism included in the process for technical review and discussion by those agencies, such as the RBMB.

Page 3 – The WSRP indicates Pasadena’s water use “likely” to decline from 28,500 AFY to 23,500 AFY by 2030. This assumption of significant water conservation is not a given and will artificially influence water resources planning.

7 **Page 3** – The WSRP indicates groundwater is declining and must be “revived”. The RBMB has presented several concepts and programs to “revive” groundwater levels in both the Pasadena and Monk Hill Subareas. However, short of going back to the Court to amend the water rights allocations, all of RBMB concepts require at least three components: Producer Participation, Producer Consensus, and funding sources as needed. This approach has met with some success in the Santa Anita and Pasadena Subareas.

Page 3 – The WSRP indicates Pasadena’s Preferred Portfolio is 50% GW, assuming “reduced” demand. This assumption of significant water conservation is not a given and will artificially influence water resources planning.

8 **Page 4** – The WSRP indicates Pasadena is Planning for “banking” wet-year discounted imported water. RBMB believes there is no basis demonstrated for this assumption of “discounted” imported water on an ongoing basis. Plans for storing imported water must assume at a minimum, some purchases at full-service rates.

9 **Page 5** – The WSRP suggests “retooling of policies” to manage and balance Raymond Basin. RBMB has not been advised of these “new concepts”, despite regular Pumping & Storage Committee and Monk Hill Task Force meetings with Pasadena present.

10 **Page 1-1** – The WSRP describes Pasadena’s surface diversion rights. It is important to note that these rights are not unlimited. RBMB suggests more detail be included on “limits” to surface diversions based on water rights.

11 **Page 1-1** – The WSRP describes the 30% reduction of pumping rights. RBMB suggests adding context and history to the water rights adjustment– Decreed rights were raised too high in 1955 and not reevaluated from time to time as suggested in 1955.

12 **Page 1-3** – The WSRP indicates defined Goals and Objectives were developed in partnership with SAG. The RBMB should have been included, at a minimum, from a technical perspective, in these Basin specific discussions in addition to SAG.

Page 1-4 – The WSRP indicated SAG was selected as a diverse group. The omission of the RBMB from the plan development is significant, and severely challenges the application of this WSRP.

13 **Page 2-1** – The WSRP indicates Pasadena purchased portions of Arroyo Seco and Eaton Wash watersheds. More detail is needed, including a description of additional associated surface water rights. New recharge facilities will require Board approval and adoption of measurement and reporting procedures.

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15 **Page 2-13** – The WSRP indicates Pasadena will be (1) implementing specific projects in RB to reduce loss (leakage) of groundwater to MSGB, (2) revise policy on Basin sustainability, (3) develop Basin protection policies and guidelines for Basin wide adoption. RBMB advises these are the roles and responsibilities of the RBMB. Pasadena is on the RBMB and all committees. Pasadena has not introduced any of these concepts in any form to the RBMB. Had RBMB input been included in the WSRP draft, some of these concepts could have already been vetted.

16 **Page 2-14** – The WSRP indicates “...on July 1, 2009, the RBMB implemented a resolution that voluntary reduced pumping from the Pasadena subarea for a term of five years.” This statement is incorrect. In order to meet the goal of 30% reduction, water production reductions were implemented incrementally at a rate of 1,070 AFY for over a five year period. The 30% reduction plan is still in place and there is no term limit of five years. The WSRP needs to include more details on why the 30% reduction plan was implemented. The RBMB determined the re-determination of the Safe Yield in 1955 and the adoption of the Long-Term Storage (LTS) Policy by the RBMB in 1993 played a major role in lower overall groundwater levels that the Pasadena subarea was experiencing.

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17 determined the LTS Policy adopted in 1993 was one factor in lower overall groundwater levels the Pasadena subarea was experiencing.

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20 **Page 4-1** – RBMB would like the opportunity to review the data from the Pasadena simulation model including inputs and outputs data.

21 **Page 4-2** – In the WSRP discussion on Groundwater Supply, there are several assumptions made for “modeling”. Any Party to the RBMB can certainly make internal management assumptions and model different scenarios; however, it should be stated and understood, in the WSRP, that the provisions of the RBMB Judgment must be followed and water rights be respected. The WSRP also appears to not recognize the inconsistency of reliance on LTS (declining WLs) and the stated goal of restoring basin water levels and basin sustainability.

22 **Page 4-5** – Figure 4-1 stops in 2009, why is the most recent drought not included?

23 **Page 5-8** – The WSRP describes a potential Raymond Basin imported water storage project. The RBMB has always supported review and consideration of new groundwater storage projects that will benefit the Basin. Similar to efforts to “revive” water levels throughout the Basin, in order for RBMB to implement new groundwater storage projects, we need producer participation, producer consensus and funding sources. In the Monk Hill Subarea, there has been no progress in pushing forward defined projects and storage agreements with MWD, even though Pasadena is a MWD member agency, the majority water rights holder and owner of the spreading facilities in that subarea.

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City of Pasadena

April 27, 2021

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Please don't hesitate to contact me with any questions you have regarding these comments. I can be reached by telephone at 626-815-1300 or by email at tony@watermaster.org.

Sincerely,



Anthony C. Zampello

Executive Officer

Raymond Basin Management Board