729	Robert Izquierdo	91104	We need a more innovative, forward-thinking approach to our water plans than what's been proposed, one that prioritizes protecting the environment. President Biden recognizes the dangers of climate change, and the current water plan should do so as well by prioritizing how we can balance restoring the basin with the water department's goals. The next 25 years are critical to addressing climate change by protecting our environment, so we must revise the current proposal accordingly.
730	Carol Soucek King	91105	Our Arroyo needs our living stream !!!!! Best part about our beautiful oasis and reason it is so beautiful
731	Jennifer Ho	91020	We can either continue to "control" the river or take a new path of restoration and regeneration of this important habitat, wildlife, and water resource. Concrete and manmade basins are not natural and will not win against what nature has evolved to do for millions of years. Bring back our living streams. We can do this. Thank you.
732	Tera Klein	91101	
733	Amy Bernstein	90065	
734	Bea Salazar	90242	
735	Genette Foster	91106	
736	JULIE Lewis	91104	
737	Caroline Kim	90710	Given the climate crisis, it is imperative to address diminishing biodiversity, protect habitat and wildlife as well as manage wisely the water resources in Hahamongna and Arroyo Seco. This is a golden opportunity to model a sustainable and regenerative approach to the

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			Raymond Basin that serves the environment first.
738			
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744	Tina Calderon	91331	As a Gabrielino Tongva Culture Bearer I support the sacred lands and waters to flow as nature designed them so that the fish and wild life can thrive and the environment will benefit. Please be responsible care takers and allow our ground waters to replenish as naturally as possible.
745			
746			
747			
748			
749			
750	Denise Desmuke- Holt	91001	
751	Erin Nevins	91206	
752	Darienne Hetherman	91001	A living stream and the vital biodiversity it supports are essential to the stability of our communities as we face climate disruption.
753	Tanja Reutimann	91106	I believe the Arroyo Seco Canyon Project and Pasadena's 25-year Water Plan, the Water System and Resources Plan, will have detrimental impacts on the habitat, wildlife and water resources in Hahamongna and the Arroyo Seco.

754	jane fawke	92252	It is absolutely crucial that this beautiful toad and its habitat is protected.
755	Karla Berglund Hughes	91101	
756	Virginia E Berglund	91101-1111	
757	Cindy M Matsuda	90275	
758	Briceida Gallegos	90047	
759	Jozefina	91214	
760	Hugh Bowles	91001	PWP have failed to engage with their own science that states that the spreading basins are by orders of magnitude less effective at percolating water into the aquifer. They want to drain more of the Arroyo Seco into expanded basins. The City and PWP have buried the Philip Williams Study (paid for by the City) that states that leaving natural flows in the stream and allow ponding for short periods behind the dam could improve aquifer re-charge by 160% in a normal rainfall year. There needs to be a full, open public discussion of the alternatives to conserving water in the Hahamongna basin aside from expanding the out dated, ineffective, and environmentally damaging processes in place.
761	Briceida Gallegos	90047	
762	Frances Goff	91107	
763	Charles Jacobsen	91101	
764	Denise Desmuke- Holt	91001	
765	Laurel Beck	91104	
766	Lee Parmerter	91001	

767	Susan L Williams	90222	
768	William Baquet Jr	91007	It is essential to protect our fresh water & all life dependent on it. Failing to understand this beyond comprehension. Bill Baquet
769	Chris Ziegler	91103	Protect biodiversity by protecting the second most import factor for life, Water! Biodiversity is essential to human health: Clearly, if localities do not make prudent decisions on our own, higher levels of government will continue to micro-manage us, which is more expensive than us being smart from the get-go. Find another option for supplying our water, as well as, implementing best practices - The Clean Water Act was adopted in the early 70's and were still not do anything near an honest effort in following recommendations, some 50+ years later. Not very impressive.
770	Tom Brady	91105	Groundwater overdraft is an increasing and ill-understood problem that Pasadena will be contributing to with this plan.
771	Chad rooney	90027	Let the area return to its natural state. CA has already lost too much of native wetlands and riparian corridors
772	Barbara F Ishida	91001	Now that they are rehabilitating the LA River, let's join that movement. Rivers, wildlife, plants have rights as well and they have much to teach us. Let's start learning from them by freeing the river to act naturally.
773	Pilar Reynaldo	90042	I was in the arroyo a few weeks ago when the water was flowing in the creeks, it was amazing to watch, listen and enjoy. On this particular afternoon it seemed like overnight the arroyo was transformed into a wildlife habitat, we observed so many birds drinking water, rabbits hopping around and a bobcat

			sauntering. Restoring our wild lands must become a priority, concrete jungles keep growing around us, daily our places to enjoy what once was are rapidly decreasing.
774	Allyn Valencia	91001	
775	Pilar Reynaldo	90042	I was in the arroyo a few weeks ago when the water was flowing in the creeks, it was amazing to watch, listen and enjoy. On this particular afternoon it seemed like overnight the arroyo was transformed into a wildlife habitat, we observed so many birds drinking water, rabbits hopping around and a bobcat sauntering. Restoring our wild lands must become a priority, concrete jungles keep growing around us, daily our places to enjoy what once was are rapidly decreasing.
776			
777	Sara Mrasek	91104	
778	Ann Motrunich	91106	
779	Marie Massa	90031-3306	
780	Sarah Ngo	91104	Protect important bird and wildlife habitats!! There are so few left.
781			
782	Denise Robb	91106	Please protect our arroyo. Use living stream. And stabilize and replenish the basin.
783	Garrison Hack	91118	
784	DAVID RYAN	91104	
785	rachel ryan	91104	
786	Lynne Webber	91042	
787	Frances Goff	91107	
788	Stephen Torres	91001	

789	Marisa	91106	
790	Ian Bowen	91107	
791	Gabriel E Bustillos	91016	
792	Diane Morgan	91104	Given how low the groundwater level in the Raymond Basin is, I'm very supportive of actions to protect the Arroyo Seco and the Raymond Basin and use a living stream to capture storm flows and protect the habitat. We need to restore waterways for all wildlife and human needs. Thank you.
793	Emily Heebner	91001	Preserve for long term, not short term
794	Susan L Williams	90222	
795	Jean Prinz	91775	We need to stabilize the Arroyo Seco Canyon area to protect wildlife and preserve sufficient water during the dry months that fish can live in the stream. The Raymond Groundwater Basin provides the watertable for trees with taproots and wildlive that need the access to the types of foliage sufficient for them to thrive.
796	David Drum	90041	We must learn to work with nature, and not try to control or destroy it
797	Jeanne Bellemin	90277	I support the Arroyo Seco Canyon Project!
798	Frances Goff	91107	We in Pasadena are right up against the mountains; we need to preserve habitat more than other areas.
799			
800			
801	Cathleen R Cox, PhD	90026	Encouraging survival of wildlife is key to our survival and making sure water is available for all of us, that is human and non-human is essential.

802	Patty Helgeson	91024	There needs to be some wild places in Pasadena. Too much building with little regard for the healing and educational beauty of nature. Why should I have to drive miles away to show my children streams and the ecosystem around them? We all lose in the long run when concrete jungles are valued more than preserving some natural areas.
803	Patty Helgeson	91024	There needs to be some wild places in Pasadena. Too much building with little regard for the healing and educational beauty of nature. Why should I have to drive miles away to show my children streams and the ecosystem around them? We all lose in the long run when concrete jungles are valued more than preserving some natural areas.
804	Catherine Carlassare	90042	
805	Kelly Davis	90068	Steelhead trout has been found in the Arroyo Seco. Pasadena must halt this plan and reconsider it's impacts on the environment!
807	Sara Watkins- Cooper	90032	My daughter goes to forest school along the Arroyo Seco river and it has been a gateway for connecting me to nature here in Los Angeles. Please abandon the Arroyo Seco Canyon Project!
808	Audrey bland	91103	heal the basin bro do what's right.
809			
810			
811	Kristin Roberts	91104	I support protecting Hahamongna and the Raymond Basin!
812			
813	Siavash Monfared	91107	

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814	Sarajo Frieden	90027	
815			
816	Patricia V DENNIS	91030	
817	Brooks Bonstin	91208	Please help steelhead back into the Arroyo!
818	Elissa Fultz	91104	Pasadena has done a wonderful job with low water use incentives, but we cannot let these victories distract from our unsustainable practices! We know we cannot survive long-term on this watershed, and our short-term gain would destroy a precious ecosystem! We will need to address these problems eventually - let's take this head on now, and not do irreversible damage in the process!
819	Lou A Insprucker	91011	
820	Denise Robb	91106	Please help care for our wildlife and fish and follow our lead.
821	Kim Nava	91016	
822	Deborah Elkins	92557	
823	Robert Garza	93063	it is part to save the planet
824	Jesse Silva	90065	The preservation of these waters will save the lives of many different fish and bird species that I have witnessed exist over the last few years of constant visits to our local creeks and rivers.
825	Felix Breden	91105	I will vote against any Pasadena officials who support this plan
826	Bill Stiefel	91001	
827	Carole McClintock	91001	
828			
829	Monique Danser	90041	

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830	Heidrun Mumper- Drumm	91105	Consciously restore the watershed in all its aspects, so that it can regerate water supplies for people, fish and other wildlife.
831	Dorothy Wong	91001	Council Member, The Arroyo Seco is the key to the City and its greatest environmental treasure. Please do all you can to invest in its restoration. Prioritize it as nature intended, as a river which feeds the ecosystem and ultimately public health. Diversity is key to a healthy ecosystem. Ensuring an adequate environmental flow for fish and wildlife during the dry season. Commit to a plan to stabilize and replenish the Raymond Groundwater Basin. Pasadena's resilience needs nature. Invest in ways forward by capturing water locally at homes, reduce, reuse, recycle. Protect, restore, connect the watershed for the future. Respectfully, Dorothy Wong
832	Dorothy Wong	91001	Council Member, The Arroyo Seco is the key to the City and its greatest environmental treasure. Please do all you can to invest in its restoration. Prioritize it as nature intended, as a river which feeds the ecosystem and ultimately public health. Diversity is key to a healthy ecosystem. Ensuring an adequate environmental flow for fish and wildlife during the dry season. Commit to a plan to stabilize and replenish the Raymond Groundwater Basin. Pasadena's resilience needs nature. Invest in ways forward by capturing water locally at homes, reduce, reuse, recycle. Protect, restore, connect the watershed for the future. Respectfully, Dorothy Wong
833	Dawn Burkhardt	91101	How we deal with water and the immediate natural resources we are responsible for will determine the quality of life for future generations

			and ultimately determined whether our habitation here in three millions is sustainable. Please do the right thing for our collective future!
834			
835	cinthya Vazquez	90640	Please keep in mind the health of our Earth and communities when taking such important decisions. I agree that revising the water plan is a great idea. Using a living stream to capture storm flows will not only protect precious habitat but also delay the drought creeping into our city. Please commit to a plan to stabilize and replenish the Raymond Groundwater Basin and remember that the wellness of nature around us will determine our future wellness. Thank you.
836	Patrice Sena	91106	Lets come together for our region's greatest environmental treasure before it's too late
837	Bob Snodgrass	91103	
838	Deborah Schankler	48864	I've hiked the Arroyo Seco trails in Highland Park and South Pasadena. In addition I've hiked near the River in Pasadena. Furthermore, I've hiked up in Altadena above JPL to the waterfall and beyond on the Fern trail. You must protect the Arroyo Seco, historicand frankly a spiritual route. Please protect this very special watershed for future generationsUse the living stream! Protect the habitat!
839	Nan Phillips	91602	Please try to communicate and come up With a plan to resolve some very important water issues. Think of an overall plan to insure clean water for our communities And also preserve our landscape. Water is precious. Be sure whatever work is done is budgeted accurately. Please and Thank you.

840	Nancy van den Hout	91105	
841	Petrea Sandel	91104	
842	cheryl auger	91105	Please discontinue further funding of the project and redirect financial resources to conservation and efficiency. Abandoning the ASCP would prevent wasting money, and allow the Arroyo Seco stream to naturally flow and percolate storm water.
843	Graham Landon Goldich	91214	
844	Carol Church	91107	
845	Bill Stiefel	91001	I am very concerned about restoring the health of the ecosystem for both wildlife and generations to come.
846	Lenna Weidman	91103	
847	Ben White	91016	
848			
849	Linda chan	91103	Let it heal! Protect it!
850	David Newsom	90041	The Arroyo Seco flows in concert w some of the most precious and diverse wildlife in our region. Please halt the destructive "25 Year Water Plan" and take the correct path on this vital and precious resources. Save the Arroyo Seco for the whole of our community.
851	Richard Luczyski	91104	PWP does admit that they should do a better job informing the public of their intensions on proposed projects. They also don't like to answer all direct questions with direct answers making a job to ask the question again and hope the answer comes this time. I do have plenty of examples if anyone is interested in seeing them. The latest with the PWP team is the neglect of

not telling us about a march electrical incident until I read about it in the Pasadena Now News yesterday with a price tag of \$480K to fix. Just another example of what the PWP isn't telling us. I guess they figured they could hide the problem somewhere in their budget where we wouldn't see it. Then the number got a little to big to hide. I wonder which team was watching the system that it took a few months to figure out the problem? I hope it becomes a cool summer or there might be lots of outings for air conditioners.

852	William Ferry	91106	
853	Susan Josenhans	91108	
854	Marc Dubeau	91011	
855	Diane Knight	91307	
856	Francesca Jimenez	91010	
857	Barbara Ishida	91001	It's time we work with our environment rather than "fixing it" to our needs. We need the environment more than the environment needs us. Let's begin a new chapter in history of reparation and regeneration.
859	Eileen Sanchez	91790	
860	Jozefina	91214	Please heal the basin, this would be great for the agriculture, help the environment grow including the fish and other wildlife. They greatly need

great for the agriculture, help the environment grow including the fish and other wildlife. They greatly need the access to the water since the draught did the damage . we need to make a better system to have a longer cycle of the Raymond groundwater basin so these creatures of all walks of life can enjoy the flow of water so they can replenish in clean safe way of life they have always had. So please give them the right that the fish , other

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			wildlife has had before. Thank you , appreciate your time!:)
861	Virginia Berglund	91101	
862	Madeleine Heller	90042	Living streams are the most beneficial way to capture stormwater, replenish our aquifers and ensure we have healthy waters, soils and ecosystems in Los Angeles. This is essential as we prepare for current and future droughts and a changing climate. Let life live.
863	Geraldine M Johnston	91001	
864	Mary Vaughan	91001	Is there no end to the sickening point of view that continually prevails in the handling of the Arroyo Seco? Keep Kathryn Barger out of the whole thing for starters.
867	Rob Johnston	91107	
871	Hope Creature	90065	I support the Let the River Flow movement to protect the natural environment for our wildlife and our own water resources.
872	Al Cullen	91107	It is time that PWP thinks about the environment and recognizes that the stream and it's surroundings are vital to the people of Pasadena. The Raymond basin is in real trouble and Pasadena has not done its part to help correct its severely overdrawn condition. We need your help by stopping this ill conceived plan being proposed by PWP.
873	Jason	91106	Let's get it done!
874	Stephanie Hernstadt	90026	We hike and enjoy the many trails just above the Raymond basin: Millard Canyon & Falls, Sunset Ridge Trail, Gabrielino Trail, El Prieto Trail, Mt. Lowe & Echo Mountain, and other trails in the area. All those mountains drain water naturally into rivers and streams mostly feeding the Arroyo

Seco, Hahamongna and basin areas. The whole system together provides beauty and habitat for humans, flora and fauna. Allow nature to proceed as it knows how, streams into basins, and groundwater to replenish naturally. Do not, and you will loose habitat & beauty, And create fire and land instability issues for generations to come. Nature always wins, and will respond in kind to our human choices. Let the river flow.

876	Jeffrey Wagner	91001	
877	Ross Dickson	91030	
934	Akina Cox	91104-3124	
880	Patricia OSullivan	91103	
881	Laurice Becker	91106	
882	Sheda Morshed	91105	Haven't we learned already that without sustainable planning, we end up spending more money in the long-run to deal with the damages done? Follow the science, always!
883	Jon Sherman	92078	Enough is enough! Please protect what's left of natural systems in

Please protect of natural systems in Southern California that have had millions of years to figure out how to exist sustainably. Learning to live within these natural systems, rather than at the expense of them, is our path toward any semblance of a sustainable future. Please let go (long past due) of anthropocentric, gold rush mentality and embrace the realization that infinite growth on a finite planet is suicidal. What's the alternative? Living in balance with and respect for natural community and the laws of nature. Greed is not good! The Earth is abundant enough for everyone's need, but not for everyone's greed.

884	Deanna	91103	I support the restoration and preservation of our region's greatest environmental treasure, and urge the City of Pasadena to protect Hahamonga and the Arroyo Seco and the wildlife and water resources within.
885	Bob Gutzman	91105-2431	PWP has not engaged with their own science that states that the spreading basins are by orders of magnitude less effective at percolating water into the aquifer. Instead, they want to drain more of the Arroyo Seco into expanded basins. The Philip Williams Study (paid for by the City) states that leaving natural flows in the stream and allow ponding for short periods behind the dam could improve aquifer re-charge by 160% in a normal rainfall year. There needs to be a full, open public discussion of the alternatives to conserving water in the Hahamongna basin aside from expanding the outdated, ineffective, and environmentally damaging processes in place.
886	Ellen Strauss	91103	The Hahamonga Basin used to be a great wildlife area, but is now so denuded that we don't recognize it. Pasadena has few enough wild areas left, and this one would be a valuable buffer between the National Forest and the city.
887	Christina Heath	91001	I've been walking in the Arroyo Seco behind Devil's Gate Dam for 60 years now. I don't think I've EVER seen the existing basins all full. There is NO NEED for more basins with the concomitant loss of vegetation and habitat. NO NEED! You need to look at your water policy and ask citizens to use less water, look into recycling what we do have. By removing a green treasure you only make this city hotter and a less desirable place

			to live. THINK before you automatically endorse destruction!!! Thank you. Chris Heath
935	richard hansink	91105	
891	James Maund	91104	
892	Mark Hunter	91011	I live in La Canada, but I seem to spend all my money in Pasadena. :) I spend a lot of time in Pasadena, too, particularly at Hahamongna Watershed Park. That park is degraded by numerous settling basins that have silted up over time and no longer percolate water into the aquifer. PWP's answer to that isbuild more spreading basins in the park. It's that well-known definition of insanity: doing the same thing over and over, and expecting a different result.
893	Robyn Estabrook	91103	Please protect the precious wildlife and habitat. If we don't, no one will.
936	Jonathan Rau	91040	PLEASE reconsider this project! It might seem like a good short term solution but we have created this water problem by thinking short term throughout history. We need to start fixing the problems we have created, not create more. Think long term and generationally! Please find another way.
895	wendy m crowley	91108	I have sent messages to the mayor and Andy Wilson who is our Represanarive. Protect narure and and stabalize and replenish the Raymond Groundwater Basin
896	Sheila Brock	91001	
897	David Drum	90041	Natural is better, and in this case cheaper, too
898	Heather Ostlund	91030	I have lived walking distance to the Arroyo Seco all my life. This is a small area still available to local wildlife. We need to protect what

little is left of this natural habitat. Not only is this section a place for local wildlife to live, it is a quiet beautiful area for the residents of Pasadena to enjoy in this otherwise concrete city we live in. We need to protect it!!

899	Katherine Quick	91040
900	Jennifer wong	91803
901	Carol Togneri	91103
902	Ann Scheid	91105

Follow the science! The Philip Williams Study (paid for by the City) states that leaving natural flows in the stream and allowing ponding for short periods behind the dam could improve aguifer re-charge by 160% in a normal rainfall year. Their own science that states that the spreading basins are by orders of magnitude less effective at percolating water into the aquifer. Draining more of the Arroyo Seco into expanded basins is old science dictated by outdated bureaucratic rules. Let's have a full, open public discussion of the alternatives to conserving water in the Hahamongna basin, alternatives to the ineffective, environmentally damaging processes in place.

903	William Ferry	91106
904	Saveria Mazzola Tilden	91107
905	Margaret Stewart	91105
906	Margaret Stewart	91105
907	Sandra Tyler	91001

Stop draining!! Keep the natural flow. It was really nice when the basin had water 10 years ago ducks swimming

908	Thomas E Johnston	91105	Let nature take its course . We have had enough of Supervisor Barger's vision .
909	Marie Massa	90031	We need to do everything we can to support the environment in Los Angeles. Supporting native plants and animals is the least we can do to help to start repairing all of the damage we have done to this state we call home.
910	Frances Perez		Preserve the natural habitat .
911	Christle Balvin Hintz	91106	Water is becoming more and more precious. Pasadena needs to capture and retain it not deplete it. Our Water and Power Department should be a leader and not a follower in stabilizing and replenishing our ground water basin.
912	Alan Simpson	91101	Heal the Basin, not destroy it.
913	William Baquet Jr	91007	Please look at the long term. If we do right by Natuire & Nature will do right for us. Be not selfish.
915	Carol Togneri	91103	
916	Violet Ouyang	91006	
917	Avram Gold	91105	
918	Carine Bester	91103	Look to the future & preserve the natural beauty & cooling environment of the Arroyo for future generations. Keep nature as an integral part of Pasadena, not an afterthought or heaven forbid something that has to be reengineered in the future. Thank you.
919	Barbara Ishida	91001	We must work with Nature and let Her lead the way for us, not the other way around. "We need acts of restoration, not only for polluted waters and degraded lands, but also for our relationship to the world." - Robin Wall Kimmerer, author of

## Braiding Sweetgrass.

920	Sheila Brock	91001	
921	Mary Vaughan	91001	Please protect the beautiful Hahamongna Park (what used to be called Devil's Gate Dam) and the Raymond Basin. All this stuff going on is being pushed through for what reason? It's a puzzlement. Are the big pits on New York part of any plan? Thank you, Mary Vaughan
922	Nina	91001	Please heal the basin!
923	molly williams	90065	
924	mineko brand	90042	Los Angeles is such a toxic and polluted place, please let us do what we can to preserve the dwindling natural resources & habitat we have left. These things are crucial to the health & well being of Pasadena residents. Thank you.
925	Adam Resnick	90026	The Arroyo is an incredible natural resource. Please work to protect the Arroyo Seco for all.
926	Dan Silver	90012	It is time to restore natural systems for beneficial uses.
927	Mary	91107	Our Arroyo is what gives our city its unique character, not every city can claim that, its home to the wildlife clinging on to some sense of normalcy. Leave it alone, it's an oasis in our city. BTW, is there a plan to rename Arroyo Seco Blvd or the Parkway which delivers our residents and guests at its destinations end, our city border?
928	Paulett C Liewer	91011	I believe that Nature has already found the best solution for replenishing aquifers. Please let Nature take her course!
929	Jason	91106	Let nature be
930	Andreas Aebi	91107	

931	Derek Farias	91746	
932	Lenna Weidman	91103	
933	Kurt Liewer	91011	
937	Matthew C Liewer	91011	
938	Adam Resnick	90026	The Arroyo is an incredible natural resource. Please work to protect the Arroyo Seco for all.
939	Adriana Baltazar	90006	
940	Julie Lewis	91104	
941	Lisa Cole	91024	The petition says it all - protect and heal the basin and the habitat! Thank you.
942	claire robinson	91001-1640	
943	Mary Anne Mello	91107	
944	SAM VEAGUE	91105	
945	Nairi Megrabian	91020	We need to protect our natural habitats as much as possible
946	Ronnie Swire Siegel	91011	As the ASLA climate action leader for Southern CA, I recommend implementing a plan for capturing storm water to replenish the Raymond Groundwater Basin and protecting habitat. It is definitely a challenge but worth putting in the effort for a long term sustainable solution.
947	Christle Balvin Hintz	91106	Water is again worth gold. And we are running out of it in the South West. When we designed the cement channels that carry water to the sea, we were concerned about floods. Now we are concerned about how to preserve the precious water we do have and not deplete our basin. Let's protect and concern our water with new and innovate thinking and not deteriorate our water basin any

## further. Christle Balvin Hintz

948	Lauren Christensen	91103	
949	James Spencer	91105	I have hiked and back packed into the Arroyo for more than 40 years and have witnessed the gradual change in water flow and vegetation die out in many areas of the Upper Arroyo. At present, the entire western US has returned to drought conditions. We are all going to need to reduce our water use. PWP has a dangerously antiquated pipeline and water storage infrastructure (Sunset Reservoir lies empty because it is seismically unsafe and water mains in older parts of the city are over 100 years old). Money needs now to be redirected to fixing these vulnerabilities while continuing to incentivize water conservation. And it is inevitable that sea water desalination will be needed to fulfill domestic and fire fighting needs. The last thing we need is more settling basins!
950			
951			
952	Robin Newquist	91105	Say goodbye to being a Tree City with the proposed depletion of groundwater
953			
954	Valerie Velazquez	91107	Please consider your long term impact and the environment - do not drain the basin, it is irresponsible and disrespectful to the land. Please invest in other solutions particularly around water conservation - there are way too many wasteful lawns in Pasadena.
955	Jeff Neff	91105	

956	Steven Huntley	91104	The water is not the personal property of the city of Pasadena. It belongs to everyone.
957	Elayne G.Techentin	91106	It seems to me a "living stream" is far preferable to mankind messing with Mother Nature again!
958	Linda Roberts	91001	I live in Altadena but this horrible project affects all of us. STOP and PROTECT HAHAMONGA! Water crisis in PASADENA? Stop the overbuilding that increases water usage among other things!
959	Liga Auzins	92840	Habitat destruction and fragmentation has a very serious negative impact on local fauna. Plese help the wildlife. It's so simple.
960	Laura Ayala- Huntley	91104	We need alternatives to just diverting the water and pumping the aquifer until there so nothing left. you have to make generational decisions here. Choose wisely.
961	Timothy Callahan	91001	
962	Adam Resnick	90026	Hahamonga and the Arroyo Seco are environmental gems of the LA region. Water is the basis for life here and we must do a better job of managing this crucial resource, both for us and our regions' wildlife. Please protect Hahamonga and the Raymond Groundwater Basin so that everyone may continue to enjoy and benefit from these unique natural resources!
963	Susie Haleblian	91011	
964	Craig Stanford	91001	
965	jerry s ewing	91780	
966	Edwin Friesen	91106	I agree with this petition

967	MARGARET BURBANK YENOKI	91016	We must do all we can to honor Nature.
968	Ben White	91016	I stand with the Arroyo Seco Foundation and Pasadena Audubon Society in opposing this project with the exception of the above provisions.
969	Julie Weinstein	91030	Keep the stream flowing and protect Raymond Groundwater Basin.
970	Terry A. Santos	91101	I strongly agree with the statements above.
971	Micah Jaffe	91101	This reckless project would contribute to the degradation to our natural resources that I've so enjoyed. Wildlife and nature are some of the things that I most enjoy about living Pasadena, and I would be so sad to see that be disregarded by the city. Please say no to this project and keep our river and groundwater basin alive and commit to sustaining it.
972	SARA P AVILA	91001	
973	M Anderson	91104	
974	LouAnne INSPRUCKER	91107	
975	Jennifer Lerew	91001	
976	Lucy Pliskin	91106	Please protect our wildlife and develop an alternative plan that does not have these deleterious impacts. Thank you.
977	Jared Burton	91104	Let the stream flow!
978	Elizabeth Petrilli	91105-2448	We need to save this important watershed. We live in a draught prone land & must begin healing it.
979	Susan McKellar	91030	
980	Elizabeth Tatum	91104	

981	Catherine Riggs	91107	
982	Hartmut & Marcia Wisch	91103	Let the water flow!!! Weere in complete support of the Arroyo Seco Foundation and the Pasadena Audubon Society opposing the Arroyo Seco Canyon Project!
983	Eileen Dennert	91030	Please keep natural habitat - it sthe only wildlife corridor in our area!!
984	Dana Parnay	95448-9708	
985	Leandra Woods	91001	
987	Geri Johnston	91001	Please stop this unnecessary project
989	Heather Vaughan	91001	Do the right thing and protect the environment.
990	Ted Zehfuss	91711	The Arroyo Seco is a beautiful canyon, that needs to be preserved!
991	Justin Anderson	91001	
992	Susan Zucker	91101-3346	This is a non renewable resource please protect it.
993	Joan G Aebi	91107	We need to protect the Arroyo it is a wonderful place for all to learn about our natural hebetate. do not let it be destroyed. Please protect the Arroyo Seco Canyon.
1011	Kathi Ellsworth	91773	I oppose this project. Hahamongna is already degraded too much.
995	Ira A. Blitz	91006	
996	Trina Jaconi Biery	91206	Please, let the stream flow. Let the water seep back into the Raymond Basin the best way.
997	Blaise Brockman	91007	
999	Kathryn A Fogarty	91106	Please do the environmentally correct thing.
1000	Heather Vaughan	91001	Do the right thing and protect our local environment.

1001	Amy Deavoll	91104	
1002	Wendy Raymond	91016	Do NOT go thru with this ill- considered project. I was born and raised in Pasadena, and I feel this would be a criminal action for the area. Iom ashamed of anyone who approves this debacle.
1003	Doris Finch	91001	Pumping more water from the aqifer for short term gains is long term degradation of the overall communityecological first, quickly followed by cultural and social.
1004	Sally Beer	91001-4507	Having lived on the edge of the upper Arroyo Seco since 1965, I am deeply troubled by Pasadena's proposals in the plan. I believe they will be detrimental to water resources and certainly to the habitat and wildlife in the Arroyo Seco. At the same time, they will do nothing to replenish groundwater in the Raymond Basin.
1005	Bernadine Stolar	91011	
1006	Bernadine Stolar	91011	
1062	Nicholas Mather	91104	We must protect wildlife and water resources. Work with environmental scientists and ecologists.
1008	Denise Guardado	91101	Wildlife is already struggling with all of the obstacles we ve placed in their path. They don t need one more.
1009	Jennifer Webster	91105	Ground water is vital for a healthy sustainable habitat. Please consider other options.
1010	Caroline Blake	91007	As a former Pasadena resident and Audubon follower, protecting wildlife, fish and water is a priority during the Climate Crisis. Please consider the long term effects before finalizing this proposed changes.

1012	V and B Jones	90510	Clean drinking water is vital.
1013	Stephanie Strout	91103	Let the water run free!
1014			
1015			
1016	Joy Chung	91011	We need to preserve what habitat we have, for future generations to enjoy. Stop this project now!
1017	Trina Jaconi Biery	91206	Please, let the stream flow. Let the water seep back into the Raymond Basin the best way.
1018	Carolyn Finger	91001	We must protect this vital resource.
1019	Cris Music	91001	
1020	Sheila M Riddell	91016	We don't need or want further destruction to this beautiful natural part of the San Gabriel Valley.
1021	Ann Jopling	91104	As a member of Pasadena Audubon and a 70 year resident of Pasadena,I urge the City Council to commit to a plan that stabilizes and replenishes the Raymond Groundwater Basin while ensuring protection of wildlife by preserving the flow of natural water, rather than further use of settling basins.
1022	Liza Reyes	91104	
1023	Diane Hong	91206	This Water Plan will have detrimental impacts on the habitat, wildlife and water resources in Hahamongna and Arroyo Seco.
1024	nancy mcgrain	91008	
1025	Katie Porter	90042	I stand with the Pasadena Audubon Society and I want the river to flow!
1026	Frances Perez	90028	The new plan should protect the wildlife habitats in this area.
1027	Priscilla Chipembere	91001	No changes to Hagamonga Watershed Park. This is sacrilege;

the park is a Native American burial
ground and wildlife habitat. It is our
last natural refuge. PLEASE DO NOT
DEVELOP IT!

			DEVELOP IT !
1028	Kathy Musial	91001	
1029	Elizabeth Johnston	91104-2122	
1030	Natalie Klibanow	91030	This area is a vital community resource to several foothills communities, and is enjoyed by countless residents, all along the arroyo, both human and animal, domestic and wild, the current projects underway have already been so disruptive, the feeling of the community, to whom the land truly belongs, have been voiced loudly again and again, please stop using these projects as a draconian funds funnel, and listen to the people who spend time in this land every day, to countless environmental scientists, and on behalf of the land itself and its wildlife, and stop these antiquated, disruptive, and useless projects, there are so many places this money could be better spent in the community. Pouring out money to ruin one of the most vital green spaces which serves several communities seems down right idiotic when there are so many places such funds could be put to better use throughout our communities
1031	Polly McConnell	91001	
1032	George Reich	91103	Does Pasadena really need to increase its population? It sall about sustainability. Water is needed for population growth and the city wants to get that water by increasing the cost of water from its residents and diverting water for natural habitat.

1033	Devin Humpal	91104	1) Our existing spreading basins are rarely filled. Adding more spreading basins does not mean we will get the water to fill them 2) Spreading basins may not be as efficient at restoring groundwater as natural, living streams, as suggested in a report commissioned by the City of Pasadena in 2000 (Philip Williams & Associates, 2000: Flood Hazard, Sediment Management, and Water Feature Analyses, Hahamongna Watershed Park) 3) Live rainbow trout have recently been found in the Arroyo, which is not acknowledged in Environmental Impacts 4) The plan continues to rely on overpumping the Raymond Basin groundwater supply 5) Does not explore resilient water policies that will be required in Southern California as our climate changes. Ignoring these problems will pass future water costs to Pasadena's inhabitants, which will disproportionately affect lower-income residents
1034	Ione Mieure	91104	Don't divert the water. PWP's own engineering studies have proven that the natural streambed sends far more water into the Raymond Basin aquifer than spreading basins do. And a year-round, natural stream offers great benefits for wildlife and for recreation.
1035	Karen Seabrook	91024	Every community is desperate for water with huge problems & shortages looming in our future. This is a band aid approach to justify removal of more ground water without the ability to replace it. The settling ponds have not proven to be a solution. This is part of the last of the low hanging fruit regarding g solutions to our water problems & I am opposed to it.

1036	Gail Adams	91001	Leave the Arroyo Secoos water alone. Solve the areaos aquifer problems scientifically.
1037	Sylvia Stachura	91776	Help us keep our wild places safe for the animals that depend on them.
1038	Susan Frank	91105	
1039	Elizabeth Burton	91106	WE NEED MORE PROTECTION OF NATURAL HABITAT AS THE POPULATION OF SOUTHERN CALIFORNIA GROWS
1040	Antoinette Mongelli	91104	I believe the Arroyo Seco Canyon Project and Pasadena's 25-year Water Plan, the Water System and Resources Plan, will have detrimental impacts on the habitat, wildlife, and water resources in Hahamongna and the Arroyo Seco.
1041	Jozefina	91214	
1042	Meryl Zwanger	91007	I firmly disagree with this project. Please strongly consider the importance of how this project might badly impact the environment. Thank you.
1043	Jonathan Fisher	91207	
1044	Carol Smith	91107	The greater Pasadena area has already lost considerable wildlife and bird habitat with the Hahamonga basin clearing. Water is a critical feature to maintain wildlife and bird habitat. a plan is needed to stabilize and replenish the Raymond Groundwater Basin to maintain critical habitat.
1045	Anita	91011	Donot divert the water. Let the stream flow. The stream feeds the aquifer better than spreading basins do. It is a poorly designed project.
1046	Susan Campisi	91001	If the the city's water plan and the Arroyo Seco Canyon Project take care of habitat, wildlife and water

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			resources, they will then be protecting public health and our quality of life. You can not separate us from nature. I urge the City of Pasadena to plan wisely.
1047	Mary Fitzgerald	91101	We in Pasadena can be a model of good, sustainable care of our environment and our people.
1048	Michele Carter	91001	I am a member of Pasadena Audubon and support the Arroyo Seco Foundation's position NOT to divert the water as proposed by Pasadena's 25-year water plan. Thank you!
1049	Christine Pallette	91775	
1050	Patti wagonhurst	90042	
1051	Sarah Barkstelle	91406	
1052	Andreas Aebi	91107	Ledt the river flow! - Heal the basin -
1053			
1054	Aixa Daza	91001	
1055	Gabrielle Johnston	91011	
1056	Denise Yuan	91001	Now more than ever, it s vitally important that we take wildlife, especially endangered ones!, and their long term welfare into account. Destroying their habitat will have negative consequences not just for the, but also for us, our future generations. We need to think more long term.
1057	Drew Dembowski	91001	
1058	Roxanne Bartlett	90042	
1059	Mike Yartzoff	91109	In 2021, solutions of infrastructure should also be solutions of ecosystem restoration/preservation. We know how, we have the tools, and we have the data. Please do

			better.
1060	Susette Horspool	91001	I can't understand why anyone would not want a flourishing river bed here. It helps the spirits and often the lives of everyone and everything around it.
1061	Angela Child	91006	

Duplicates and blanks have been removed. The total number of signers is: 1024



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.

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.

It is inappropriate for Pasadena's WSRP to criticize the RBMB's management of the Basin, under the Judgement, 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.

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.

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".

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:

<u>Page 1</u> – 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.

<u>Page 1</u> – 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.

<u>Page 3</u> – 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.

<u>Page 3</u> – 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.

<u>Page 3</u> – 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.

<u>Page 4</u> – The WSRP indicates Pasadena is Planning for "banking" wet-year <u>discounted</u> imported water. RBMB believes there is <u>no basis</u> 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.

<u>Page 5</u> – 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.

<u>Page 1-1</u> – 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.

- <u>Page 1-1</u> 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.
- <u>Page 1-3</u> 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.
- <u>Page 1-4</u> 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.
- <u>Page 2-1</u> 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.
- <u>Page 2-12</u> 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.
- <u>Page 2-13</u> The WSRP indicates Pasadena will be (1) implementing specific <u>projects</u> in RB to reduce loss (leakage) of groundwater to MSGB, (2) revise <u>policy</u> on Basin sustainability, (3) develop Basin protection policies and <u>guidelines</u> 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.
- <u>Page 2-14</u> 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 <u>over</u> 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 redetermination 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.
- <u>Page 2-16, 4-3</u> The WSRP indicates Pasadena's current "long-term storage" is 13,400 AF in Monk Hill and 20,600 AF in Pasadena subareas. The WSRP indicates, "Long-term storage is the key underpinning Pasadena's water supply resiliency". The RBMB suggests this discussion be clarified to include (1) termination of long-term storage when accounts are exhausted (no new storage), and (2) current declining water levels while water is "stored" in LTS accounts. RBMB

City of Pasadena April 27, 2021 Page 4

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

<u>Page 2-17</u> – 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 meetings 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.

<u>Page 2-17</u> — 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.

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

<u>Page 4-2</u> – 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.

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

<u>Page 5-8</u> – 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.

<u>Page 5-10</u> — 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.

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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. Zampiello Executive Officer

Raymond Basin Management Board



# Translocation of Rainbow Trout to the Arroyo Seco from the Bobcat Fire Burn Area Fall 2020



## **Prepared by Jennifer Pareti**

#### Introduction

Following the 2020 Bobcat Fire, CDFW led a fish rescue in the West Fork San Gabriel River (WFSGR) and Bear Creek (tributary to WFSGR) in Los Angeles County, within the Angeles National Forest. This report is a follow up to the Bobcat Fire Fish Rescue Report (Pareti 2021) and focuses on the translocation of rescued native coastal rainbow trout (Oncorhynchus mykiss irideus) to the Arroyo Seco in Los Angeles County, within the Angeles National Forest.

The Bobcat Fire began on September 6, 2020 and burned 115,796 acres of the Angeles National Forest, including 93% of the lower West Fork San Gabriel River watershed and 81% of the Bear Creek watershed (InciWeb 2020). CDFW biologists conducted reconnaissance level surveys on October 13 and 14, 2020 resulting in the observation of the extensively burned watersheds with little to no vegetation remaining on the steep surrounding mountainsides. The Burned Area Emergency Response Report (BAER) projected that upon the arrival of moderate rainfall, heavy debris and sediment loads would occur within the stream resulting in high mortality of native fish species throughout the WFSGR and Bear Creek (USFS 2020). A fish rescue was discussed with US Fish and Wildlife and US Forest Service, and all were in agreement with the CDFW rescue and release plan. Additionally, CDFW evaluated plans for a conservation translocation of rainbow trout to the Arroyo Seco.

The Arroyo Seco, a tributary to the Los Angeles River, has historically supported a rainbow trout population, however the watershed burned extensively in the 2009 Station Fire. Stream habitat within the Arroyo Seco has recovered to a level which should support rainbow trout but fish have not been observed during CDFW reconnaissance level and electrofishing surveys. Fish passage is not currently possible in the Arroyo Seco around Devil's Gate Dam, and therefore, there is no way for native rainbow trout to naturally repopulate the Arroyo Seco. The WFSGR coastal rainbow trout population is recognized as a valuable genetic resource for southern California Steelhead and native coastal rainbow trout (Abadia-Cardosa et al. 2016, NMFS 2012). Translocating WFSGR rainbow trout into Arroyo Seco provided an opportunity to preserve valuable WFSGR genetics as well as potentially re-establishing a native rainbow trout population in Arroyo Seco.

A reconnaissance level survey was conducted in Arroyo Seco on November 12, 2020 to assess the stream habitat. The water level in the stream was low following a year of below average rainfall, but the habitat was still suitable for rainbow trout. Approximately 3 miles of stream were selected for the translocation and 500 rainbow trout was determined as target population size to be translocated. Due to the shallow habitat in the Arroyo Seco at the time of the fish rescue, it was decided to only translocate small rainbow trout (less than 5 inches).

#### Rescue

Fish rescues in the WFSGR for translocation to Arroyo Seco were conducted by CDFW staff over two days: November 24, and December 1, 2020. Rescue efforts varied in number of rescue teams and rescue locations based on staff availability and are shown in Table 1 and Figure 1. Rescue teams were made up of 5-6 CDFW staff.

Table 1. West Fork San Gabriel River and Bear Creek Fish Rescue Dates and Locations

Rescue Date	GPS Coordinates of Rescue Locations by Rescue Date		
	WFSGR	Bear Creek	
November 24	34.244782, -117.946519	N/A	
December 1	34.242414,-117.919680	34.240860, -117.884622	

Electrofishing was utilized to capture all fish and was conducted using one to two backpack electrofisher units (Smith Root Models LR-20B and LR-24) depending on staff availability, as well as stream width and morphology. Electrofisher voltage settings ranged from 150-250 Volts depending on water depth. Remaining settings were as follows: 30 Hertz pulse frequency, 5 milliseconds pulse width, and 15 percent duty cycle. Rescue locations were selected based on CDFW 2018 habitat and fish data as well as accessibility (Pareti 2020). Electrofishing was conducted in an upstream direction in selected rescue locations and consisted of one or two electrofishers with at least two neters assigned to each unit.

Captured fish were placed in buckets with water and transferred to streamside holding containers with aerators. All fish were identified and counted by species. Rescued rainbow trout individuals were sorted by approximate size to less than or greater than 5 inches (127 mm). Fish translocated to Arroyo Seco had their adipose fin clipped to mark fish for future identification. Fish were weighed and measured (fork length) as time allowed. A representative number of adipose fin clips were collected for genetic sampling and stored dry in individually marked envelopes.

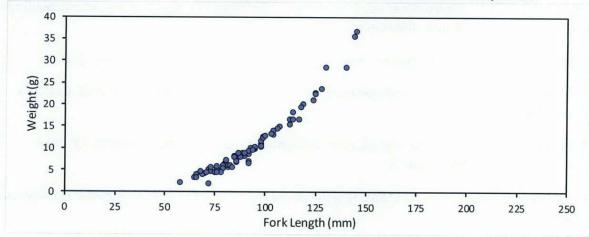
The total number of rainbow trout rescued are listed in Table 2 below along with the numbers of fish translocated to the Arroyo Seco as well as released into the East Fork San Gabriel River. Graph 1 shows length vs. weight relationships for all measured individuals translocated to the Arroyo Seco.

Fish were transferred to coolers filled with stream water for transport to release locations. Water temperature was monitored within the coolers and multiple battery-operated aerators were used for each cooler. Fish collection efforts concluded by 1:30 PM each day.

Table 2. Total Rainbow Trout Rescued from West Fork San Gabriel River and Bear Creek and Released in Arroyo Seco and East Fork San Gabriel River (EFSGR). Due to habitat availability, only rainbow trout less than 5 inches (127 mm) were considered for translocation to Arroyo Seco.

	Number of Rainbow Trout by Date		Total Fish
	11/24	12/1	
Total Rescued	271	379	650
Total Released in Arroyo Seco < 5 inches (127 mm)	197	272	469
Total Released in EFSGR > 5 inches (127 mm)	69	107	176
Total Mortalities	5	0	5

Graph 1. Length vs. weight of measured and weighed rainbow trout (n=78) rescued in West Fork San Gabriel River and Bear Creek and translocated to the Arroyo Seco, November 24 and December 1, 2020. Due to habitat availability, only rainbow trout less than 5 inches (127 mm) were considered for translocation to Arroyo Seco.



#### Release

A total of 469 rainbow trout were released into the Arroyo Seco on November 24 and December 1, 2020, distributed over 2.5 miles of stream (Figure 2). Fish were acclimated prior to release by slowing adding water from the Arroyo Seco stream into the coolers until the cooler water temperature was within 2°F of the Arroyo Seco. Once acclimated, fish were transferred to buckets and backpacks of 100% Arroyo Seco water to ensure no water from WFSGR entered the Arroyo Seco. Fish were hiked to release locations in buckets and backpacks and released in small quantities (3-10 fish) into areas with the best available rainbow trout habitat. Fish were observed following release to confirm that they were behaving normally. Mortalities were collected and preserved in ethyl alcohol.

### **Future Monitoring**

A monitoring plan has been designed to collect data on Arroyo Seco stream conditions where rainbow trout were released and in downstream areas where fish may disperse. Fish surveys will be conducted by CDFW in the summer and/or fall.

## Acknowledgements

Thank you to the following CDFW Region 5 staff for their assistance with fieldwork and planning for this fish rescue and release effort: Olivia Arredondo, Russell Barabe, Karen Boortz, Claudio Cardenas, Marissa Groenhof, Shelley Hunter, Matt Lucero, Derek Miller, Jenny O'Brien, John O'Brien, Austin Sturkie, Abram Tucker, and Brian Young.

#### References

Abadia-Cardosa, A., Pearse, D.E., Jacobsen, S., Marshall, J., Dalrymple, D., Kawasaki, F., Ruiz-Camps, G., Garza, J.C. 2016. Populations Genetic Structure and Ancestry of Steelhead/rainbow trout (Oncorhynchus mykiss) at the Extreme Southern Edge of their Range in North America. Conservation Genetics, 17(3), 675-689.

InciWeb. 2020. InciWeb – Incident Information System, Bobcat Fire. https://inciweb.nwcg.gov/incident/7152/

Pareti, J. 2020. West Fork San Gabriel River Stream Habitat and Fish Abundance June through August 2018. California Department of Fish and Wildlife, Region 5.

Pareti, J. 2020a. West Fork San Gabriel River 2018 Drying Event Summary, October 24, 2018 - December 27, 2018. California Department of Fish and Wildlife, Region 5.

Pareti, J. 2021. Bobcat Fire Fish Rescue, West Fork San Gabriel River and Bear Creek, Fall 2020. California Department of Fish and Wildlife, Region 5.

USFS. 2020 (October 11). Burned Area Emergency Response, Bobcat Fire. Angeles National Forest Hydrology and Watershed Specialist Report.

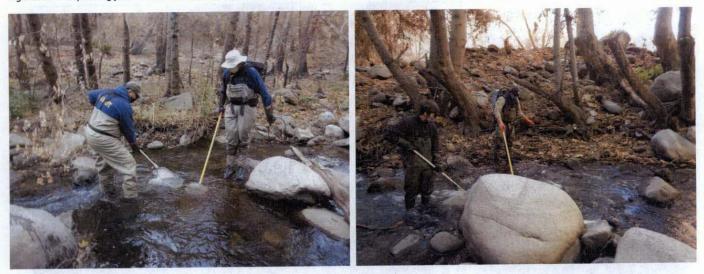
Figure 1: Bobcat Fire Fish Rescue Locations on the West Fork San Gabriel River. November 24 and December 1, 2020.



Figure 2. Bobcat Fire Rainbow Trout Translocation Locations on the Arroyo Seco. November 24 and December 1, 2020.



Figures 3-4. Capturing fish in the West Fork San Gabriel River and Bear Creek using backpack electrofishing.



Figures 5-8. Processing fish. Fish were sorted and counted by species. Rainbow trout were further sorted into two size classes, less than or greater than 5 inches (127 mm). Top and bottom left, rainbow trout less than 5 inches. Top and bottom right, rainbow trout greater than 5 inches

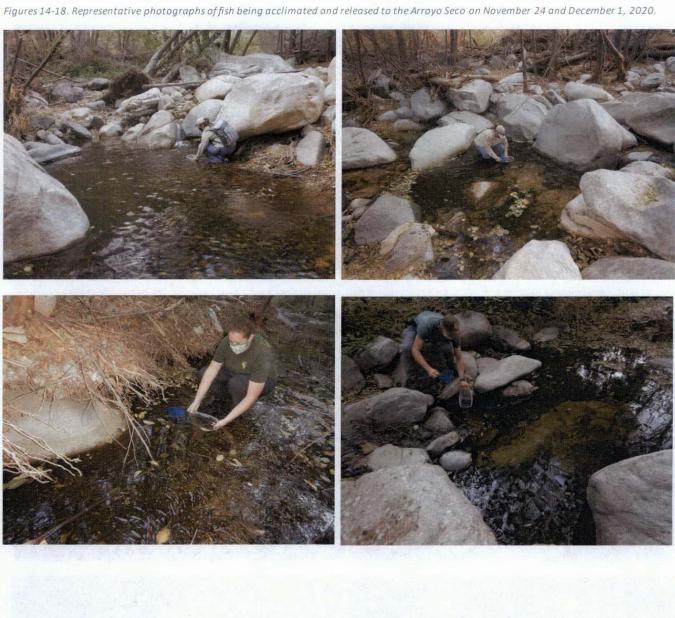


 $Figures 9-10.\ Processing \ fish.\ Fish\ were\ measured, weighed, and fin\ clipped\ according\ to\ the\ rescue\ and\ translocation\ plan.$ 



Figures 11-14. Representative photographs of fish being acclimated and released to the Arroyo Seco on November 24 and December 1, 2020.







December 17, 2018

To: Mitch Dion, Pasadena Water and Power

Roumiana Voutchkova, Pasadena Water and Power

From: Michael J. Preszler, Zanjero

Jim Crowley, Zanjero

Subject: Raymond Basin Assessment

## 1. Purpose and Scope

Pasadena Water and Power ("PWP") is currently engaged in the significant challenge of staving off the potential of critical water supply shortfalls, ensuring continued water reliability, and implementing long-term solutions to address water quality issues in the Raymond Basin.

The Raymond Basin Assessment (RBA) presented here is based on review of information, data, historical documents, discussions with Pasadena Water and Power (PWP), and others with knowledge of the Raymond Basin. Much information exists describing the Raymond Basin and the longstanding effects over time and little will be repeated in the RBA. This document, the RBA, is intended to provide a perspective on water resource stewardship in the Raymond Basin aimed at forwarding PWP's interest in protection and recovery of the Raymond Basin.

The purpose of the RBA is to provide an initial effort comprised of reviewing the Raymond Basin and management to identify current status and understanding. The RBA is intended to evaluate whether over-all management of the Raymond Basin has been effective over time, including Pasadena's involvement. The purpose also includes consideration of strategic options for Pasadena to consider in working towards improving the Raymond Basin. The findings and recommendations described here are based on an evaluation of limited time availability and resources, and represent an initial effort for implementation.

### CONCLUSION

The Raymond Basin is not managed in a sustainable manner as evidenced by the decrease in basin groundwater levels over the last 118 years, and is under threat of spreading contamination.

PWP and RBMB must change its course and take action to prevent permanent failure of the basin.



# 2. Raymond Basin Adjudication

In the 1940s the Raymond Basin was the subject of adjudication, a legal agreement or decision that defines the rights of water pumpers in a basin. The adjudication focused on water right entitlements. The adjudication did not focus on management efforts that would allow for a sustainable operation of the basin that would balance extractions from the basin with natural replenishment supplemented by imported supplies. The original judgment established a safe yield for the basin of 21,900 acre-feet per year and divided the water rights among sixteen users. In 1955 the judgment was modified, resulting in a decreed safe yield of 30,622 acre-feet per year. Justification for this increase is not clear in the documents. A 1974 modification of the judgment allows basin parties the right to spread canyon diversions and recapture a percentage of the spread water. In 1984 the judgment was restated and modified with no change in the decreed rights. The Raymond Basin decreed rights and storage accounts are shown in Table 1.

Table 1. Raymond Basin Decreed Rights and Long-Term Storage

Area	(Acre-Feet Per Year)	Pasadena Subarea Long-Term Storage as of 6/30/2018, Acre-Feet
Monk Hill Subarea		
La Canada Irrigation District	100	999.3
Las Flores Water Company	249	457.2
Lincoln Avenue Water Company	567	1,254.8
Pasadena, City of	4,464	13,398.8
Pasadena Cemetery Association	91	184.3
Rubio Canon Land & Water Assn.	1,221	1,077.0
Valley Water Company	797	525.4
Subtotal:	7,489	17,897
Pasadena Subarea		
Alhambra, City of	1,031	3,543.1
Arcadia, City of	2,118	891.0
California-American Water Company	2,299	1,510.6
East Pasadena Water Company	515	317.4
H.E. Huntington Library & Art Gallery	372	434.1
Kinneloa Irrigation District	516	790.0
Pasadena, City of	8,343	9,968.8
San Gabriel County Water District	1,091	2,825.0
Sunny Slope Water Company	1,558	2,427.9
Subtotal:	17,843	22,708
Western Unit Total:	25,332	40,605
City of Pasadena Total:	12,807	
Santa Anita Subarea		
Arcadia, City of	3,526	and
Sierra Madre, City Of	1,764	
Subtotal	5,290	
Raymond Basin Total	30,622	

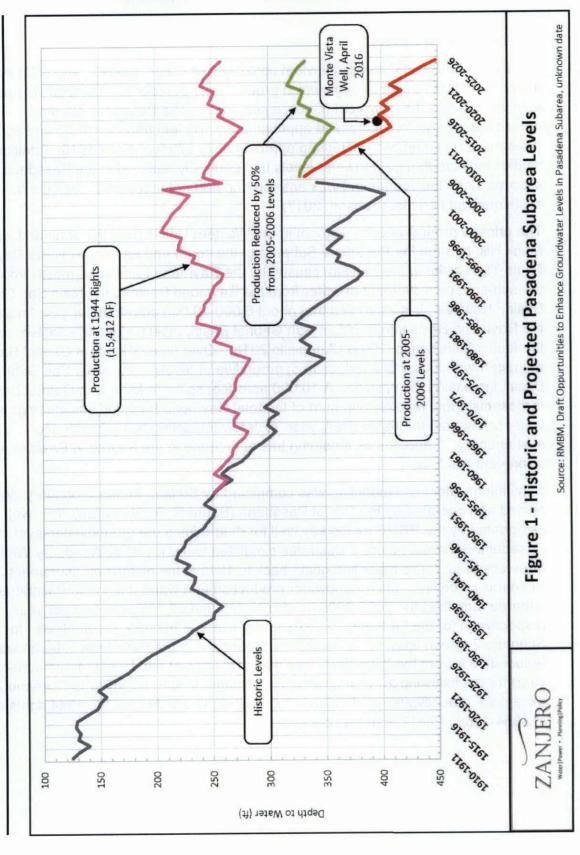
### 3. Groundwater Levels

The Raymond Basin contains alluvium consisting of sands, gravels, and other porous materials of large depth through which groundwater percolates, with total volume estimated at 820,000 acre-feet (Geoscience, 2004). The Pasadena subarea groundwater elevation decreased approximately 100 feet between 1980 and 2008 (Stetson, 2017), and has decreased approximately 275 feet since 1910. Additionally, studies indicate that groundwater levels had generally declined in the Pasadena subarea since the Judgement was entered and had not recovered, even during sustained wet periods. (Stetson, 2017)

The primary groundwater movement in the Western Unit is from the north and west of Monk Hill, through the Pasadena Subarea to the south and east towards the Raymond Fault. The barrier in the alluvium caused by the Raymond Fault zone mostly impedes the sub-surface movement of water from the Raymond Basin to the Main San Gabriel Basin. However, it is estimated that about 6,000-10,000 acre-feet per year "spills" from the Raymond Basin into the Main San Gabriel Basin, mostly along the eastern side of the fault. (Geoscience, 2004) (Zampiello 2018). Over time, Main San Gabriel Basin management has led to a reduction of groundwater levels in the Main San Gabriel Basin increasing the spillage. A 10,000 acre-feet spill into Main San Gabriel Basin represents approximately one third of the total Raymond Basin adjudicated rights. This water is lost from the basin every year, severely impacting basin health and sustainability. It appears as if nothing has been done in the Raymond Basin to reduce or prevent this loss.

Simulation water level modeling was completed by Stetson for the Woodbury Well, owned and operated by the City of Pasadena (Board R. B., Unknown). This well was designated by the RBMB as the key well for determining the groundwater level of the Pasadena Subarea. Figure 1 illustrates simulated water levels at Woodbury Well for three scenarios. The black line going back to 1911 is the historic measurement. In Scenario 1 (red line), the groundwater production and water use in the Pasadena subarea remain at the 2005-2006 levels (28,243 and 57,737 acre-feet per year respectively) for the following 20 years under average hydrologic conditions. In Scenario 2 (green line), the groundwater production in the Pasadena subarea was reduced 50% from the 2005-2006 levels and remains at that level (14,121 acre-feet per year) for the following 20 years. Scenario 3 (magenta line) is similar to Scenario 2 except the groundwater production in the Pasadena was kept at the 1944 rights starting in 1954-1955 (15,412 acre-feet per year).

December 17, 2018





As shown in Figure 1 under Scenario 1, the simulation indicated that the water level at Woodbury Well would continue to decline from approximately 330 feet to 450 feet (about 120 feet). Under Scenario 2, results indicate that the water level at Woodbury Well appears to stabilize although it declines about 10 feet. Under Scenario 3, results indicate that the water level at Woodbury Well stabilizes at about 250 feet since 1954-1955.

Informed with the data shown in Figure 1 and concerned over basin contamination, the RBMB developed an approach to both recover groundwater levels and mitigate groundwater contamination. In 2009, the Pasadena subarea subcommittee adopted Resolution No. 42-0109 entitled, "Resolution of the Board of Directors of the Raymond Basin Management Board Adopting a Cooperative Pumping Reduction Plan for the Parties with Water Rights in the Pasadena Subarea" (Reduction Plan). This Reduction Plan called for the water agencies and pumpers involved to voluntarily agree to incrementally decrease pumping in the Pasadena subarea by six percent each year for five years for a maximum of 30 percent reduction. The initial goal of the Reduction Plan is to increase groundwater levels to 50 feet above the conditions as of July 1, 2009.

The groundwater level, as measured at the Monte Vista Well, decreased by about 13 feet from 2009 to 2017 (Stetson, 2017). The Reduction Plan didn't produce anticipated results (i.e. increase groundwater levels). In addition, the actual volumes pumped didn't significantly change – it was just a "paper" reduction. The Reduction Plan restriction primarily placed a limitation on the use of 1955 Decreed Rights, but allowed producers to continue to produce groundwater against their Long Term Storage. Consequently, it is likely actual production would have been the same whether or not the Reduction Plan was enacted. (Stetson, 2017)

The amount of long-term storage available in the Pasadena subarea is 22,708 acrefeet. (Board R. B., 2018) Although the ability to add to the long-term storage account is no longer available, the remaining long-term storage account could provide decades of "make up" water. In other words, the actual volume of water pumped from the basin may not decrease by 30 percent for decades, resulting in the continual lowering of groundwater levels.

Information available in 2009 when the resolution was adopted to curtail pumping by 30% clearly showed that the curtailment would not obtain stated goals (i.e., 50 feet increase in ground water levels). Modeling information shown in Figure 1 indicated that

<sup>&</sup>lt;sup>1</sup> Although Woodbury Well was designated as the key well for determining the groundwater level of the Pasadena Subarea, data was not collected and the Monte Vista Well was instead used to determine static water elevation for the Pasadena Subarea.



a minimum curtailment of about 50% would be required to maintain groundwater levels over time and therefore a curtailment of larger than 50% would be required to increase groundwater levels by 50 feet. Even with this data, the RBMB selected to only reduce pumping by 30 percent, and then allowed use of carryover storage, nullifying any potential for positive basin impacts.

## 4. Contamination of the Basin

The National Aeronautics and Space Administration (NASA) is responsible for remediation of contaminates originating from the Jet Propulsion Laboratory (JPL) site, as required under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA). See Figure 2 below depicting the contamination zone. The cleanup effort includes treatment of groundwater extracted from drinking water production wells in the Monk Hill subarea containing site-related chemicals of interest, which include volatile organic compounds (VOCs) and perchlorate. Contaminated wells are located in both the Monk Hill subarea and the Pasadena subarea down gradient of the JPL facility, however, NASA has not accepted responsibility for groundwater

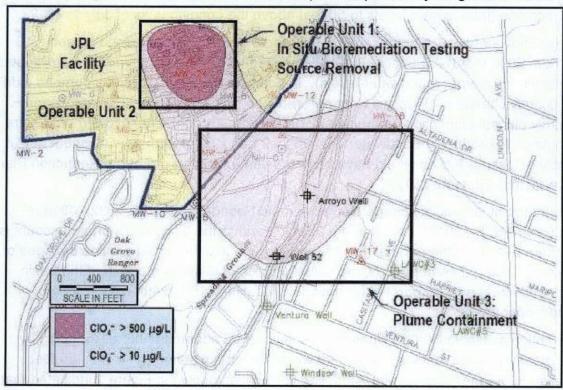


Figure 2 - Map of JPL Perchlorate Contamination in the Arroyo Seco (Brick, 2018)

December 17, 2018

contamination in the Pasadena subarea. (Brick, 2018) PWP staff has indicated that sampling in wells to the south and east have elevated plume contaminates, indicating the contamination continues to spread outside the capture area. There are contamination sites that are currently not managed that appear to be migrating downgradient into the central portion of the Pasadena subarea, where Pasadena's Woodbury and Monte Vista wells are located, by 2024. (Geoscience, 2004) JPL and NASA's cleanup efforts of the managed areas are important. However, plume movement outside of the existing managed area is a direct threat to the long-term sustainability of the basin and needs to be addressed.

## 5. Hydrologic Modeling

A Raymond Basin groundwater model has been developed by Geoscience. It uses MODFLOW modeling software. The MODFLOW computer code is a block-centered, three-dimensional, finite-difference groundwater model widely used. MODFLOW was developed by the U.S. Geological Survey for the purpose of modeling groundwater flow.

The Geoscience 2004 report, "Raymond Basin Ground Water Flow Model Predictive Simulations", provides a description of how the Raymond Basin model was developed. The discussion of model development is sound and should provide an adequate tool to examine the Raymond Basin. However, in the 2004 Geoscience report, the projected 2017 groundwater levels, under baseline conditions, were predicted to rise throughout the entire basin. While the basin essentially operated under baseline conditions through 2017, there was actually a decrease in groundwater levels throughout the basin. This is presumably at least partially due the drought conditions experienced in the basin during these years. However, it is unknown how much of the incorrect projection might be attributable to modeling development or calibration.

## 6. Basin Management

The most noteworthy finding is the seemingly lack of urgency regarding the basin's state of health and implementing effective management actions. There appears to be ample data and basin information to identify the deteriorating state of the basin, and many available project options to reduce declining groundwater levels in the Pasadena subarea. However, only limited efforts have been implemented. Actions that have been taken over time (such as the 30% reduction in decreed rights pumping) have failed to increase or even maintain groundwater levels in the Pasadena subarea. It does not appear that the RBMB fully evaluated the 30% reduction plan prior to implementation as review of information suggests that a 30% evaluation was not completed. A 50% reduction was studied that indicated a 50% reduction would maintain groundwater levels.



Additionally, the over-arching RBMB goals and objectives are unclear. It appears the current goal for the Pasadena subarea is to raise the groundwater levels 50 feet above the 2009 conditions. Why is this a goal? How is that goal tied to reaching basin sustainability? What is basin sustainability? There does not appear to be an over-arching policy that could answer these questions. In addition, there is no urgency or effective practices in place to even meet the stated goal of 50 feet above 2009 conditions.

The structure of the RBMB was determined by the Court. It appears that the approval structure of the RBMB minimizes the ability for PWP to prioritize the Pasadena subarea making significant and meaningful projects difficult to carry out. It also appears that the City of Pasadena has not been proactive or assertive in an effort to improve basin management and sustainability.

The RBMB structure does not address the myriad of interlinking urban issues that impact water quality and quantity. For instance multiple entities have authority over land use, stormwater, well construction/ abandonment, hazardous cleanup, and many other factors. At a minimum, the RBMB should be involved in all these issues to ensure groundwater protection.

There have been discussions regarding combining management of the Raymond Basin with the management of the Main San Gabriel Basin. The RBMB should fully investigate and understand the advantages and disadvantages of this possibility and assure that one basin isn't being favored over the other.

# 7. Sustainable Groundwater Management Act (SGMA)

Adjudicated basins are largely exempt under the Sustainable Groundwater Management Act (SGMA). As such, SGMA does not require sustainability management of adjudicated basins. The Raymond Basin adjudication focuses on the water rights interests of the parties and not sustainability management of the basin. Discussions with California Department of Water Resources (DWR) SGMA staff indicate that the State of California (State) is aware that adjudicated basins including Raymond Basin, are not operated under a sustainably management approach that would meet the requirements of SGMA.

There is interest at the State level to require adjudicated basins to be managed in a sustainable approach. No known actions at the State level have initiated towards this goal at this time. However, it is likely the State will become involved in the current political atmosphere within California water management. It is recommended that sustainability requirements be considered in developing long-term basin goals and objectives in order to maintain local basin management.

### 8. Conclusions and Recommendations

The Raymond Basin holds over 800,000 acre-feet of water. The Basin's water supply is critical to the continued success of the member communities. It is also the critical local supply during short-term and long-term supply emergencies. In the case of an emergency where Metropolitan Water District supplies are not available such as through drought, regulatory constraints, contamination, or earthquake, the Raymond Basin would be the primary and only local water supply available to meet the City of Pasadena demands. However, current conditions and trends for basin volume and quality threaten its ability to supply water during normal conditions, and during emergencies. Without a healthy, sustainable basin, there may be no groundwater available for supply shortage emergencies.

There are three main threats to the basin that PWP should address with near-term decisions and actions.

- Contamination. The JPL contamination plumes need to be actively halted, treated, and remediated to prevent irreparable effects to the basin, limiting operational flexibility and water availability. The RBMB and/or Pasadena could assume an increased role in working with JPL, the EPA and others to develop options to address contamination.
- 2. Basin Management. The basin levels have trended down since the adjudication, yet there appears to be no urgency in responding. The basin management needs to define basin long-term sustainability goals and develop, support, and implement actions to reach sustainability. RBMB should investigate ways to lead, or at least participate in, the many other urban-interface issues that impact basin health, including land use, stormwater, well permitting, hazardous cleanup, etc.
- 3. SGMA. The State acknowledges that almost none of the adjudicated basins meet SGMA requirements. Given the State's recent actions in water management, it is highly likely the State will at the minimum soon enforce SGMA requirements on adjudicated basins, or even more intrusive, become active regulators of the basin.

PWP is in the unique situation as the basin's biggest user, and therefore at most risk to basin failures. However, PWP's voting power on the RBMB is equal to all users, limiting the ability to control its destiny. Therefore, PWP should take a two-part strategy to improve the basin and its supply reliability:

### 1. PWP Self Actions

PWP should identify the risks, goals, and management alternatives to directly improve sustainability of the Monk Hill and Pasadena subareas. Implement these actions as the lead, but enjoining partners where possible if the partnerships do not significantly impact the schedule. Specific project actions include:

- a. Reduce loss to Main San Gabriel Basin. Obtain a copy of the basin model for use in alternatives analysis. Calibrate model to most recent conditions as required. Model each project and identify their effect on the water lost over the fault and plume movement.
- b. One project could be to pump back from the fault line and recharge near the Arroyo Seco spreading grounds and contamination plume.
- c. Another project is to add new wells and/or increase pumping from the fault line to feed Pasadena's distribution system. Obtain the system hydraulic model and analyze feasibility, including necessary improvements.
- d. Investigate moving Arroyo Seco diversion/recharge away from plume area and downstream to allow full water right diversions. Investigate ability of relocated diversions to support recycled/raw water opportunities.
- e. Investigate potential issues in merging the managements of the RBMB with the Main San Gabriel Basin and identify specific policies PWP should pursue on this effort.

## 2. PWP and RBMB Actions

PWP needs to work within the RBMB in a proactive manner to establish an understanding of basin threats and a sense of urgency in the need to address long-term sustainability. Specific project actions include:

- a. Identify and commit to pursuing responsible entities in contamination management and cleanup. RBMB needs to lead this effort and manage contamination cleanup activities to protect the basin.
- b. Determine the sustainable yield of the basin.
- c. The RBMB should establish an overarching policy on basin sustainability, develop management goals, and actively implement management actions to meet sustainability goals.
- d. Development of basin protection policies and guidelines to be adopted by all other land use and regulatory entities in the basin.

Ultimate success of basin management and sustainability will depend on how concisely the issues and alternatives have been set out and how assertively PWP and the RBMB chooses to act upon them.

### 9. References

- Board, R. B. (Unknown) Draft Opportunities to Enhance Groundwater Levels in Pasadena Subarea.
- Board, R. B. (2009). Resolution No. 42-0109 Resolution of the Board of Directors of the Raymond Basin Management Board Adopting a Cooperative Pumping Reduction Plan for the Parties with Water Rights in the Pasadena Subarea.
- Board, R. B. (2012). Rules and Regulations.
- Board, R. B. (2015). Resolution No. 48-0415 Resolution of the Board of Directors of the Raymond Basin Management Board Adopting Guidelines for Construction of a New Well or Well Destruction in the Raymond Basin.
- Board, R. B. (2015-2017). Annual Report.
- Board, R. B. (2018). Annual Report July 1, 2017 June 30, 2018.
- Board, R. B. (Unknown). Draft Opportunities to Enhance Groundwater Levels in the Pasadena Subarea.
- Brick, T. (2004). Action Plan for Groundwater Management in the Arroyo Seco 2010.
- Brick, T. (2018). Personal Communication.
- Geoscience. (2004). Baseline Ground Water Assessment of the Raymond Basin Final Report
- Geoscience. (2004). Raymond Basin Ground Water Flow Model Predictive Simulations.
- Stetson. (2017). A Cooperative Pumping Reduction Plan for the Parties with Water Rights in the Pasadena Subarea Performance Evaluation.
- NASA (2010). CDPH Policy Memorandum 97-005 Documentation Raymond Basin, Monk Hill Subarea.
- Pasadena, City of. (1961). The Adjudication of the Raymond Basin.
- Pasadena, City of. (1965). The Raymond Basin.
- Pasadena, City of. (2011). Water Integrated Resources Plan.
- Pasadena, City of. (2016). 2015 Urban Water Management Plan.
- Pasadena, City of. (2018). City of Pasadena Local Water Supply Presentation.
- Philip Williams and Associates, Ltd. (2000). Flood Hazard, Sediment Management, and Water Feature Analyses, Hahamongna Watershed Park Pasadena, CA.

- Stetson Engineers Inc. (2015). Draft Technical Memorandum Monk Hill Subarea Task Force.
- Stetson Engineers Inc. (2017). Staff Report A Cooperative Pumping Reduction Plan for the Parties with Water Rights in the Pasadena Subarea Performance Analysis.
- Superior Court of California. (1984). Notice of Motion to Modify and Restate Judgement in Regard to Transfer of Rights and the Establishment of a New Raymond Basin Management Board as Watermaster.
- U.S. Bureau of Reclamation. (2014). Los Angeles Basin Groundwater Adjudication Summary Lost Angeles Basin Stormwater Conservation Study.
- Zampiello, T. (2018). Personal Communication.

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# Martinez, Ruben

From:

Laura Solomon <

Sent: To: Thursday, June 03, 2021 3:39 PM PublicComment-AutoResponse

Cc:

Tim Brick; Mitchell Tsai; Mark Hunter

Subject:

Arroyo Seco Canyon Project

**CAUTION:** This email was delivered from the Internet. Do not click links or open attachments unless you **know** the content is safe. Report phish using the Phish Alert Button. <u>Learn more...</u>.

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To: Pasadena City Council

RE: Arroyo Seco Canyon Project

June 3, 2021

Dear Pasadena City Council:

Thank you for the opportunity to comment on the FEIR for the Arroyo Seco Canyon Project. My name is Laura Solomon, and I served on the Environmental Advisory Commission for six years. I am also the president of the Pasadena Audubon Society. As a long-time resident of Pasadena (my grandparents moved here in 1901 and 1903), I have some understanding of the need to have access to water here in Southern California. In fact, I cannot think of a more urgent issue facing us than access to water. Because of that, I understand the need to replenish the Raymond Basin, which has been sinking for the last 150 years. It is because I understand that need that I cannot support the Arroyo Canyon Project, and I urge Council to not spend \$14 million on a project that will be ineffectual at best and harmful at worst.

I cannot support the ASCP in its current form because it does not create new water. Instead, it merely diverts water from the living stream into settling ponds. These ponds are not as effective as the stream at getting water back into the Raymond Basin. They silt up quickly so they require ongoing maintenance, and they also attract mosquitoes and algae. Their soil bottoms are tamped down so they hold the water much longer than the sandy bed of the stream that allows water to percolate much easier. This water diversion removes sorely-needed habitat, habitat that our local flora and fauna depend upon, in an area that has already suffered enough because of human abuse.

Another reason I cannot support the ASCP is that it ignores the presence of fish in the stream. That alone should trigger a major revision of the EIR.

Another reason I cannot support the ASCP is that it ignores the fact that as part of the settlement between LA Co DPW and the Arroyo Seco Foundation and Pasadena Audubon Society, the County will be leaving water behind Devil's Gate Dam through the spring all the way to July 1. Surely that is a much more effective means of getting water into the Raymond Basin than a few settling ponds?

Another reason I cannot support the ASCP is that its plan to mitigate the destruction of habitat, planting 50 sycamores and mothing else, indicates that the mitigators do not understand the habitat that is already there. There are so many problems with this plan that I don't even know where to begin. I will just say that sycamores soak up a lot of water.

I do understand the urgency of the situation regarding the Raymond Basin. But I cannot support a project that destroys one of our last little bits of alluvial scrub while all over the city there is property that does nothing to harvest rainwater and put it back into the Basin. As long as I see people watering their lush, emerald-green lawns day in and out, I will be

against this project. As long as I see city-owned property that has no swales or other methods of reclaiming water for the Basin, I will be against this well-intentioned but short-sighted project. I would much rather see that \$14 million spent on rain harvesting and conservation incentives and education.

I urge City Council to stop funding the misguided ASCP and instead, allow nature to get that water into the Basin and spend the money on projects that will truly help.

Thank you for the opportunity to comment.

Sincerely, Laura Solomon

Pasadena, CA 91106

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