Summary of 2020 Urban Water Management Plan Public Hearing Comments and Suggestions with LADWP Responses

Meeting 1: March 9, 2021, Virtually via WebEx
Meeting 2: March 13, 2021, Virtually via WebEx

Los Angeles Aqueduct:

1. **Comment**: The amounts of water being exported is damaging to the ecosystem and I believe you can do what you are doing without exporting so much water especially as time goes on and you are more successful with your conversation efforts. It will be beneficial if you don't take all that water.

   Response: *As detailed in Chapter 11, Section 11.2.1, LADWP's available LA Aqueduct supplies have been reduced by approximately one-half since 1992, leaving approximately half of the City's historical LA Aqueduct supplies in the Mono Basin and Owens Valley. This has resulted in an increased dependence on purchased imported supplies from MWD. Development of LADWP's local supply program will reduce dependence on MWD, but LADWP will continue to rely on LA Aqueduct supplies to ensure water supply reliability for the City of Los Angeles as detailed in Chapter 11, Section 11.2.7. LADWP remains committed to meeting all of its environmental obligations to serve uses in the Eastern Sierra. Chapter 4, Section 4.3 discusses environmental enhancement and mitigation in the Owens Valley and Mono Basin. LADWP will continue to exercise its water rights to ensure continued affordable and reliable water supplies for the City of Los Angeles.*

2. **Comment:** The levels of water that DWP plans to export from the Owens Valley, Inyo and Mono Counties, as indicated by the UWMP, are damaging to the ecosystems and environment in the Owens Valley. I encourage DWP to share the conservation savings it has been and will be achieving with the people of the Eastern Sierra by decreasing water exports much more significantly in the coming years.

   Response: *As detailed in Chapter 11, Section 11.2.1, LADWP's available LA Aqueduct supplies have been reduced by approximately one-half since 1992, leaving approximately half of the City's historical LA Aqueduct supplies in the Mono Basin and Owens Valley. This has resulted in an increased dependence on purchased imported supplies from MWD. Development of LADWP's local supply program will reduce dependence on MWD, but LADWP will continue to*

rely on LA Aqueduct supplies to ensure water supply reliability for the City of Los Angeles as detailed in Chapter 11, Section 11.2.7. LADWP remains committed to meeting all of its environmental obligations to serve uses in the Eastern Sierra. Chapter 4, Section 4.3 discusses environmental enhancement and mitigation in the Owens Valley and Mono Basin. LADWP will continue to exercise its water rights to ensure continued affordable and reliable water supplies for the City of Los Angeles.

3. **Comment**: Why has the city of LA not worked more closely with the Eastern Sierra in developing the UWMP?

   ***Response**: The requirements of the UWMP Act require water suppliers to coordinate UWMP plan updates with any city or county served by the supplier. While LADWP does not provide water service in Inyo and Mono Counties, LADWP has voluntarily conducted outreach in the Eastern Sierra and informed the Chairs and Tribal Administrators of the Bishop Paiute Tribe, the Big Pine Paiute Tribe of the Owens Valley, the Fort Independence Indian Community of Paiutes, the Lone Pine Paiute-Shoshone Tribe, the Mono Lake Kutzadika Tribe, and the Timbisha Shoshone Tribe of the 2020 UWMP development.*

4. **Comment**: Will LADWP supply water to cities outside of LA and what is the financial arrangement? Would Owens Valley water, LAA water, be something you offer to outside of LA? Your ownership of water makes us an extension of LA, and an important part of extension of LA, because what you do really impacts us.

   ***Response:** LADWP provides water service to some customers outside the City as described in Chapter 1, Section 1.3.1. LADWP's ability to supply water outside of City boundaries is governed Los Angeles City Charter Sections 673 and 677.*

Conservation:

1. **Comment:** Current water use is at or exceeds maximum cost-effective potential, right, based on the conservation study? If I do a back of the envelope comparison, looking at where we are today relative to the assumptions made. I think we've exceeded what the conservation study defines as a cost-effective potential and we are actually at the early stages of being at a level of

conservation that they defined as being at the outer edge of what was ever reasonable.

***Response**: The maximum cost-effective potential identified in the Water Conservation Potential Study describes additional hardware related potential while most of the conservation achieved since 2015 was non-hardware related. Continued investments in hardware savings to reach the maximum cost-effective potential will minimize opportunities for demand rebounds while also helping LADWP achieve its water use efficiency goals. As shown in Exhibit 3L, the results of the Water Conservation Potential Study identified 140,000 AFY of additional potentials available from a starting point in FYE 2014. As shown in Exhibits 3N, 3P, 3T, and 3R, there are still remaining potentials available moving forward in our conservation programs for all customer classes.*

2. **Comment:** Has LADWP looked at the assumption for GPCD going into those future projections, and are we going to better than 100 GPCD in your view? We are right at the edge of the commitment, we're at 106 now and 100 by 2035. How realistic is it not to expect more efficiency in GPCD given that we are almost at 100, and where we thought we were at the limit based on 2035? There's a tension here between what we were planning to do, with incredible success, and what that has meant for water resiliency by the city. Looking at the conservation projections going into the future and just asking the question what are we expecting for the future? And are we really limited by 100 GPCD?

   ***Response**: The per capita water use metric is inclusive of total water use from all customer sectors (residential, commercial, industrial, etc.). Broad per capita use targets may result in adverse impacts or disproportionate burdens on different sectors. Achieving and maintaining a per capita usage of 100 gallons is consistent with achieving a maximum cost-effective potential as identified in the Water Conservation Potential Study discussed in Chapter 3, Section 3.3. LADWP continues to invest in water use efficiency and monitor water use trends to ensure continued water supply reliability for the City of Los Angeles.*

3. **Comment**: The per gallon per day projections don't seem to reflect the legislation which by 2023 needs to get us down to 55 gallons per day per person, and were still talking about a 100 GPCD. LADWP'S projections, which you explain it came from SCAG, don't reflect the reality. LADWP has shown the excellent work you've done, or maybe shows how much conservation is really left to do. Since

1970s, 1 million populations increase and demand continues to go down, and so the use projections into the future I think that's a mistake.

***Response**: The 55 GPCD water use target proposed by state legislation refers to indoor residential water use only while LADWP's 100 GPCD goal includes water use from all customer sectors and non-revenue water. Analysis of indoor water use across customer sectors presented in Chapter 2, Section 2.1.2 suggests that LADWP has already met the 55 GPCD indoor residential use target proposed.*

4. **Comment**: The majority of tenants who have attended my webinar on water and power conservation don't pay for water, water is something that is covered in the lease contract, and the landlord pays for that. Most tenants are primarily responsible for gas, and the amount of power that they consume inside their unit. Are outreach efforts regarding conservation going to change, or stay the same? Being that a lot of these city apartment building owners cover the water bill, I wonder if there are any efforts, or will be in future, to specifically target the owners to see what and how DWP, or anyone else, can help conserve water?

   ***Response**: Multi-family residential customers qualify for many of LADWP's existing programs as described in Chapter 3, Section 3.2.3. LADWP is also looking to expand multi-family residential programs as described in Chapter 3, Section 3.4. Additionally, LADWP's awareness/support measure programs described in Chapter 3, Section 3.2.3, are also available for all LADWP customers. Information for all LADWP water conservation programs are also detailed at the following website: https://www.ladwp.com/waterconservation. Furthermore, the State passed SB 7 in 2016, which requires that any new multifamily dwelling unit constructed after January 1, 2018 (pursuant to the amended Water Code Section 537) install individual unit submetering of water use and bill individual tenants accordingly. There are also programs available for retrofits of existing multifamily properties to do the same.*

5. **Comment**: I want to congratulate you on exceeding your goals, some of us have been at this for a very long time. Next level of conservation and technology at that level changes very quickly. I think we're going to see more changes in the short term, the toilet programs you did in the 90s and 2000s are ready for a whole new cycle with community-based organizations, just for an example.

   ***Response**: LADWP continuously monitors new technologies that can improve water use efficiency and is committed to providing cost effective investments in*

conservation and water use efficiency programs. Chapter 3, Section 3.2.3 describes LADWP's Technical Assistance Program (TAP) that promotes innovative solutions to saving water and provides customized incentives for retrofitting water-intensive equipment in the Commercial, Industrial, Institutional, and Multi-family customer sectors.

Operation NEXT

1. **Comment**: Seems to me that the conservation efforts in the last decade have been very successful and Operation NEXT coming online and making real additional conservation gains over next decade but when I see water exported from Owens Valley between now and 2045 there isn't much difference in decrease? Why is there not going to be a greater benefit here in the Owens Valley and Mono County given the success of the conservation plan we've seen and more on the way?

   Response: *As detailed in Chapter 11, Section 11.2.1, LADWP's available LA Aqueduct supplies have been reduced by approximately one-half since 1992, leaving approximately half of the City's historical LA Aqueduct supplies in the Mono Basin and Owens Valley. This has resulted in an increased dependence on purchased imported supplies from MWD. Development of LADWP's local supply program will reduce dependence on MWD, but LADWP will continue to rely on LA Aqueduct supplies to ensure water supply reliability for the City of Los Angeles as detailed in Chapter 11, Section 11.2.7. LADWP remains committed to meeting all of its environmental obligations to serve uses in the Eastern Sierra. LADWP will continue to exercise its water rights to ensure continued affordable and reliable water supplies for the City of Los Angeles.*

2. **Comment**: This UWMP has demonstrated that the existing sources are reliable through the projection period and also implies that Operation Next is for resilience as opposed to reliability, however I am unclear as to what resilience means in the context of this report. Operation NEXT supplies will be down at Hyperion area and LADWP requires very large, new, and expensive pipelines to get it up to headworks which is likely to be disrupted. The best types of Operation NEXT in the case of resilience would be the San Fernando Basin be refilled without buying MWD water and then use it for injection to headworks for continued gravity feed to communities that would be presumed to be cut off from

MWD water in the case of an earthquake. This concept of resilience remains unclear.

***Response**: Reliability assessments required in the UWMP are focused on varying hydrological scenarios. These assessments do not consider all scenarios of potential supply disruption. The Water Shortage Contingency Plan outlines potential responses to supply disruptions. The Operation NEXT Water Supply Program is currently in the conceptual planning phases and is not included in this UWMP reliability analysis. However, this program provides opportunities to develop local supplies and storage, which would serve as a critical component of water supply resilience.*

6. **Comment**: In the chapter on Operation NEXT I see a single sentence reference to projected unit cost of Operation NEXT that seems out of place. I encourage you to delete it.

   ***Response**: Since the program is still in its conceptual phases and program components have not been finalized, the preliminary costs may not accurately represent projected costs. The sentence has now been removed to avoid confusion.*

7. **Comment**: What areas in City of LA will be supplied from Operation NEXT? Where will it be used? Is it going to be immediately, and is it going to be pumped into the DWP distribution system?

   ***Response**: Operation NEXT is currently in the early conceptual planning stages and specific program components have not yet been identified or scoped. The Operation NEXT program and associated challenges are discussed in Chapter 8. Details related to Operation NEXT will be included in future UWMP updates as the program is developed.*

Groundwater:

1. **Comment**: With DWP's goal to replenish the groundwater basin what sort of plan does DWP have to manage groundwater usage in particular during drought conditions so we can avoid the negative benefits of over using groundwater such as land subsidence or seawater intrusion.

   ***Response**: In addition to supply projections presented in the UWMP, LADWP also conducts an annual water supply and demand assessment. This*

assessment considers current groundwater levels and develops a pumping plan to ensure that our pumping practices are sustainable do not cause adverse effects such as land subsidence or water quality degradation. LADWP also actively works with the ULARA Watermaster and Water Replenishment District to maintain sustainable water pumping practices in the San Fernando and Central Basins, respectively. Additional details on pumping and replenishment can be found in Chapter 5.

2. **Comment**: There is a certain amount of river basin overflow into the Los Angeles (LA) River. If DWP decides to utilize basin for storage to enhance local supplies and increase resilience then the amount of seepage or leakage in to the LA River becomes a relevant issue. This also makes the LA River a multi-purpose benefit. That's still of interest to a variety of stakeholders.

   Response: *San Fernando groundwater pumping strategies are described in Chapter 5, Section 5.2 and include a discussion regarding upwelling.*

Metropolitan Water District:

1. **Comment**: There was a discussion from City Council asking and requesting the following: What would it look like if LADPW wasn't part of MWD? I thought that was a fascinating exercise to see where we may be in the future in terms of supplies because there are projections from UCLA and others from getting off imported water entirely. I live in Santa Monica and our projection is to getting off that by 2023, I admire cleaning up the groundwater and greater success to rain water and recycled water projects, and give you credit for that and conservation work especially with community-based organizations. LADWP was the leader in that and gave us a big step forward in both working with community and environmental justice and dealing with our future demand as it reflects everybody in the city.

   Response*: LADWP and the City's Chief Legislative Analyst are researching and investigating information responsive to the question on "severing" its relationship with MWD in the event that MWD does not fully address allegations of abuse and harassment. There are many aspects, including legal, resource, and operational that need to be carefully considered in response to the Council Committee request.*

2. **Comment**: When do you see water independence from MWD happening?

   Response*: LADWP and the City's Chief Legislative Analyst are researching and investigating information responsive to the question on "severing" its relationship with MWD in the event that MWD does not fully address allegations of abuse and harassment. There are many aspects, including legal, resource, and operational that need to be carefully considered in response to the Council Committee request.*

3. **Comment**: LA has invested billion in MWD and should not walk away from it.

   Response: *LADWP and the City's Chief Legislative Analyst are researching and investigating information responsive to the question on "severing" its relationship with MWD in the event that MWD does not fully address allegations of abuse and harassment. There are many aspects, including legal, resource, and operational that need to be carefully considered in response to the Council Committee request.*

4. **Comment**: One of the things I'm concerned about is how MWD will charge us. We're on the volume basis opposed to fix charges, yet I understand there are some rumblings that MWD wants to increase the standby charges, in other words they will be more fixed charges opposed to volumetric.

   Response*: LADWP is actively engaged in ongoing MWD rate refinement discussions and will continue to advocate on behalf of the City and protect ratepayers.*

Water Demand:

1. **Comment**: There's a pretty clear downward trend in demand since 2004 and suddenly in 2020 the line for both analysis turn upward almost like there's a sudden turnabout I don't understand how that is analyzed and the other thing I don't understand is the difference between actual and projected demand with and without conservation simply because if you think about residential users much of the conservation say they replaced lawn or turf with zero scaping and there's appliances purchased much more efficient that water use is somewhat baked in so I'm having a hard time how that conservation is calculated going into future.

Response: *Projected demands take into account historic conservation efforts and LADWP's water use efficiency capabilities under the maximum cost-effective potential water savings identified from the Water Conservation Potential Study. Future savings potentials utilize water use efficiency from fiscal year ending (FYE) 2014 as a baseline as described in Chapter 3, Section 3.3. The projected demand without additional conservation is the expected demand if water use efficiency from FYE 2014 is maintained throughout the planning horizon. The post-conservation demand accounts for conservation savings achieved since FYE 2014 and additional projected savings through FYE 2045.*

2. **Comment**: Why would demand go up and not continue to drop? Increases in multifamily would offset single family and therefore be lower, along with requirements from conservation legislation. You show as the progression of a downward trend, which most urban water agencies have continued with, and yet you show an increase in demand going into the future. Which makes me wonder about the SCAG figures as an accurate source of information. Historically they relied on build-out and population. You decoupled those. I retain the same concern. Also, if you combine that with legislation going forward, where your per capita drops drastically and you're also going to have to deal with system losses on a much wider sense to meet some of those obligations.

   Response*: The California Water Code requires demographic projections to come from state, regional, or local forecasting agency such as the Southern California Association of Governments (SCAG). LA City Planning works in conjunction with SCAG to develop these projections. While historic conservation efforts have been successful to reverse the upward trend in total water demand, LADWP's water use efficiency capabilities are based on the maximum cost-effective potential water savings identified from the Water Conservation Potential Study. The demand forecast presented in the UWMP shows that the forecasted population growth out pacing the remaining conservation savings potential.*

3. **Comment**: If we're building-out and covering landscaping, we're going to be offsetting demand and with new development were looking at neutrality or new levels of appliances that we haven't seen in the past. I challenge the assumption that multi-family will continue to grow and single family will have limited growth. I understand SCAG is a regional source, but historically in terms for water planning they haven't been reliable, and I think the most reliable source is LADWP where you have charted well since the 70s; with increases of population

your demand has gone down to historical lows. MWD and IRP says the same thing, they're at 40 years of low in demand and high levels of storage even during these dry times. Those real numbers should instruct as much as future planning projections. Only point I'm trying to make is that the demand levels are at historical levels across the water industry in urban areas.

***Response**: The California Water Code requires demographic projections to come from state, regional, or local forecasting agency such as the Southern California Association of Governments (SCAG). LA City Planning works in conjunction with SCAG to develop these projections. While historic conservation efforts have been successful to reverse the upward trend in total water demand, LADWP's water use efficiency capabilities are based on the maximum cost-effective potential water savings identified from the Water Conservation Potential Study. LADWP performs short-term demand forecasts annually in addition to the long-term forecasts provided in the UWMP. Short-term forecasts and ongoing water use trends are used to inform future long-term UWMP demand forecasts.*

Water Supply Planning:

1. **Comment**: The way I understood the driest consecutive five-year scenario, I was hoping what you were saying you were planning through that dry period looking into the future, there are so many unknowns in terms future supplies and demand, I understand this is a real challenge, and if you start with that this is our driest five years and this is what we're planning for and that includes fire, that just makes sense as a metric of where we have been and where we can be, it could be worst and many be not.

   ***Response**: Considering the historic driest five-year scenario for the drought risk assessment is a method prescribed by California Water Code Section 10612. LADWP recognizes that considering historic hydrology may not capture potential future climate risks and accounts for this by considering additional climate risk factors to water demands and available Los Angeles Aqueduct supplies as described in Chapter 12.*

2. **Comment**: Basic element of climate is defined by norms, and any good hydrologist/meteorologist also knows that the third deviations and skewness is important. When LADWP starts talking about changes to numerical entities and you assume climate from 1988-1992 will be the same as 2021-2025. I doubt it.

Look at the oceans, they've changed a lot especially at California. I am highly disappointed about using norms and first standard deviations. I would like to see the data and the third, fourth, fifth, and even sixth standard deviations. Because if you look at the jet streams from yesterday and today in the LA Times, its going all over the place and it should be almost linear but because of the warming of the arctic we are getting less rainfall and I expect even much less rainfall in the future for LA city. The importance of RW increases.

***Response**: While the reliability scenarios consider historic hydrology, the analysis also accounts for recent changes to supply conditions, such as current Eastern Sierra obligations and climate impacts. Reliability tables presented in Exhibits 11E through 11G in Chapter 11 are simplified but consider a potential range of climate scenarios. Climate considerations utilize global climate models that consider many climate scenarios as described in Chapter 12.*

3. **Comment**: I want to reinforce the comment related to the 35-year-old hydrology, sort of the worst-case scenario. I think that would be very questionable as we move forward, considering how much things have been variable in terms of supply over the past few years. It is critical for people to understand the importance of MWD storage. The big story of reliably and to offset variability and more extreme events. Comment about the changing climate is key and those are the biggest risks of reliability going forward.

   ***Response**: While the reliability scenarios consider historic hydrology, the analysis also accounts for recent changes to supply conditions, such as increased obligation and climate impacts. The figures presented in the tables are simplified but consider a potential range of climate scenarios. Climate considerations utilize global climate models that consider many climate scenarios as described in Chapter 12. The additional reliability from MWD storage is demonstrated in the Water Shortage Contingency Plan, particularly with catastrophic supply interruption planning, as presented in Chapter 11, Section 11.4 and in Appendix I.*

Summary of 2020 Urban Water Management Plan Public Hearing Comments and Suggestions with LADWP Responses

General Comments:

1. **Comment**: When you're going to deal with public I highly recommend converting to millions of people or millions of gallons per day. It works, understanding and translating to real life. I highly recommend that you convert to MGD a lot of people know what a gallon is, and it's a lot easier than an acre foot. Please in the future use gallons, it's easier.

   ***Response**: Reporting of water supply volumes in acre-feet is consistent with internal reporting practices and reporting practices across the industry. Large volumes of water are more typically quantified in acre-feet whereas flows or facility capacities are more typically quantified in million gallons per day.*

Summary of 2020 Urban Water Management Plan Written Comments with LADWP Responses

Comments received during public comment period, opened February 19, 2021 and closed on April 13, 2021.

Ann Dorsey, 3/21/2021

Comment: I encourage the LADWP to promote water conservation as a way of life not just during droughts, community stormwater capture infrastructure that will minimize runoff to the ocean by keeping the rain near where it falls thereby allowing groundwater recharge, use of grey water in homes and increase infrastructure maintenance to prevent water loss through leaks/line breaks (and using materials that are resistant to earthquakes).

Response: *LADWP continues to promote water conservation as a way of life at all times, supports community capture, and is actively exploring methods to minimize system water loss as detailed in Chapter 3, Section 3.2.*

Arnold Liu, Quantum Dynamics, Inc., 2/26/2021

Comment: As a leading military-aerospace flow metrologist [sic] who also has extensive experience in pipeline leak detection, I am simply appalled at how LADWP simply continues to fail to implement the basic steps towards rigorously based water audits and water main leak detection: without low uncertainty calibration of its large water meters, water audits will only remain rough estimates, and early water infrastructure leak detection a distant dream.

Response: *LADWP continues to actively explore methods and technologies to minimize water system losses and identify system leaks as detailed in Chapter 3, Section 3.2.3, Water Loss Control.*

Casey Maddren, LA Resident 4/11/2021

Comment: The UWMP fails to acknowledge the realities of LA's changing hydrology.

Response: *The UWMP acknowledges changing hydrology and climate risks to water supply availability as well as water demands, which are discussed in*

Chapter 12. Specifically, LA Aqueduct supply availability projections incorporate adjustment factors based on climate study results.

Comment: LADWP must also quantify the efforts of ongoing development and the inevitable increase in hardscape.

Response: *Chapter 6 describes LADWP's watershed management strategies to expand the City's stormwater capture capacity.*

Comment: The UWMP fails to include current research and readily available information that is crucial to planning for the future.

Response: *Based on the timing and development of this document, data from the 1985/86 – 2014/15 hydrological period was selected to represent normal year conditions. Additional data will be processed and used in future UWMP updates as it becomes available.*

Comment: The UWMP uses deceptive practices to inflate projected future water supplies. The biggest problems…is that they include projected conservation as a part of the total water supply.

Response: *Conservation is recognized as a supply to highlight Los Angeles's achievement in water use efficiency and to acknowledge that additional water supplies would be required to meet demand without these achievements. Exhibit 11E shows that accounting of post-conservation demand and water supplies excluding conservation are equivalent.*

Comment: The UWMP fails to discuss supplies needed to maintain LA's urban forest, the role of trees as part of the groundwater recharge process, and the probably [sic] impacts to the urban forest if supplies are inadequate.

Response: *The UWMP demand forecasts provide an overview of projected water demands by customer sector. Chapter 2, Section 2.1.2 also provides an estimate of current indoor and outdoor water uses by customer sector. LADWP*

recognizes the need to serve demands for both indoor and outdoor uses and does not prescribe end uses.

Fred Pickel, Office of Public Accountability, 4/13/2021

Comment: OPA recommends that the Los Angeles Department of Water and Power (LADWP) either provide a comprehensive Water Supply Master Plan within the UWMP Report, or, if sufficient information is unavailable, then clearly highlight the elements absent from this Master Plan.

UWMP should contain clarifying disclosures on: (a) Operation NEXT information that is still being developed, and (b) when the details on the transition to a new water portfolio with Operation NEXT will be provided.

Response: *LADWP recognizes that there are limitations to including all the information necessary to support a comprehensive master plan in the UWMP, particularly for the Operation NEXT Water Supply Program. The Operation NEXT Water Supply Program is still in its early conceptual stages and a formal master plan for the Program remains to be developed. Chapter 8 recognizes several challenges the Program will need to overcome as the Program is being developed. Revisions have been made to Chapter 8 to capture elements that are under development and when additional refinement can be expected. Future UWMP updates will incorporate details from the Program as they become available.*

Geoffrey McQuilkin, Mono Lake Committee, et al., 4/13/2021

Comment: Provide a more realistic future water demand scenario that retains and builds upon Los Angeles' existing water efficiency achievements and helps to secure the Green New Deal Sustainability pLAn goal of obtaining 70% of the City's water supply from local sources.

Response: *The 2020 UWMP demand forecasts consider multiple drivers, including demographics projections and conservation projections, as described in Chapter 2, Section 2.3. Demographic projections are primary drivers of water*

demand forecasting, as described in Chapter 1, Section 1.3.1. As required by the California Water Code, projected population estimates are based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier, and in consultation with local and regional land use authorities. As such, the latest demographic projections are obtained from the Southern California Association of Governments, which considers different growth scenarios. Conservation projections are consistent with achieving a maximum cost-effective potential as identified in the Water Conservation Potential Study discussed in Chapter 3, Section 3.3. LADWP is committed to the development of programs that advance the initiatives highlighted in the Green New Deal and will work towards achieving these long-term goals.

Comment: Remove LADWP's per capita water use efficiency "cap" of 100 gallons, establish a new, bold conservation target to achieve 75–80 gallons per capita by 2045 and address other water use factors that inappropriately inflate forecasted water demands.

Response: *The per capita water use metric is inclusive of total water use from all customer sectors (residential, commercial, industrial, etc.). Broad per capita use targets may result in adverse impacts or disproportionate burdens on different sectors. Achieving and maintaining a per capita usage of 100 gallons is consistent with achieving a maximum cost-effective potential as identified in the Water Conservation Potential Study discussed in Chapter 3, Section 3.3. LADWP continues to invest in water use efficiency and monitor water use trends to ensure continued water supply reliability for the City of Los Angeles.*

Comment: Count local water supplies created by Operation Next in the UWMP supply scenario, recognizing these are estimates. These new local recycled water supplies are an essential part of LADWP's commitment to obtain 70% of its water from local sources.

Response: *Operation NEXT is currently in the early conceptual planning stages and specific program components have not yet been identified or scoped. The Operation NEXT program and associated challenges are discussed in Chapter 8. Given the lack of details at this time, Operation NEXT was not considered for the*

2020 UWMP reliability assessment. Operation NEXT will be included in future UWMP updates as program details are developed.

Comment: More fully quantify local water supplies to be created by the Stormwater Capture Master Plan and Safe Clean Water Program, including all planned and anticipated stormwater capture/reuse projects, regardless of whether such projects are being led by LADWP or other City Departments (e.g. LASAN), outside agencies (e.g. LAUSD) or other third-party groups, including NGOs.

Response: *Local supplies created by LADWP's Stormwater Capture program are described in Chapter 6, Section 6.8. Specifically, "LADWP will work with the Upper Los Angeles River Area (ULARA) Watermaster to continue observing actual water levels and re-evaluate basin safe yield to protect against overdraft and to allow additional increases in groundwater production over time as SFB elevations rebound."*

Comment: Build on and expand Los Angeles' and LADWP's existing programs addressing equity and affordability issues. Increase Los Angeles CBO involvement in the design and implementation of water efficiency, distributed stormwater capture, and conservation projects and programs. Augment outreach and funding for rental housing conservation improvements and provide more detail on tracked metrics.

Response: *LADWP has partnered with the Southern California Gas Company to through the Energy Savings Assistance Program to target low income households and provide installation services. Additionally, LADWP is developing future programs that specifically target multi-family residential customers as detailed in Chapter 3, Section 3.4. More information on LADWP's existing programs can be found in Chapter 3, Section 3.2.3. The section on "Awareness/Support Measure Programs" covers many of our community outreach programs, including our Community Partnership Program that provides funding to local non-profit organizations and calls for proposals from those organizations to address specific outreach challenges. Those organizations then propose programs for creative solutions to reach communities that may not be*

aware of all the water use efficiency incentives and practices they can do to reduce their bills and instill environmental stewardship in their communities.

Comment: Commit to the development of a sustainable Integrated Water Resources Management Plan for the Los Angeles Aqueduct in partnership with the Eastern Sierra Tribes, local communities and governments and conservation organizations. There are opportunities for shared stewardship and efficiency improvements in both watersheds that are more cost effective and environmentally beneficial than continued litigation and will achieve a more climate-resilient and sustainable future for both the Eastern Sierra and Los Angeles.

Response: *LADWP prepares an Urban Water Management Plan to ensure long-term supply reliability for the City of Los Angeles. LA Aqueduct supplies and the primary framework governing LADWP environmental operations are discussed in Chapter 4. The California Urban Water Management Planning Act requires every urban water supplier prepare and adopt an Urban Water Management Plan every five years.*

Comment: The UWMP does not adequately address water affordability and equity concerns for LA's disadvantaged communities.

Response: *Chapter 1, Section 1.0 highlights LADWP's reliability strategy which includes development of LADWP's local supply program and reduced dependence on purchased imported water. Investments in the local supply program improves water supply reliability while also providing a cost-effective alternative to purchased imported water. Savings from these cost advantageous supplies are passed directly to customers due to LADWP's rate structure. Chapter 3, Section 3.2.3 discuss LADWP's conservation and water use efficiency programs which are designed to maximize water savings and cost effectiveness for customers.*

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Ileene Anderson, Center for Biological Diversity, 4/13/2021

Comment: We are concerned that the Draft Urban Water Management Plan has a number of flaws that need to be remedied prior to finalization. We joined in comments submitted by numerous groups that identified flaws in the analyses of the amount of water use that cause the draft plan to over-estimate the amount of water needed, along with other flaws (please see comments submitted by the Mono Lake Committee et al. dated 4-12-21).

Response: *Please refer to responses issued to Mono Lake Committee comments above.*

Comment: Our concerns in this letter are focused on rare and endangered plants, animals and their habitats that rely on natural hydrological systems and available water for at least part of their lifecycle in Inyo and Mono counties. The current diversions into the Los Angeles Aqueduct if continued will cause further harm to these plants and animals that are already teetering on the brink of extinction. And if there are any increased diversions, those impacts will likewise increase. Based on modeling of climate change effects, many of these species will most likely be pushed closer towards extinction as climate change progresses. Therefore, proactive planning in the UWMP is needed to allow for more water to remain in the habitats that these rare species rely on.

Response: *As detailed in Chapter 11, Section 11.2.1, LADWP's available LA Aqueduct supplies have been reduced by approximately one-half since 1992, leaving approximately half of the City's historical LA Aqueduct supplies in the Mono Basin and Owens Valley. This has resulted in an increased dependence on purchased imported supplies from MWD. Development of LADWP's local supply program will reduce dependence on MWD, but LADWP will continue to rely on LA Aqueduct supplies to ensure water supply reliability for the City of Los Angeles as detailed in Chapter 11, Section 11.2.7. LADWP remains committed to meeting all of its environmental obligations despite projected climate risks. Chapter 4, Section 4.3 discusses environmental enhancement and mitigation in the Owens Valley and Mono Basin. LADWP will continue to exercise its water rights to ensure continued affordable and reliable water supplies for the City of Los Angeles.*

Los Angeles Department of Water & Power

Summary of 2020 Urban Water Management Plan Written Comments with LADWP Responses

James E. Rambeau Sr, Big Pine Paiute Tribe of Owens Valley, 4/12/2021

Comment: The final Plan should include tabular data to accompany graphs.

Response: *The Final 2020 UWMP includes detailed tabular data in Appendix B which captures data reported to the California Department of Resources for the purposes of compliance with the Urban Water Management Planning Act.*

Comment: A purpose of the draft Plan is to present the water sources to be tapped to provide for LADWP customers, and because the Eastern Sierra is a significant source, the Tribe is directly affected by LADWP's plans. The Tribe was late in learning about the Plan update, because LADWP did not publicize it widely in our area or write directly to the Tribe. In the future, and for all LADWP water-planning efforts, the Tribe respectfully requests notification. Should the Tribe request participation, your Commission should honor the request.

Response: *The UWMP Act requires water suppliers to coordinate UWMP updates with any city or county served by the supplier. While LADWP does not provide water service in Inyo and Mono Counties, LADWP has voluntarily conducted outreach in the Eastern Sierra and informed the Chairs and Tribal Administrators of the Bishop Paiute Tribe, the Big Pine Paiute Tribe of the Owens Valley, the Fort Independence Indian Community of Paiutes, the Lone Pine Paiute-Shoshone Tribe, the Mono Lake Kutzadika Tribe, and the Timbisha Shoshone Tribe of the 2020 UWMP development. LADWP also provided a briefing to the Inyo/LA Standing Committee in early March 2021 with an overview of the UWMP including announcements of the public draft review period and two virtual public hearing meetings. In addition to attending the Inyo/LA Standing Committee, several members of the Eastern Sierra community also attended the virtual public hearings held on March 9th and 13th and submitted comments. The California Environmental Quality Act does not apply to the preparation and adoption of UWMPs (California Water Code Section 10652). Formal tribal consultations are thus not required for the UWMP preparation process under Assembly Bill 52. However, LADWP's Owens Valley Tribal Engagement Policy provides commitment to engage with Owens Valley tribal leadership on an on-going decision-maker to decision-maker basis respecting the individual sovereignty of each of the Owens Valley Tribes. This Policy is separate from and neither replaces nor diminishes LADWP's responsibilities for formal tribal*

consultation under Assembly Bill 52, which is conducted on a project specific basis for LADWP projects throughout California. Additional engagement on this matter may be explored through LADWP's Owens Valley Tribal Engagement Policy.

Comment: The Tribe suggests LADWP begin moving toward the Mayor's sustainability goals for water soon and at a faster rate than presented in the draft Plan. The Mayor's goals are deferred in the draft Plan and tangentially mentioned with references to and discussions of Operation NEXT.

Response: *Operation NEXT is currently in the early conceptual planning stages and specific program components have not yet been identified or scoped. The Operation NEXT program and associated challenges are discussed in Chapter 8. Given the lack of details at this time, Operation NEXT was not considered for the 2020 UWMP reliability assessment. Operation NEXT will be included in future UWMP updates as program details are developed.*

Comment: A review of the data presented by LADWP staff at the public meetings shows LADWP could greatly reduce water exports from the Eastern Sierra, even without implementing Operation NEXT or the Mayor's pLAn.

Response: *Prolonged increased demand and dependence on MWD supplies would result in additional impacts to regional supplies, which would negatively impact not only water supply reliability for Los Angeles, but for the greater Southern California Region as a whole.*

Comment: The Tribe requests LADWP curtail imports via the LAA and shift to using water supplied by MWD to make up any water demands that cannot be supplied locally. The Tribe understands that, like the City of Los Angeles, MWD is also focusing on developing sustainable water sources and greater storage capacity. Also, its member agencies likewise are implementing water recycling and other water conservation measures. These should help lessen impacts on places of origin, such as the California Delta.

Response: *As detailed in Chapter 11, Section 11.2.1, LADWP's available LA Aqueduct supplies have been reduced by approximately one-half since 1992, leaving approximately half of the City's historical LA Aqueduct supplies in the Mono Basin and Owens Valley. This has resulted in an increased dependence on purchased imported supplies from MWD. Development of LADWP's local supply program will reduce dependence on MWD, but LADWP will continue to rely on LA Aqueduct supplies to ensure water supply reliability for the City of Los Angeles as detailed in Chapter 11, Section 11.2.7. LADWP will continue to exercise its water rights to ensure continued affordable and reliable water supplies for the City of Los Angeles.*

Comment: Finally, the Tribe recommends LADWP or other City officials reach out to and work with the Tribe so that the Tribe has an opportunity to meaningfully participate in planning future water management. Water is more than "a commodity" to people in the Tribal community; it is time the people of Los Angeles acknowledge this fact and allow us to begin working together on a sustainable future.

Response: *The California Environmental Quality Act does not apply to the preparation and adoption of UWMPs (California Water Code Section 10652). Formal tribal consultations are thus not required for the UWMP preparation process under Assembly Bill 52. However, LADWP's Owens Valley Tribal Engagement Policy provides commitment to engage with Owens Valley tribal leadership on an on-going decision-maker to decision-maker basis respecting the individual sovereignty of each of the Owens Valley Tribes. This Policy is separate from and neither replaces nor diminishes LADWP's responsibilities for formal tribal consultation under Assembly Bill 52, which is conducted on a project specific basis for LADWP projects throughout California. Additional engagement on this matter may be explored through LADWP's Owens Valley Tribal Engagement Policy.*

Summary of 2020 Urban Water Management Plan Written Comments with LADWP Responses

Jeff Griffiths, Inyo County Board of Supervisors, 4/13/2021

Comment: The County encourages further investment in creative water conservation measures and requests that LADWP exceed the conservation targets included in the UWMP to reduce the demand on deliveries from the LAA.

Response: *As detailed in Chapter 11, Section 11.2.1, LADWP's available LA Aqueduct supplies have been reduced by approximately one-half since 1992, leaving approximately half of the City's historical LA Aqueduct supplies in the Mono Basin and Owens Valley. This has resulted in an increased dependence on purchased imported supplies from MWD. Development of LADWP's local supply program will reduce dependence on MWD, but LADWP will continue to rely on LA Aqueduct supplies to ensure water supply reliability for the City of Los Angeles as detailed in Chapter 11, Section 11.2.7. LADWP will continue to exercise its water rights to ensure continued affordable and reliable water supplies for the City of Los Angeles.*

Comment: The County supports LADWP's goal to reduce reliance on purchased imported water and the potential environmental benefits to the Bay Delta and Colorado River (Section ES-1) provided that it does not result in increased export from the Eastern Sierra. LADWP's goal of reducing reliance on imported water should expressly apply to the LAA as well because water derived from the Eastern Sierra and delivered via the LAA is imported, not local, water.

Response: *As detailed in Chapter 11, Section 11.2.1, LADWP's available LA Aqueduct supplies have been reduced by approximately one-half since 1992, leaving approximately half of the City's historical LA Aqueduct supplies in the Mono Basin and Owens Valley. This has resulted in an increased dependence on purchased imported supplies from MWD. Development of LADWP's local supply program will reduce dependence on MWD, but LADWP will continue to rely on LA Aqueduct supplies to ensure water supply reliability for the City of Los Angeles as detailed in Chapter 11, Section 11.2.7. LADWP will continue to exercise its water rights to ensure continued affordable and reliable water supplies for the City of Los Angeles.*

Comment: LADWPs policy should also expressly provide that some water gained from new projects in the Owens Valley remain in the valley and dedicated for environmental purposes.

Response: *As detailed in Chapter 11, Section 11.2.1, LADWP's available LA Aqueduct supplies have been reduced by approximately one-half since 1992, leaving approximately half of the City's historical LA Aqueduct supplies in the Mono Basin and Owens Valley. This has resulted in an increased dependence on purchased imported supplies from MWD. Development of LADWP's local supply program will reduce dependence on MWD, but LADWP will continue to rely on LA Aqueduct supplies to ensure water supply reliability for the City of Los Angeles as detailed in Chapter 11, Section 11.2.7. LADWP will continue to exercise its water rights to ensure continued affordable and reliable water supplies for the City of Los Angeles.*

Comment: Additionally, data in Section 4 are expressed alternately in fiscal or runoff year totals, and that practice confuses the analysis. We recommend the UWMP rely on a consistent measure, preferably runoff year or the standard hydrologic water year.

Response: *Some data in Chapter 4 is provided in runoff year to more accurately portray hydrologic cycle. However, reporting of data in fiscal years is consistent with the reporting requirements of the Urban Water Management Planning Act.*

Comment: The County is concerned, however, that LADWP's idea of local [water] ignores the fact that some Eastern Sierra water is banked after being exported through the LAA. In particular, the UWMP describes efforts to remediate groundwater in the San Fernando Basin in the hopes of increasing that water source for conjunctive use management. Some groundwater in that basin is imported LAA water stored for pumping later to meet future demands (Sections 5.0 and 5.12). Thus, some of the increased reliance on local groundwater could lead to further environmental degradation in the Owens Valley given the export of water to a Southern California basin rather than storing it where it would naturally recharge and support the valley's environment.

Response: *Considerations for storage in the Owens Valley are not excluded from the UWMP. As stated in Chapter 5, Section 5.12, LADWP is evaluating storage programs in the Owens Valley and along the LA Aqueduct, south of South Haiwee Reservoir.*

Jerry Gewe, Water & Power Associates, 4/13/2021

Comment: We recommend that LADWP coordinate with the Metropolitan Water District of Southern California (MWD) and other agencies such as the Los Angeles County Department of Public Works, the Groundwater Replenishment District and local water supply agencies on recycled water transmission projects to avoid duplication of effort, unnecessary infrastructure spending, negative impacts on basins receiving recycled water and to make sure supply and demand are coordinated throughout the service area .

Response: *As detailed in Chapter 8, collaboration with regional partners is a key objective of the Operation NEXT Program. LADWP is collaborating with regional partners, including the Metropolitan Water District and the Water Replenishment District, to avoid duplication of efforts and develop regional local water supplies.*

Comment: We encourage recycled water projects that emphasize augmenting potable water supplies as opposed to expanding the non-potable (purple pipe) infrastructure system.

Response: *Recycled water planning efforts described in Chapter 7, Section 7.3 recognize the potential for future augmentation of potable water supplies.*

Comment: The Associates urges LADWP to closely work with and support MWD regarding efforts to pursue appropriate enhancements to achieve water supply reliability in the event of seismic events affecting the California Water Project and in protecting MWD's access to Colorado River supplies.

Response: *LADWP continues to coordinate closely with MWD and DWR through its participation on the Seismic Resilience Water Supply Task Force to address seismic risks to water supply.*

Comment: The Associates commend the water system staff for the forward thinking and long-range planning associated with Operation NEXT. We do recommend, however, that staff thoroughly analyze the costs and rate impacts of the component projects of Operation NEXT and verify that DDW regulations will allow the feasible implementation of the augmentation of potable water supplies before contractually obligating LADWP's rate-payers.

Response: *Program costs and funding opportunities are critical considerations for the Operation NEXT development process. Chapter 8, Section 8.6 details potential funding sources and other cost considerations of the Program. As the Program nears the end of the planning stage, a more refined cost-estimate will be developed.*

Comment: The Associates urge LADWP to continue to aggressively pursue cost-effective water conservation projects as a primary strategy in water supply planning.

Response: *LADWP is committed to achieving the maximum cost-effective potential as identified in the Water Conservation Potential Study discussed in Chapter 3, Section 3.3. LADWP continues to invest in water use efficiency and monitor water use trends to ensure continued water supply reliability for the City of Los Angeles.*

Comment: We also recommend LADWP continue to aggressively pursue outside funding and make sure the City of Los Angeles receives its fair share of statewide funding mechanisms.

Response: *LADWP continues to pursue all available funding opportunities as identified in Chapter 11, Section 11.1.12.*

Summary of 2020 Urban Water Management Plan Written Comments with LADWP Responses

Kelsey Jessup, The Nature Conservancy, 4/12/2021

Comment: Considering that Los [Angeles] was identified as the most water stressed city in the United States by the Conservancy's global survey on megacities in 2014, and future drought scenarios, the UWMP needs to take a much more aggressive approach to water conservation and improving stormwater capture capacity to recharge local groundwater basins using nature based solutions.

Response: *LADWP's water use efficiency goals are consistent with achieving a maximum cost-effective potential as identified in the Water Conservation Potential Study discussed in Chapter 3, Section 3.3. LADWP continues to invest in water use efficiency and monitor water use trends to ensure continued water supply reliability for the City of Los Angeles. LADWP's reliability assessment, provided in Chapter 11, Section 11.2.7, projects that LADWP will have sufficient supplies to meet demands under each hydrologic scenario. Furthermore, LADWP's Water Shortage Contingency Plan (Appendix I) identifies additional actions LADWP may take to respond to potential shortages.*

Comment: Nature Based Solutions (NBS) which restore and/or enhance natural systems, can increase human, ecosystem, and infrastructure resilience to climate impacts, and can reduce damage from natural hazards as well as, or even better than, gray infrastructure solutions, often at a lower cost. In line with that, we believe that the goal for 3,400 AFY by 2035 through distributed stormwater capture projects can be increased and needs a stronger emphasis on vegetated NBS.

Response: *The 3,400 AFY value is incorrect and has been revised. Chapter 6 describes LADWP's capture potentials according to the Stormwater Capture Master Plan, which was demonstrated a stormwater capture potential of 31,000 to 56,000 AFY for distributed infiltration above usable aquifers. Nature-based solutions, such as green stormwater infrastructure projects, will account for the majority of distributed stormwater capture projects.*

Comment: In line with the above-mentioned measures, we also recommend researching the possibility of implementing vegetated approaches to centralized

stormwater capture projects such as spreading grounds, for example, by converting them to constructed wetlands or hybrid solutions of wetlands and maintained infiltration areas that would provide local habitat enhancement and many other environmental and social co-benefits.

Response: *The City of Los Angeles is highly urbanized and leaves little opportunity for large open-space projects, such as spreading grounds. LADWP partners with the County of Los Angeles to improve the five spreading grounds in the San Fernando Valley as described in Chapter 6, Section 6.4.*

Comment: Community-based organizations themselves know best what community needs should be compensated and prioritized. When partnering with community-based organizations who have limited funding and capacity, the Conservancy recommends providing a budget to compensate any anticipated outreach costs, in addition to stipends compensating community participants for their time participating. Other best practices include providing free food at all public events, supporting childcare options, and compensating transportation costs. The Conservancy also recommends incorporating recommendations from community-based organizations about how to proactively address barriers to community participation, including technological access, language, culture, and message relevance.

Response: *LADWP has an active Community Partnership Program which provides funding to CBOs to promote projects to educate and inform community members about the benefits of water use efficiency measures and how they can be implemented. Past programs have also included educational events to inform customers about the value of water and also certification programs for sole proprietor Spanish speaking gardeners to learn how to maintain and care for California Friendly Plants.*

Comment: Community engagement includes incorporating community expertise about the issues at hand, including integrating diverse world views and relationships to nature and water. Information sharing is a two-way street and LADWP has much to benefit from the profound water-related connections and knowledge that diverse communities have. In particular, the Conservancy recommends that LADWP consider robust community engagement with tribes

and tribal organizations who continue to connect with and relate to water in Los Angeles in important ways. Tribes and tribal organizations continue to be key stewards and caretakers of scarce resources in the face of significant challenges.

Response: *The California Environmental Quality Act does not apply to the preparation and adoption of UWMPs (California Water Code Section 10652). Formal tribal consultations are thus not required for the UWMP preparation process under Assembly Bill 52. However, LADWP's Owens Valley Tribal Engagement Policy provides commitment to engage with Owens Valley tribal leadership on an on-going decision-maker to decision-maker basis respecting the individual sovereignty of each of the Owens Valley Tribes. This Policy is separate from and neither replaces nor diminishes LADWP's responsibilities for formal tribal consultation under Assembly Bill 52, which is conducted on a project specific basis for LADWP projects throughout California.*

Lynn Boulton, Range of Light Group, 4/13/2021

Comment: The planned 190,400 AFY in 2025 to 184,200 AFY in 2045 reflects minor reductions over the 30-year average of 192,000 AFY due to climate change. Painfully, for both the Eastern Sierra's ecosystems and economy, the plan is still to extract the most water possible for the next 25 years. The UWMP does not describe where the 190,400 AFY will come from, but should.

Response: *The UWMP describes the methodology of projecting LA Aqueduct deliveries in Chapter 4, Section 4.6. As stated in this section, deliveries are estimated based on historical data while also considering various uses within the Eastern Sierra.*

Comment: The UWMP also describes water banking projects for recharge in the San Fernando Valley that might come from Los Angeles Aquifer [sic] (LAA) water. Already infrastructure is in place for high-runoff in the Eastern Sierra to be banked in Antelope Valley. The Indian Wells Valley Groundwater Authority has asked for water from the LAA to recharge its over-drafted basin. We ask that you implement water banking and recharging groundwater in the Eastern Sierra first, before using LAA for other regions. We ask that our ecosystems come first before those outside of the LADWP territory.

Response: *LADWP does not currently have any infrastructure in place to store water in the Antelope Valley. Chapter 5, Section 5.6 explains that LADWP is currently exploring opportunities in the Antelope Valley, but does not currently possess any storage capabilities in the basin. Furthermore, considerations for storage in the Owens Valley are not excluded from the UWMP. As stated in Chapter 5, Section 5.12, LADWP is evaluating storage programs in the Owens Valley and along the LA Aqueduct, south of South Haiwee Reservoir.*

Melanie Rivera, LA Waterkeeper, 4/13/2021

Comment: Revise demand projections or create a new demand scenario to convey recent declining demand trends in lieu of projections assuming no further conservation or efficiency efforts past 2035

Response: *The 2020 UWMP demand forecasts consider multiple drivers, including demographics projections and conservation projections, as described in Chapter 2, Section 2.3. Demographic projections are primary drivers of water demand forecasting, as described in Chapter 1, Section 1.3.1. As required by the California Water Code, projected population estimates are based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier, and in consultation with local and regional land use authorities. As such, the latest demographic projections are obtained from the Southern California Association of Governments, which considers different growth scenarios. Conservation projections are consistent with achieving a maximum cost-effective potential as identified in the Water Conservation Potential Study discussed in Chapter 3, Section 3.3.*

Comment: Clarify conservation projections and revise the projections to be more consistent with recent conservation trends. LAW recommends a new conservation goal of at least 80 gpcd or lower for urban water use moving forward.

Response: *The per capita water use metric is inclusive of total water use from all customer sectors (residential, commercial, industrial, etc.). Broad per capita use targets may result in adverse impacts or disproportionate burdens on different sectors. Achieving and maintaining a per capita usage of 100 gallons is*

consistent with achieving a maximum cost-effective potential as identified in the Water Conservation Potential Study discussed in Chapter 3, Section 3.3. LADWP continues to invest in water use efficiency and monitor water use trends to ensure continued water supply reliability for the City of Los Angeles.

Comment: Quantify and incorporate water supply created by Operation NEXT, which is designed to allow for 100% beneficial use of recycled water by 2035, into the supply projections

Response: *Operation NEXT is currently in the early conceptual planning stages and specific program components have not yet been identified or scoped. The Operation NEXT program and associated challenges are discussed in Chapter 8. Given the lack of details at this time, Operation NEXT was not considered for the 2020 UWMP reliability assessment. Operation NEXT will be included in future UWMP updates as program details are developed.*

Comment: Quantify and incorporate maximum potential yields from stormwater capture (from the Safe Clean Water Program), including identifying a greater number of City and non-City projects being funded by the SCWP, and groundwater remediation into the supply projections (recommend including a detailed table showing how much of the future groundwater supply will be remediating the SFVGB). LAW also recommends that LADWP consider whether additional stormwater capture beyond the planned 70,800 AFY is possible.

Response: *Local supplies created by LADWP's Stormwater Capture program are described in Chapter 6, Section 6.8. Specifically, "LADWP will work with the Upper Los Angeles River Area (ULARA) Watermaster to continue observing actual water levels and re-evaluate basin safe yield to protect against overdraft and to allow additional increases in groundwater production over time as SFB elevations rebound." Additional capture potential beyond the UWMP planning horizon is discussed Chapter 6, Section 6.3, and additional information regarding San Fernando Basin remediation is provided in Chapter 5, Section 5.2.*

Summary of 2020 Urban Water Management Plan Written Comments with LADWP Responses

Richard Button, Lone Pine Paiute-Shoshone Reservation, 4/13/2021

Comment: Further, LADWP did not publicize the draft Plan widely in our area or write directly to the Owens Valley Indian Water Commission as instructed to do so by some of the Tribes in Eastern Sierra including the Lone Pine Paiute-Shoshone Reservation. In the future, and for all LADWP water-planning efforts, the Lone Pine Paiute-Shoshone Reservation respectfully requests notification and consultation via the Owens Valley Indian Water Commission.

Response: *The UWMP Act requires water suppliers to coordinate UWMP updates with any city or county served by the supplier. While LADWP does not provide water service in Inyo and Mono Counties, LADWP has voluntarily conducted outreach in the Eastern Sierra and informed the Chairs and Tribal Administrators of the Bishop Paiute Tribe, the Big Pine Paiute Tribe of the Owens Valley, the Fort Independence Indian Community of Paiutes, the Lone Pine Paiute-Shoshone Tribe, the Mono Lake Kutzadika Tribe, and the Timbisha Shoshone Tribe of the 2020 UWMP development. LADWP also provided a briefing to the Inyo/LA Standing Committee in early March 2021 with an overview of the UWMP including announcements of the public draft review period and two virtual public hearing meetings. In addition to attending the Inyo/LA Standing Committee, several members of the Eastern Sierra community also attended the virtual public hearings held on March 9th and 13th and submitted comments. The California Environmental Quality Act does not apply to the preparation and adoption of UWMPs (California Water Code Section 10652). Formal tribal consultations are thus not required for the UWMP preparation process under Assembly Bill 52. However, LADWP's Owens Valley Tribal Engagement Policy provides commitment to engage with Owens Valley tribal leadership on an on-going decision-maker to decision-maker basis respecting the individual sovereignty of each of the Owens Valley Tribes. This Policy is separate from and neither replaces nor diminishes LADWP's responsibilities for formal tribal consultation under Assembly Bill 52, which is conducted on a project specific basis for LADWP projects throughout California. Additional engagement on this matter may be explored through LADWP's Owens Valley Tribal Engagement Policy.*

Comment: The Lone Pine Paiute-Shoshone Reservation suggests LADWP begin moving toward the Mayor's sustainability goals for water soon and at a

faster rate than presented in the draft Plan. The Mayor's goals are deferred in the draft Plan and tangentially mentioned with references to and discussions of Operation NEXT.

Response: *Operation NEXT is currently in the early conceptual planning stages and specific program components have not yet been identified or scoped. The Operation NEXT program and associated challenges are discussed in Chapter 8. Given the lack of details at this time, Operation NEXT was not considered for the 2020 UWMP reliability assessment. Operation NEXT will be included in future UWMP updates as program details are developed.*

Comment: A review of the data presented by LADWP staff at the public meetings shows LADWP could greatly reduce water exports from the Eastern Sierra, even without implementing Operation NEXT or the Mayor's pLAn.

Response: *Prolonged increased demand and dependence on MWD supplies would result in additional impacts to regional supplies, which would negatively impact not only water supply reliability for Los Angeles, but for the greater Southern California Region as a whole.*

Comment: The Lone Pine Paiute-Shoshone Reservation requests LADWP curtail imports via the LAA and shift to using water supplied by MWD to make up any water demands that cannot be supplied locally. The Lone Pine Paiute-Shoshone Reservation understands that, like the City of Los Angeles, MWD is also focusing on developing sustainable water sources and greater storage capacity. Also, its member agencies likewise are implementing water recycling and other water conservation measures. These should help lessen impacts on places of origin, such as the California Delta.

Response: *As detailed in Chapter 11, Section 11.2.1, LADWP's available LA Aqueduct supplies have been reduced by approximately one-half since 1992, leaving approximately half of the City's historical LA Aqueduct supplies in the Mono Basin and Owens Valley. This has resulted in an increased dependence on purchased imported supplies from MWD. Development of LADWP's local supply program will reduce dependence on MWD, but LADWP will continue to rely on LA Aqueduct supplies to ensure water supply reliability for the City of Los*

Angeles as detailed in Chapter 11, Section 11.2.7. LADWP will continue to exercise its water rights to ensure continued affordable and reliable water supplies for the City of Los Angeles.

Comment: Provide a more realistic future water demand scenario that retains and builds upon Los Angeles' existing water efficiency achievements and helps to secure the Green New Deal Sustainability pLAn goal of obtaining 70% of the City's water supply from local sources.

Response: *The 2020 UWMP demand forecasts consider multiple drivers, including demographics projections and conservation projections, as described in Chapter 2, Section 2.3. Demographic projections are primary drivers of water demand forecasting, as described in Chapter 1, Section 1.3.1. As required by the California Water Code, projected population estimates are based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier, and in consultation with local and regional land use authorities. As such, the latest demographic projections are obtained from the Southern California Association of Governments, which considers different growth scenarios. Conservation projections are consistent with achieving a maximum cost-effective potential as identified in the Water Conservation Potential Study discussed in Chapter 3, Section 3.3*

Comment: Remove LADWP's per capita water use efficiency "cap" of 100 gallons, establish a new, bold conservation target to achieve 75–80 gallons per capita by 2045 and address other water use factors that inappropriately inflate forecasted water demands.

Response: *The per capita water use metric is inclusive of total water use from all customer sectors (residential, commercial, industrial, etc.). Broad per capita use targets may result in adverse impacts or disproportionate burdens on different sectors. Achieving and maintaining a per capita usage of 100 gallons is consistent with achieving a maximum cost-effective potential as identified in the Water Conservation Potential Study discussed in Chapter 3, Section 3.3. LADWP continues to invest in water use efficiency and monitor water use trends to ensure continued water supply reliability for the City of Los Angeles.*

Comment: Count local water supplies created by Operation Next in the UWMP supply scenario, recognizing these are estimates. These new local recycled water supplies are an essential part of LADWP's commitment to obtain 70% of its water from local sources.

Response: *Operation NEXT is currently in the early conceptual planning stages and specific program components have not yet been identified or scoped. The Operation NEXT program and associated challenges are discussed in Chapter 8. Given the lack of details at this time, Operation NEXT was not considered for the 2020 UWMP reliability assessment. Operation NEXT will be included in future UWMP updates as program details are developed.*

Comment: More fully quantify local water supplies to be created by the Stormwater Capture Master Plan and Safe Clean Water Program, including all planned and anticipated stormwater capture/reuse projects, regardless of whether such projects are being led by LADWP or other City Departments (e.g. LASAN), outside agencies (e.g. LAUSD) or other third-party groups, including NGOs.

Response: *Local supplies created by LADWP's Stormwater Capture program are described in Chapter 6, Section 6.8. Specifically, "LADWP will work with the Upper Los Angeles River Area (ULARA) Watermaster to continue observing actual water levels and re-evaluate basin safe yield to protect against overdraft and to allow additional increases in groundwater production over time as SFB elevations rebound."*

Comment: Build on and expand Los Angeles' and LADWP's existing programs addressing equity and affordability issues for lower income communities. Programs should be developed that invest in making water more affordable for low-income residents, reducing leaks, creating jobs and job training programs, and ensuring that LADWP's rebate programs are accessible by and fully benefit LA's low-income communities.

Response: *LADWP has partnered with the Southern California Gas Company to through the Energy Savings Assistance Program to target low income households and provide installation services. Additional information on this program is detailed in Chapter 3.*

Comment: Invest in desalination technologies to increase water supply and reliability.

Response: *Chapter 10, Section 10.3 describes LADWP's early desalination efforts and discusses LADWP's strategies to pursue other, lower cost local water sources, which is a critical consideration to maintain affordability.*

Comment: Commit to the development of a sustainable Integrated Water Resources Management Plan for the Los Angeles Aqueduct in partnership with the Eastern Sierra Tribes, local communities and governments and conservation organizations. There are opportunities for shared stewardship and efficiency improvements in both watersheds that are more cost effective and environmentally beneficial than continued litigation and will achieve a more climate-resilient and sustainable future for both the Eastern Sierra and Los Angeles.

Response: *LADWP prepares an Urban Water Management Plan to ensure long-term supply reliability for the City of Los Angeles. LA Aqueduct supplies and the primary framework governing LADWP environmental operations are discussed in Chapter 4. The California Urban Water Management Planning Act requires every urban water supplier prepare and adopt an Urban Water Management Plan every five years.*

Comment: Finally, the Lone Pine Paiute-Shoshone Reservation recommends LADWP or other City officials reach out to and work with the Tribes and the Owens Valley Indian Water Commission so that we have an opportunity to meaningfully participate in planning future water management. Water is more than "a commodity" to people in the Tribal community; it is time the people of Los

Angeles acknowledge this fact and allow us to begin working together on a sustainable future.

Response: *The California Environmental Quality Act does not apply to the preparation and adoption of UWMPs (California Water Code Section 10652). Formal tribal consultations are thus not required for the UWMP preparation process under Assembly Bill 52. However, LADWP's Owens Valley Tribal Engagement Policy provides commitment to engage with Owens Valley tribal leadership on an on-going decision-maker to decision-maker basis respecting the individual sovereignty of each of the Owens Valley Tribes. This Policy is separate from and neither replaces nor diminishes LADWP's responsibilities for formal tribal consultation under Assembly Bill 52, which is conducted on a project specific basis for LADWP projects throughout California. Additional engagement on this matter may be explored through LADWP's Owens Valley Tribal Engagement Policy.*

Robert McDuff, 3/26/2021

Comment: Restoration and preservation of the Eastern Sierra environment on a sustainable basis should be stated as the top priority in managing water resources.

Response: *LADWP remains committed to meeting all of its environmental obligations despite projected climate risks. Chapter 4, Section 4.3 discusses environmental enhancement and mitigation in the Eastern Sierra.*

Comment: [...] the UWMP should include a pledge to work to restore sufficient water supplies to the Native American communities and the land they currently occupy, as well as allocations to restore at least part of the greater valley which they cared for prior to LA's takeover of much of the land. This work should not be solely in response to litigation and governmental regulatory action, but part of LADWPs greater civic responsibility on behalf of the citizens of LA and in support of our brothers and sisters that we are impacting in other parts of the state and nation.

Response: *As detailed in Chapter 11, Section 11.2.1, LADWP's available LA Aqueduct supplies have been reduced by approximately one-half since 1992, leaving approximately half of the City's historical LA Aqueduct supplies in the Mono Basin and Owens Valley. This has resulted in an increased dependence on purchased imported supplies from MWD. Development of LADWP's local supply program will reduce dependence on MWD, but LADWP will continue to rely on LA Aqueduct supplies to ensure water supply reliability for the City of Los Angeles as detailed in Chapter 11, Section 11.2.7. LADWP remains committed to meeting all of its environmental obligations despite projected climate risks. LADWP will continue to exercise its water rights to ensure continued affordable and reliable water supplies for the City of Los Angeles.*

Comment: On the supply side, a greater emphasis should be placed on cleaning up the SF Valley aquifer, stormwater capture, recycling including DPR, along with conservation. The investments in the first three should be increased and timelines accelerated with the commensurate supply amount increased in the models. Conservation should be drastically stepped up for the multi-year drought scenarios and further education and incentive programs initiated now, rather than waiting until we are in the middle of a 5 year scenario. This should include outreach and installation assistance with residential rain capture and landscaping use. With respect to DPR, LADWP should be accelerating the buildout of the infrastructure to support this, as well as working with the state legislature to develop the appropriate regulatory framework to make it practical and widespread**.**

Response: *LADWP is committed to continue developing local supplies, which includes remediation of the San Fernando Basin (Chapter 5), stormwater capture (Chapter 6), water recycling (Chapter 7), and conservation (Chapter 3). Chapter 7, Section 7.1.1 also describes developing DPR regulations and LADWP's consideration for several DPR project concepts that can be implemented once regulations are in place.*

Comment: Given the adverse environmental and social impacts of a possible Delta Tunnel project, reliance on MWD supplies should be minimized (after satisfying items 1 and 2 above) and mitigated by the actions in item 3 above.

Response: *LADWP recognizes the challenges associated with the Bay-Delta as described in Chapter 9, Section 9.1.2.4. As stated throughout the UWMP, LADWP is committed to reducing its dependence on purchased imported water through the development of local supplies.*

Teri Red Owl, Owens Valley Indian Water Commission (OVIWC), 4/13/2021

Comment: Further, LADWP did not publicize the draft Plan widely in our area or write directly to the OVIWC as instructed to do so by some of the Tribes in Eastern Sierra. In the future, and for all LADWP water-planning efforts, the OVIWC respectfully requests notification and consultation.

Response: *The UWMP Act requires water suppliers to coordinate UWMP updates with any city or county served by the supplier. While LADWP does not provide water service in Inyo and Mono Counties, LADWP has voluntarily conducted outreach in the Eastern Sierra and informed the Chairs and Tribal Administrators of the Bishop Paiute Tribe, the Big Pine Paiute Tribe of the Owens Valley, the Fort Independence Indian Community of Paiutes, the Lone Pine Paiute-Shoshone Tribe, the Mono Lake Kutzadika Tribe, and the Timbisha Shoshone Tribe of the 2020 UWMP development. LADWP also provided a briefing to the Inyo/LA Standing Committee in early March 2021 with an overview of the UWMP including announcements of the public draft review period and two virtual public hearing meetings. In addition to attending the Inyo/LA Standing Committee, several members of the Eastern Sierra community also attended the virtual public hearings held on March 9th and 13th and submitted comments. The California Environmental Quality Act does not apply to the preparation and adoption of UWMPs (California Water Code Section 10652). Formal tribal consultations are thus not required for the UWMP preparation process under Assembly Bill 52. However, LADWP's Owens Valley Tribal Engagement Policy provides commitment to engage with Owens Valley tribal leadership on an on-going decision-maker to decision-maker basis respecting the individual sovereignty of each of the Owens Valley Tribes. This Policy is separate from and neither replaces nor diminishes LADWP's responsibilities for formal tribal consultation under Assembly Bill 52, which is conducted on a project specific basis for LADWP projects throughout California. Additional engagement on this*

matter may be explored through LADWP's Owens Valley Tribal Engagement Policy.

Comment: The OVIWC suggests LADWP begin moving toward the Mayor's sustainability goals for water soon and at a faster rate than presented in the draft Plan. The Mayor's goals are deferred in the draft Plan and tangentially mentioned with references to and discussions of Operation NEXT.

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Comment: A review of the data presented by LADWP staff at the public meetings shows LADWP could greatly reduce water exports from the Eastern Sierra, even without implementing Operation NEXT or the Mayor's pLAn.

Response: *Prolonged increased demand and dependence on MWD supplies would result in additional impacts to regional supplies, which would negatively impact not only water supply reliability for Los Angeles, but for the greater Southern California Region as a whole.*

Comment: The OVIWC requests LADWP curtail imports via the LAA and shift to using water supplied by MWD to make up any water demands that cannot be supplied locally. The OVIWC understands that, like the City of Los Angeles, MWD is also focusing on developing sustainable water sources and greater storage capacity. Also, its member agencies likewise are implementing water recycling and other water conservation measures. These should help lessen impacts on places of origin, such as the California Delta.

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Comment: Provide a more realistic future water demand scenario that retains and builds upon Los Angeles' existing water efficiency achievements and helps to secure the Green New Deal Sustainability pLAn goal of obtaining 70% of the City's water supply from local sources.

Response: *The 2020 UWMP demand forecasts consider multiple drivers, including demographics projections and conservation projections, as described in Chapter 2, Section 2.3. Demographic projections are primary drivers of water demand forecasting, as described in Chapter 1, Section 1.3.1. As required by the California Water Code, projected population estimates are based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier, and in consultation with local and regional land use authorities. As such, the latest demographic projections are obtained from the Southern California Association of Governments, which considers different growth scenarios. Conservation projections are consistent with achieving a maximum cost-effective potential as identified in the Water Conservation Potential Study discussed in Chapter 3, Section 3.3*

Comment: Remove LADWP's per capita water use efficiency "cap" of 100 gallons, establish a new, bold conservation target to achieve 75–80 gallons per capita by 2045 and address other water use factors that inappropriately inflate forecasted water demands.

Response: *The per capita water use metric is inclusive of total water use from all customer sectors (residential, commercial, industrial, etc.). Broad per capita use targets may result in adverse impacts or disproportionate burdens on different sectors. Achieving and maintaining a per capita usage of 100 gallons is consistent with achieving a maximum cost-effective potential as identified in the*

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Comment: Count local water supplies created by Operation Next in the UWMP supply scenario, recognizing these are estimates. These new local recycled water supplies are an essential part of LADWP's commitment to obtain 70% of its water from local sources.

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Response: *Local supplies created by LADWP's Stormwater Capture program are described in Chapter 6, Section 6.8. Specifically, "LADWP will work with the Upper Los Angeles River Area (ULARA) Watermaster to continue observing actual water levels and re-evaluate basin safe yield to protect against overdraft and to allow additional increases in groundwater production over time as SFB elevations rebound."*

Comment: Build on and expand Los Angeles' and LADWP's existing programs addressing equity and affordability issues for lower income communities. Programs should be developed that invest in making water more affordable for low-income residents, reducing leaks, creating jobs and job training programs,

and ensuring that LADWP's rebate programs are accessible by and fully benefit LA's low-income communities.

Response: *LADWP has partnered with the Southern California Gas Company to through the Energy Savings Assistance Program to target low income households and provide installation services. Additional information on this program is detailed in Chapter 3.*

Comment: Commit to the development of a sustainable Integrated Water Resources Management Plan for the Los Angeles Aqueduct in partnership with the Eastern Sierra Tribes, local communities and governments and conservation organizations. There are opportunities for shared stewardship and efficiency improvements in both watersheds that are more cost effective and environmentally beneficial than continued litigation and will achieve a more climate-resilient and sustainable future for both the Eastern Sierra and Los Angeles.

Response: *LADWP prepares an Urban Water Management Plan to ensure long-term supply reliability for the City of Los Angeles. LA Aqueduct supplies and the primary framework governing LADWP environmental operations are discussed in Chapter 4. The California Urban Water Management Planning Act requires every urban water supplier prepare and adopt an Urban Water Management Plan every five years.*

Comment: Finally, the OVIWC recommends LADWP or other City officials reach out to and work with the Tribes and the OVIWC so that we can have an opportunity to meaningfully participate in planning future water management. Water is more than "a commodity" to people in the Tribal communities; it is time the people of Los Angeles acknowledge this fact and allow us to begin working together on a sustainable future.

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Tilford P. Denver, Bishop Paiute Tribe, 4/13/2021

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Comment: Finally, the Bishop Paiute Tribe recommends LADWP or other City officials reach out to and work with the Tribes and the Owens Valley Indian Water Commission so that we have an opportunity to meaningfully participate in planning future water management. Water is more than "a commodity" to people in the Tribal community; it is time the people of Los Angeles acknowledge this fact and allow us to begin working together on a sustainable future.

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Tom Williams, Sierra Club Los Angeles, 4/13/2021

Comment: 8.5 [Operation NEXT] Environmental Considerations Programmatic environmental studies to comply with CEQA are currently being conducted and are required prior to the start of construction.

Provide listing and current scopes for all environmental studies currently underway or to be contracted within 2021.

Provide alternative sanitary sewage treatment and IPR/DPR treatments for discharges within LACity which could divert flows from Hyperion and allow for higher elevation reuse for DPR or IDR, e.g., within San Fernando Valley, between SR-134 and I-10/I-110, I-110 - I-405 and I-405 – SR-1. Project Reject effluent to be discharged into downslope pipelines going to Hyperion similar to LACo systems discharging to Terminal Island.

Provide a City draft ordinance for inclusion in current State efforts for Direct Potable Reuse (DPR) and identification of involved regulatory agencies, and alternative strategies for engagement with regulators and Best Practices.

Provide a City draft ordinance to facilitate permitting of the various aspects of the Program and projects within the City of Los Angeles.

Provide a single listing of Constituents/Contaminants of Emerging Concern (CEC) and develop a single standard definition and current annually updated

listing of CECs along with current and anticipated treatment for their removal and discharge.

Response: *The Operation NEXT Water Supply Program is currently under development to address the stated concerns. Relevant documents will become available as the Program is more fully developed.*

Comment: [Operation NEXT Groundwater] Provide supporting documents as to "advanced treated recycled water" CECs consideration, along with quality/risks for reject waters discharged to Santa Monica Bay.

Provide risk assessment for maintaining IDR water mixing with urban groundwater and the extent of such being reused within the City of LA.

Provide flowchart/process-flow diagrams for "potable reuse by raw water augmentation" and clarify as to what this means and relationships as to LAAFP waters within the SFB.

Response*: The Operation NEXT Water Supply Program is currently under development to address the stated concerns. Relevant documents will become available as the Program is developed.*

Comment: Provide current known/recorded levels of any CECs found through the LACity areas.

Response: *LADWP continues to monitor the water quality of our supply sources and provides necessary treatment to water served to meet or exceed all drinking water standards. For instance, LADWP has not detected PFAS/PFOA in the water served to our customers. For more water quality information, please refer to LADWP's Annual Drinking Water Quality Report.*

Comment: Provide access to "Flow Model, and supporting reports and how the EPA-RIRpt has been incorporated into the UWMP.

Response: *Additional information can be found in the Remedial Investigation Update Report, which is provided at www.ladwp.com. The findings of this report*

are incorporated in this UWMP through LADWP's groundwater remediation program described in Chapter 5, Section 5.2.

Comment: [Managing Emerging Contaminants of Concern] “Managing” is so abstract as to render this discussion as useless and requiring a totally separate appendices/studies for definition and use. Provide a “REAL” risk assessment without prejudices indicated herein.

Define and provide catalogue of “Good Science” regarding chemical of emerging concern CECs and for Emerging Contaminants of Concern, ECCs.

Response: *LADWP's management strategy for emerging contaminants of concern is described in Chapter 5, Section 5.9 as referenced by the comment. For more water quality information, please refer to LADWP's Annual Drinking Water Quality Report.*

Comment: “Concerns” and “more investigation” are so abstract as to render this discussion as useless and requiring a totally separate appendices/studies for definition and use. Provide a “REAL” assessment of future “CECs” and ECCs without prejudices indicated herein.

Response: *LADWP's management strategy for emerging contaminants of concern is described in Chapter 5, Section 5.9 as referenced by the comment. For more water quality information, please refer to LADWP's Annual Drinking Water Quality Report.*

Comment: “Concerns” and “more investigation” are so abstract as to render this discussion as useless and requiring a totally separate appendices/studies for definition and use. Provide a “REAL” assessment of future “CECs” and ECCs without prejudices indicated herein.

Response: *LADWP's management strategy for emerging contaminants of concern is described in Chapter 5, Section 5.9 as referenced by the comment. For more water quality information, please refer to LADWP's Annual Drinking Water Quality Report.*

Comment: “Proactively address” and “early monitoring” & “early use” of a “balanced approach” are so abstract as to render this discussion as useless and requiring a totally separate appendices/studies for definition and use. Provide a “REAL” assessment of future “CECs” and ECCs with balanced approach as indicated herein. Is this part of the UWMP? Provide details and supporting documents.

Response: *LADWP's management strategy for emerging contaminants of concern is described in Chapter 5, Section 5.9 as referenced by the comment. For more water quality information, please refer to LADWP's Annual Drinking Water Quality Report.*

Comment: Provide current “appropriate processes” and the ranges of CECs which can be/are being treated. Provide anticipated future treatment of CEC including multi-passes, as in RO units.

Response: *LADWP's management strategy for emerging contaminants of concern is described in Chapter 5, Section 5.9 as referenced by the comment. For more water quality information, please refer to LADWP's Annual Drinking Water Quality Report.*

Comment: Provide current source controls and related treatments used currently and anticipated to 2045. Provide CEC review and status for salts, all perchlorate, nutrients, uranium and Cr-6 and any treatment for such within LA County.

Response: *LADWP's management strategy for emerging contaminants of concern is described in Chapter 5, Section 5.9 as referenced by the comment. For more water quality information, please refer to LADWP's Annual Drinking Water Quality Report.*

Comment: Provide clear definitions and differentiation between CECs, ECCs, and Constituents of Emerging Concern, CnECs (vs CmECs).

Response: *LADWP's management strategy for emerging contaminants of concern is described in Chapter 5, Section 5.9 as referenced by the comment. For more water quality information, please refer to LADWP's Annual Drinking Water Quality Report.*

William Helmer, Owens Valley Resident, 4/13/2021

Comment: Every resident in Inyo and Mono Counties should have been informed of this Plan. The City of Los Angeles should also have engaged in government-to-government consultation with all tribal governments in Inyo County and Mono County. I request that the comment period be extended until June 13, 2021, and be accompanied by real public outreach which specifically invites Owens Valley residents to provide their input.

Response: *The UWMP Act requires water suppliers to coordinate UWMP updates with any city or county served by the supplier. While LADWP does not provide water service in Inyo and Mono Counties, LADWP has voluntarily conducted outreach in the Eastern Sierra and informed the Chairs and Tribal Administrators of the Bishop Paiute Tribe, the Big Pine Paiute Tribe of the Owens Valley, the Fort Independence Indian Community of Paiutes, the Lone Pine Paiute-Shoshone Tribe, the Mono Lake Kutzadika Tribe, and the Timbisha Shoshone Tribe of the 2020 UWMP development. LADWP also provided a briefing to the Inyo/LA Standing Committee in early March 2021 with an overview of the UWMP including announcements of the public draft review period and two virtual public hearing meetings. In addition to attending the Inyo/LA Standing Committee, several members of the Eastern Sierra community also attended the virtual public hearings held on March 9th and 13th and submitted comments.*

Comment: In summary, the City of Los Angeles' draft 2020 Urban Water Management Plan needs to begin the rapid phasing out of water extraction from the Owens Lake and Mono Lake watersheds via the Los Angeles Aqueduct. Los Angeles needs to ramp up its good work on developing and using local water sources. Otherwise, the plan is not sustainable, and will hold back real sustainable development in Los Angeles as well as the Eastern Sierra.

Response: *As detailed in Chapter 11, Section 11.2.1, LADWP's available LA Aqueduct supplies have been reduced by approximately one-half since 1992, leaving approximately half of the City's historical LA Aqueduct supplies in the Mono Basin and Owens Valley. This has resulted in an increased dependence on purchased imported supplies from MWD. Development of LADWP's local supply program will reduce dependence on MWD, but LADWP will continue to rely on LA Aqueduct supplies to ensure water supply reliability for the City of Los Angeles as detailed in Chapter 11, Section 11.2.7. LADWP will continue to exercise its water rights to ensure continued affordable and reliable water supplies for the City of Los Angeles.*

2020 Urban Water Management Plan
Written Comments Received

I support LADWP efforts to supply water reliably in a sustainable manner and their goals to enhance water conservation and use efficiency, increase stormwater capture capacity, maximize and expand groundwater production and maximize water reuse. It is imperative to maximize local water use and minimize imported water use. I encourage the LADWP to promote water conservation as a way of life not just during droughts, community stormwater capture infrastructure that will minimize runoff to the ocean by keeping the rain near where it falls thereby allowing groundwater recharge, use of grey water in homes and increase infrastructure maintenance to prevent water loss through leaks/line breaks (and using materials that are resistant to earthquakes).

Thank you,

Ann Dorsey
Northridge, CA 91325

As a leading military-aerospace flow metrologist who also has extensive experience in pipeline leak detection, I am simply appalled at how LADWP simply continues to fail to implement the basic steps towards rigorously based water audits and water main leak detection: without low uncertainty calibration of its large water meters, water audits will only remain rough estimates, and early water infrastructure leak detection a distant dream.

It should be noted that all quality management plans, e.g. ISO 9000/9001/9002, ANSI/ASME NQA-1, MIL-I-45208, etc., REQUIRE calibration as the basis for all measurements. This means that LADWP and, indeed, the state of Calfornia, do not actually have a rigorously based quality management system.

For several years now I have circulated the attached proposal to various state and municipal water agencies -- and simply received no response or simply been brushed off. One more astute water system engineering manager did, however, recently express his frustration with the situation, commenting that when someone doesn't want to change a situation, one can always find excuses not to...

Newton's first law states that an object maintains its state of rest or motion unless acted upon by an external force. Water infrastructure is obviously a "large body" with large inertia.

The national average leakage from old water mains is ~20%, with water mains typically the oldest municipal infrastructures. Recent scientific studies indicate that western North America is likely at the beginning of the worst "megadrought" since 800 AD. These are very compelling forces. Can LADWP continue to maintain its "state of rest" regarding a rigorous approach to water management?

Please enter this email and proposal as a comment to the Urban Water Management Draft Plan. It should at least be entered into the comments for historical reasons, even as LADWP fails to take any action on it.

Dr. Arnold Liu
QUANTUM DYNAMICS, INC.

April 11, 2021

Los Angeles Department of Water & Power
111 N. Hope Street, Room 308
Los Angeles, CA 90012,
Attn: Benjamin Wong: uwmp@ladwp.com

Re: 2020 Urban Water Management Plan
Comments

Dear Mr. Wong,

I'd like to submit the following comments on the 2020 Urban Water Management Plan. The current version of the UWMP fails by a large margin to present a realistic assessment of current and future water supplies available to DWP. Among its many faults:

- The UWMP fails to acknowledge the realities of LA's changing hydrology.
- The UWMP fails to include current research and readily available information that is crucial to planning for the future.
- The UWMP uses deceptive practices to inflate projected future water supplies.
- The UWMP fails to discuss supplies needed to maintain LA's urban forest, and the probably impacts to the urban forest if supplies are inadequate.

The inclusion of Water Shortage Contingency Plans for use during dry periods does not compensate for the UWMP's larger shortcomings. Planning for the future of LA's water resources must be done on a comprehensive basis using current information and accurate methodologies. The DWP cannot afford to adopt an unrealistic and inadequate UWMP, hoping to use the WSCP as a fallback strategy if things go wrong. Current research increasingly points to a drier and hotter climate in LA (and the region). The UWMP must acknowledge this.

Detailed comments are below. I urge the DWP Board of Commissioners to insist on substantial revisions to the Draft UWMP. In its current version it is wildly inaccurate and is completely unacceptable as a planning document.

Sincerely,
Casey Maddren
[redacted]
Los Angeles, CA 90068

URBAN WATER MANAGEMENT PLAN, COMMENTS

In many respects, the Los Angeles Department of Water & Power has done a remarkable job of meeting the water needs of the people of Los Angeles. In addition to maintaining and upgrading the City's water infrastructure, the DWP has made considerable progress in reducing per capita water consumption. There are many reasons for DWP staff to be proud of the Department's accomplishments.

Unfortunately, the DWP has fallen far short in meeting its obligations to the people of LA with the current draft of the Urban Water Management Plan. In its current form, the UWMP fails to include information crucial to planning for the future use of LA's water resources. The plan uses deceptive practices to misrepresent the city's available water supplies. The plan also fails to assess needed water supplies for LA's urban forest, and how the failure to adequately irrigate LA's trees could thwart stormwater capture initiatives, accelerate local warming and increase energy consumption.

The UWMP Fails to Acknowledge the Realities of LA's Changing Hydrology

The 2020 UWMP claims that DWP will be able to meet the city's water needs under any future scenario. In the Executive Summary, under Section ES-6, Water Supply Reliability, the UWMP makes the following statement:

"LADWP does not anticipate water shortages as demands are met by the available supplies under all hydrologic scenarios."

And again, under Section ES-8, Conclusion, the UWMP asserts:

"Based on the overall service area reliability assessment in compliance with CWC Section 10635(a), LADWP anticipates all demands are met by the available supplies under all hydrologic scenarios."

Neither of these statements are credible. The 2020 UWMP not only fails to acknowledge but seems determined to deny the realities of LA's, and California's, changing hydrology. As DWP knows, the majority of the water used by the people of LA comes from hundreds of miles outside the city's boundaries. While the amount varies from year to year, only about 10% of the water we use comes from groundwater within the city's limits. The remainder comes from the LA Aqueduct, the State Water Project and the Colorado River. The first two are increasingly impacted by declining snowpack in the Sierra Nevadas, which is tied to climate change. The third, while also impacted by climate change, is simply over-allocated. The three states that rely on the Colorado River for water have been using more than it can actually deliver. The current allocations are absolutely unsustainable, and so far negotiations on reducing allocations have not achieved a solution.

Based on these facts, which are well known to DWP, LA's water future is increasingly precarious. Interestingly, in Section ES-1, Overview and Purpose, under Local Groundwater, the UWMP acknowledges another important factor:

In recent years, contamination issues have impacted LADWP's ability to fully utilize its local groundwater entitlements. Furthermore, reduced groundwater elevations in local basins have resulted from decades of expanding urbanization, increasing impervious hardscape, and channelization of stormwater runoff. Aging wellfields and distribution system infrastructure have also presented challenges to the development and use of the City's local groundwater resources. [Emphasis added.]

This is another central fact of LA's hydrology. The continual expansion of new development, and the associated replacement of pervious surfaces with hardscape, has resulted in a massive loss of stormwater which otherwise would have replenished our aquifers. This process

continues, as City Hall continues to approve new projects on previously undeveloped land (like The Vineyards at Porter Ranch) and to promote increasingly dense infill projects (as in the replacement of bungalow courts with large multi-family buildings with minimal setbacks).

The central strategy proposed by the UWMP for increasing LA's local water resources is an effort to significantly expand stormwater capture. Yet the UWMP makes no effort to quantify the effects of ongoing development and the inevitable increase in hardscape. While the DWP works to expand centralized and distributed stormwater capture infrastructure, ongoing development will inevitably result in more impervious hardscape and more stormwater runoff. The UWMP's failure to offer any serious discussion of this conflict is a serious omission.

The UWMP Fails to Include Current Research & Information Crucial to Planning

The UWMP's assumptions regarding precipitation are overly optimistic and do not reflect the most current information available about the area's hydrology. In Section ES-6, Water Supply Reliability, the authors state the following:

To determine the overall service area reliability, LADWP defined three hydrologic conditions: average year (30-year median hydrology from FY 1985/86 to 2014/15); single-dry year (repeat of the 1989/90 hydrology); and multi-dry year (repeat of FY 1987/88 to FY 1991/92 hydrology). Exhibit ES-O illustrates the current supply mix for the five-year average from FY 2015/16 to FY 2019/20. Exhibits ES-P and ES-Q illustrates the future supply mix for FY 2044/45 under average and single dry year conditions, respectively.

The ranges for these scenarios seem to have been chosen to avoid calculating the impacts of the driest periods. For average year, the authors choose 30-year median hydrology from FY 1985/86 to 2014/15. Why not 1990 through 2020? Is it because this would mean including some of the area's driest periods in calculating the average? As the LA Times notes in a July 2020 article on the area's unpredictable precipitation, the average over the last 22 years is well below what we have come to think of as normal:

Looking at downtown Los Angeles over the last 22 rainfall seasons, seven seasons have been above average and 15 have been below. That means nearly 70% of years were below average for rainfall during the period. That stretch of years includes one of the wettest years and five of the driest years on record.

Rainfall season was a 'roller coaster ride' when two wettest months turned dry
LA Times, July 2, 2020
https://www.latimes.com/california/story/2020-07-02/rainfall-season-was-a-roller-coaster-ride-when-two-wettest-months-turned-dry

The UWMP completely ignores a growing body of research that suggests that Southwest North America is experiencing a megadrought, caused in part by global warming. The following is a quote from a 2020 study by A. Park Williams, Edward R. Cook, et. al., which uses tree ring records to explore the question of whether we are currently experiencing a megadrought.

The tree-ring record serves as an ominous reminder that natural climate variability can drive SWNA [Southwest North America] megadroughts that are as severe and longer than the 21st-century drought thus far. The atmosphere and ocean anomalies that drove past megadroughts very likely dwarfed those that occurred during 2000–2018, but superposition of the 2000–2018

climate dynamics on background anthropogenic soil drying put an otherwise moderately severe soil-moisture drought onto a trajectory characteristic of the megadroughts of 800–1600 CE. Critical to the megadrought-like trajectory of the 21st-century event were enhanced evaporative demand, early snowpack loss, and a broad spatial extent, all promoted by anthropogenic warming. Natural variability may very well end the early 21st-century drought in the coming years, and this transition may be under way after a wet 2019. However, our work demonstrates that the magnitude of background anthropogenic soil drying is already substantial relative to the range of natural multidecadal variability. Furthermore, anthropogenic global warming and its drying influence in SWNA are likely still in their infancy. The magnitude of future droughts in North America and elsewhere will depend greatly on future rates of anthropogenic greenhouse gas emissions globally. The effects of future droughts on humans will be further dependent on sustainable resource use because buffering mechanisms such as ground water and reservoir storage are at risk of being depleted during dry times.

Large contribution from anthropogenic warming to an emerging North American megadrought
A. Park Williams, Edward R. Cook, Et. Al., 2020
https://science.sciencemag.org/content/368/6488/314.abstract

The reliability of deliveries from the State Water Project and the LA Aqueduct are largely dependent on snowpack in the Sierra Nevadas, but the UWMP fails to include recent and readily available research showing that significant decline in snowpack is probable. See the following quote from page 22 of a 2016 study of the LA Basin by the Bureau of Reclamation:

3.5.1 Imported Supply

Imported water for the Greater Los Angeles area will also likely be affected by the changing climate. For California, the State Water Project (SWP) Delivery Reliability Report 2013 projects a temperature increase of 1.8 to 5.4 °F by mid21st century and 3.6 to 9 °F by the end of the century (Cayan et al. 2009). It predicts that increased temperatures will lead to less snowfall at lower elevations and decreased snowpack. By mid-century it predicts that Sierra Nevada snowpack (the source of SWP water) will reduce by 25% to 40% of its historical average. Decreased snowpack is projected to be greater in the northern Sierra Nevada, closer to the origin of SWP water, than in the southern Sierra Nevada. Furthermore, an increase in "rain on snow" events may lead to earlier runoff. [Emphasis added.]

Even if we go with the low-end prediction of 25% reduction in snowpack by mid-century, this would have a huge impact on water deliveries to the LA area. The UWMP's failure to include this information in its assessment of supply reliability is inexplicable.

Bureau of Reclamation, Managing Water in the West, Los Angeles Basin Study, 2016
https://www.usbr.gov/watersmart/bsp/docs/fy2017/LABasinStudySummaryReport.pdf

On page ES-28, under Climate Risks, the UWMP offers a vague assessment of impacts from climate change, but ignores recent research. In its discussion of impacts to the LA Aqueduct, the UWMP cites a 2011 study from UCLA which projects "[….] a reduction of snowpack in the Eastern Sierra Nevada region by the end of the 21st century." But it offers no specifics. And why does the UWMP rely on a 2011 study when the more recent study from the Bureau of Reclamation was available. Not only is the Reclamation study based on more recent data, but it offers a specific range when assessing loss of snowpack in the Sierras. The UWMP also cites a 2020 Climate Study, but again, fails to provide specifics.

The UWMP Uses Deceptive Practices to Inflate Projected Water Supplies

On page ES19, Exhibit ES-O purports to show supply reliability based on 2016-20 average and states that the total supply for this period is 497,386 AF. In a truly bizarre move, the following graphic, Exhibit ES-P, shows supply reliability under average year conditions in 2044/45, claiming "Total Production" of 710,500 AF.

Just for starters, the choice of the word "production" is completely inappropriate. The DWP does not "produce" any water at all. The DWP can only manage available water resources. The use of the word "production" in this context must be removed from the UWMP. It is wildly inaccurate and completely misleading.

To compound the problem with Exhibit ES-P, it seems to indicate that available water resources in 2044/45 will rise more than 200,000 AF above current levels. To make things even more bizarre, Exhibit ES-Q shows that under single dry/multiple dry year conditions, in 2044/45 we will see total "production" of 746,000 AF. In other words, the UWMP asks us to believe that under dry conditions DWP will have greater supplies than it would under average conditions.

The biggest problem with these exhibits is that they include projected conservation as part of the total water supply. This is ridiculous, and the DWP knows it. Conservation does not create additional supply. Conservation merely enables the city to make more effective use of available supplies. Conservation does not "produce" any water at all. The choice to present supply projections using the pretense that conservation represents additional supply is dishonest and misleading.

This gross misrepresentation is continued in Exhibits ES-R and ES-S. Adding even more reason to question the UWMP's projections, the calculations in both these charts show that the DWP expects supplies purchased from MWD to rise under both average and dry conditions. Given the evidence presented above regarding the decline of the Sierra snowpacks and the over-allocation of the Colorado River, there is good reason to ask whether the MWD will be able to deliver the quantities of water that the UWMP bases its assumptions on.

Fails to Discuss Water Required by Urban Forest & Impacts Resulting from Loss of Trees

The strategies outlined in the UWMP for increasing LA's water resources rely heavily on replenishing aquifers through stormwater capture, but the plan completely fails to address the role LA's urban forest will play in this process. The urban forest is a crucial component of LA's infrastructure, playing an important role in facilitating stormwater capture and reducing temperatures. While the UWMP discusses LA's Green Streets Program, it contains no meaningful discussion of the importance of trees as part of the process of groundwater recharge.

A search of the UWMP for the word "tree" reveals that it occurs only five times, and in two of these instances the word is used in reference to Tree People. A search for the word "forest" reveals that it also occurs only five times. In this case four of the five references are to Forest Lawn Memorial Park.

The Urban Forestry Division estimates that there are over 10 million trees within the City's boundaries. While estimates vary as to the breakdown, it seems approximately 90% of these

trees grow on private land while the remaining 10% are on rights-of-way or parks owned by the City. Given the importance of the urban forest in facilitating groundwater recharge and reducing temperatures, it is amazing that the UWMP barely mentions this crucial component of our infrastructure. The UWMP does talk about infiltration as part of the Green Streets Program, but only in vague terms, and it does not acknowledge the importance of the urban forest in the infiltration process.

Because the urban forest plays a crucial role in this process, maintaining a healthy urban forest is absolutely crucial. But the UWMP does not even attempt to estimate the amount of water needed to maintain the urban forest. It does not attempt to assess the damage that could occur to the urban forest during an extended dry period, and how that could hinder the process of groundwater recharge. The Water Shortage Contingency Plans assume increased conservation in the event of a dry period, but this will almost certainly cause irreparable damage to the urban forest. Has the DWP forgotten that the push for conservation during the last period of water scarcity resulted in increased mortality in LA's tree population? If citizens stop watering their lawns, they also stop watering their trees. The replacement of lawns with drought-tolerant landscaping seems logical, but again, this means fewer people watering their trees.

Included as an attachment is a letter I sent to the DWP Board of Commissioners last year regarding the importance of assessing and planning for water resources needed to maintain the urban forest. I urge the DWP to consider this aspect of our water landscape carefully, and to revise the UWMP to include such an assessment.

ATTACHMENT A

Letter to DWP Commissioners
Re UWMP & Urban Forest

February 21, 2020

Board of Water & Power Commissioners
Department of Water & Power
111 N. Hope St., Room 1555-H
Los Angeles, CA 90012

Re: 2020 UWMP, Necessary Considerations Regarding LA's Urban Forest

Dear Commissioners,

As the DWP is beginning the process of preparing the 2020 Urban Water Management Plan, I'm writing to voice my concern over an aspect of the plan that has been overlooked in the past. As you know, one of the biggest consumers of water in the City of Los Angeles is the urban forest. The Urban Forestry Division estimates that there are over 10 million trees within the City's boundaries, of which about two million are maintained by the City. The Department of Recreation & Parks estimates there are at least one million trees growing in the City's 15,000 acres of parkland, spread among developed urban parks and growing in coastal and inland areas. According to UFD there are nearly 700,000 street trees growing along 6,700 miles of streets. This means the vast majority of trees in LA's urban forest are on private property, and maintained by property owners. Unfortunately, at this point we have to settle for estimates, because the City of LA has not yet completed a comprehensive tree inventory, although that process is starting now. But this means we also don't have accurate information regarding the water consumed by the urban forest, and this is a significant challenge.

The health of LA's urban forest is crucial to the City's survival. I know you're aware that trees play an important role in groundwater recharge, as well as keeping our air clean and reducing temperatures. In order to create a sustainable LA, we must maintain a healthy urban forest, but we're falling far short of that goal. According to a 2017 report from USC [1], the LA Basin has seen a rapid decline in urban tree cover. The authors say that this will undermine our ability to "adapt to increased urban temperatures, manage urban stormwater, and maintain urban nature and quality of life."

An April 2017 article published in the LA Times [2] quotes US Forest Service Researcher Greg McPherson who says we are facing an unprecedented die-off of trees in Southern California. McPherson cites insect infestations, drought and higher salinity in recycled water as factors causing rapid tree loss. He goes on to say that, "Catastrophic loss of our canopy, would have consequences for human health and well-being, property values, air-conditioning savings, carbon storage, the removal of pollutants from the air we breathe, and wildlife habitat."

The LA Times recently ran an article [3] in which climatologist Bill Patzert discusses the possibility that the drought hasn't really ended, and that we're actually in the middle of a much longer drought cycle. Patzert points out that over the last 20 years LA's average annual rainfall has been below the historic average. He makes the case that we're actually experiencing a long-term drought, and that the recent years of heavy rain didn't begin to make up for earlier losses. If this trend continues, it would have disastrous effects on our water resources, with the related impact of higher mortality rates for the city's trees.

As the process of preparing the 2020 UWMP begins, it is vital that the DWP include an analysis of the role the urban forest plays in maintaining groundwater supplies, and also an analysis of the water

consumed by the urban forest. I can't claim to have read every word of the 2015 UWMP, but I haven't come across any language that addresses the role that the urban forest plays in our ecosystems or that states its importance in the continued resilience of our water supplies. The DWP cannot allow such an analysis to be omitted from the 2020 UWMP.

While exact numbers will be difficult to formulate, the UWMP must at least make a ballpark assessment of the water resources needed to maintain the urban forest. It must also quantify the role that the urban forest plays in groundwater recharge, and what impacts the current decline of the urban forest will have on our aquifers if that decline is not reversed. I realize that this will make the task of preparing the UWMP even more complicated than it already is, but in order for it to give an accurate and useful picture of where LA stands, the UWMP must address the following issues....

1. How much water does the urban forest currently consume?
2. How large a role does the urban forest play in recharging groundwater supplies?
3. If the urban forest continues to decline at its current rate, how will this impact groundwater recharge?
4. How much additional water will be needed to ensure the viability of the 20,000 to 30,000 replacement trees to be planted as part of the Sidewalk Repair Program?
5. How much additional water will be needed to ensure the viability of the 90,000 new trees that Mayor Garcetti has said the City will plant?
6. What strategies are available to maintain the health of the urban forest in the likely event of a drought scenario?
7. How can the City educate property owners about the crucial role they play in maintaining the urban forest, thereby ensuring necessary groundwater recharge?
8. How can the City support citizens' efforts to maintain the trees in their community?

I urge the DWP to make consideration of these issues an integral part of the 2020 UWMP. Thank you for your time.

Sincerely,
Casey Maddren
[redacted]
Los Angeles, CA 90068
[redacted]

1.
Increased home size and hardscape decreases urban forest cover in Los Angeles County's single-family residential neighborhoods, Lee, Longcore, Rich, Wilson, March 3, 2017
https://www.sciencedirect.com/science/article/abs/pii/S1618866716303296

2.
The trees that make Southern California shady and green are dying. Fast, LA Times, April 19, 2017
https://www.latimes.com/local/california/la-me-dying-urban-trees-20170403-story.html

3.
Is California Headed Back into Drought, or Did We Never Really Leave One?, LA Times, February 15, 2020
https://www.latimes.com/california/story/2020-02-15/is-california-headed-back-into-drought-or-did-we-never-really-leave-one

REPORT FROM

OFFICE OF PUBLIC ACCOUNTABILITY

Date: April 12, 2021

To: Los Angeles Department of Water & Power
111 No. Hope Street, Room 308,
Los Angeles, CA 90012
Attn: Benjamin Wong

From: Frederick H. Pickel, Ph.D., Executive Director,
Grant Hoag, P.E., Utility Rates & Policy Specialist

Reference: **OPA Comments on the 2020 Urban Water Management Plan Draft**

RECOMMENDATION

The Office of Public Accountability (OPA) finds the 2020 Urban Water Management Plan (UWMP) Draft Report is very comprehensive. The contents of the Draft Report are well beyond the requirements of the UWMP Act, due to the inclusion of a Master Plan for Water Supply and Resource Management. OPA finds, however, that the proposed Master Plan component lacks several essential elements. These include program schedules for the next 25 years, system capacities, regional collaborative partners, and cost and funding estimates.

OPA recommends that the Los Angeles Department of Water and Power (LADWP) either provide a comprehensive Water Supply Master Plan within the UWMP Report, or, if sufficient information is unavailable, then clearly highlight the elements absent from this Master Plan.

DISCUSSION

1. **The UWMP Report is comprehensive.**

OPA believes that LADWP has demonstrated that its current, existing water supply is reliable and that the UWMP Report meets and exceeds the State UWMP Act requirements. One key objective of the UWMP is to quantify that existing and planned supplies already in development are adequate for future demands under several drought scenarios. The Draft Report does so, and in Chapter ES-18 concludes that:

> "LADWP does not anticipate water shortages as demands are met by the available supplies under all hydrologic scenarios."

In the UWMP Report, the water supplies used to confirm supply reliability exclude future water associated with the proposed Operation NEXT program. Regardless, a comprehensive Master Plan should be part of the UWMP, or the UWMP should contain clarifying disclosures on:

a) Operation Next information that is still being developed, and
b) when the details on the transition to new water portfolio with Operation NEXT will be provided.

2. A Comprehensive Master Plan for DWP's Long Term Water Supply and Resource Management is Vitally Important

OPA agrees that reducing reliance on imported water supplies and on maximizing local supply will improve water utility services. In the UWMP, the purpose for Operation NEXT program is described as:

> "… to strengthen the City's long-term resiliency and sustainability…"
>
> and that a Water Supply Master Plan will describe how LADWP will:
>
> "…develop a sustainable water supply portfolio that includes increasing local water supplies and water conservation by FY 2044/45 and to reduce its dependence on purchased imported supplies."

Documentation of this transition requires a detailed and comprehensive Water Supply Master Plan that is well beyond the requirements of the UWMP Act, and should include program schedules, regional collaboration goals, sources of supply capacities, costs, and funding plans. Also, timely and transparent information that clearly identifies both the benefits and the challenges of implementation is required to minimize public controversies and to gain public support. This is particularly true for Operation NEXT, which will require more than two decades to complete, new State legislation on the reuse of recycled water, and billions of dollars in additional funding from rate payers.

3. Matters Excluded

In conducting its review, OPA has not conducted a technical review of the assumptions, sources of information or calculations used in the UWMP Draft Report.

April 13, 2021

Los Angeles Department of Water & Power
Attn: Benjamin Wong
111 N. Hope Street, Room 308
Los Angeles, CA 90012

Submitted via email to: uwmp@ladwp.com

Re: Comments on the Draft 2020 Urban Water Management Plan

Dear Mr. Wong,

On behalf of the signatories listed below, we submit the following comments and recommendations on the Los Angeles Department of Water & Power's (LADWP) draft 2020 Urban Water Management Plan (UWMP).

The vision set forth by Mayor Garcetti in 2014 through Executive Directive 5 and extended through the Green New Deal Sustainability pLAn in 2019 (the "Sustainability PLAn") provides the goals and outcomes for the transformation of Los Angeles' water resources. LADWP's UWMP identifies how the City will achieve these goals.

While the draft UWMP, as written, highlights the tremendous strides made to date to establish the City of Los Angeles as a leader on water conservation and enhancing local water supplies, it does not deliver on the Sustainability pLAn's mandate for making Los Angeles truly water secure and climate resilient.

The UWMP is the blueprint that will guide Los Angeles' future actions and investments. For this reason, the UWMP needs to be improved so that it aligns with the City's Sustainability pLAn, especially regarding:

- Water efficiency
- Water recycling and distributed stormwater capture
- Water and climate equity
- Reducing LA's dependence on imported water supplies from the Eastern Sierra as well as from the Metropolitan Water District of Southern California (MWD).

1. Los Angeles is nearly 15 years ahead of schedule in achieving Sustainability pLAn 2035 targets for reducing LA's water use.

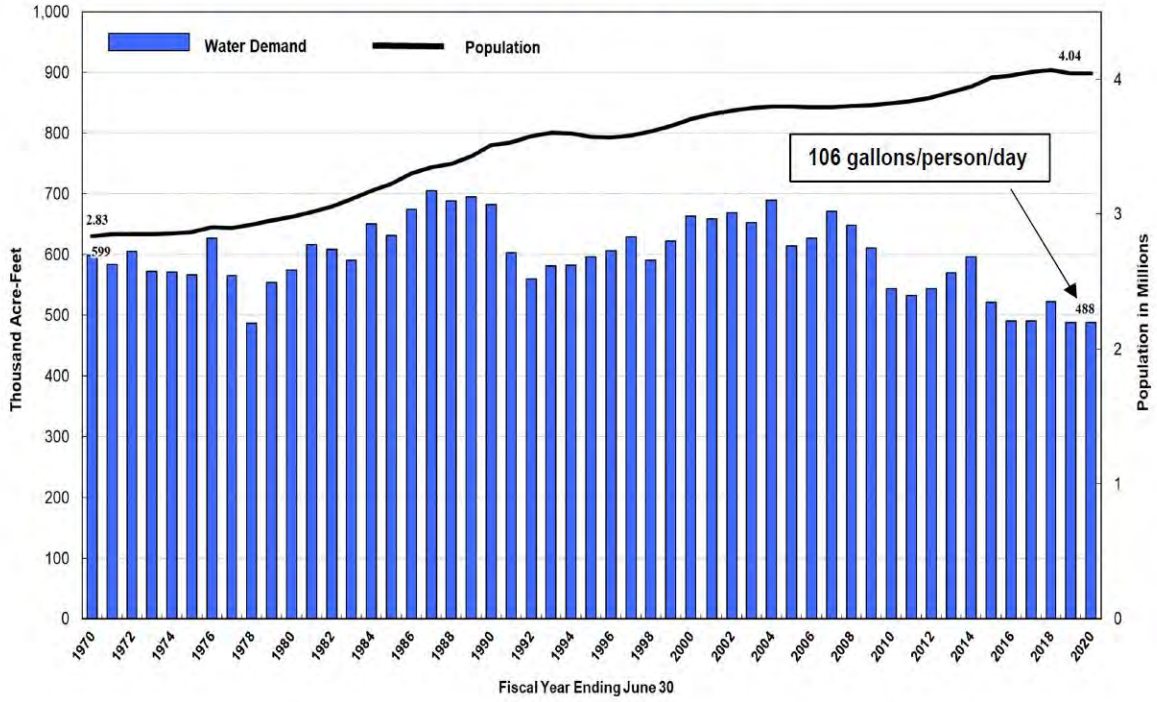
The UWMP affirms significant water efficiency improvements achieved since 2014 by Los Angeles. LA's 2020 per capita water use is 106 gallons daily (GPCD), down from 133 GPCD in 2014. As of today, LA has effectively met its *potable*[1] 2025 GPCD target and is on track to

[1] The UWMP should provide clear information on how the GPCD targets are to be calculated. The Sustainability pLAn's goal for reduced *potable* per capita water use is a different calculation from *total* per capita water use is a

surpass its 2035 *potable GPCD* target within the next few years. LADWP must continue this momentum as Los Angeles can still do much more to reduce unnecessary water waste through efficiency improvements.

Today Los Angeles is using less water (potable and recycled combined) than it did 50 years ago, despite the City's population growing by more than 1.2 million people during that period (see Exhibit 3A, 2020 Draft UWMP).

Exhibit 3A
Historical City of Los Angeles Water Use



The benefits to Los Angles of these water efficiency improvements are significant:

- LADWP's water rates are significantly lower than they would have been without water conservation (AWE, 2018). Water efficiency is a major contributor to achieving LADWP's and the City's equity goals.

- LADWP's water efficiency programs achieve significant energy savings and reduced greenhouse gas emissions at a cost that is competitive with the City's investment in its energy efficiency programs (Spang, 2020).

- Los Angeles reduces urban runoff and improves water quality by implementing distributed stormwater capture projects, consistent with the requirements of the 2016

different calculation from *total* per capita water use. Note that all recycled water, except direct potable reuse, I excluded from potable water use.

Enhanced Water Quality Program (LARWQCB, 2016).

- National research documents the significant job and economic growth benefits that accrue from investments in water efficiency (AWE 2017). Southern California studies have evaluated the benefits of water efficiency and have published similar conclusions (Economic Roundtable, 2011).

In 2018, the UCLA Institute of the Environment and Sustainability estimated that lowering LA's per capita water demand from 133 to 75 GPCD by 2035 could generate an estimated $7–$10 billion in economic benefits to Los Angeles (UCLA, 2018).

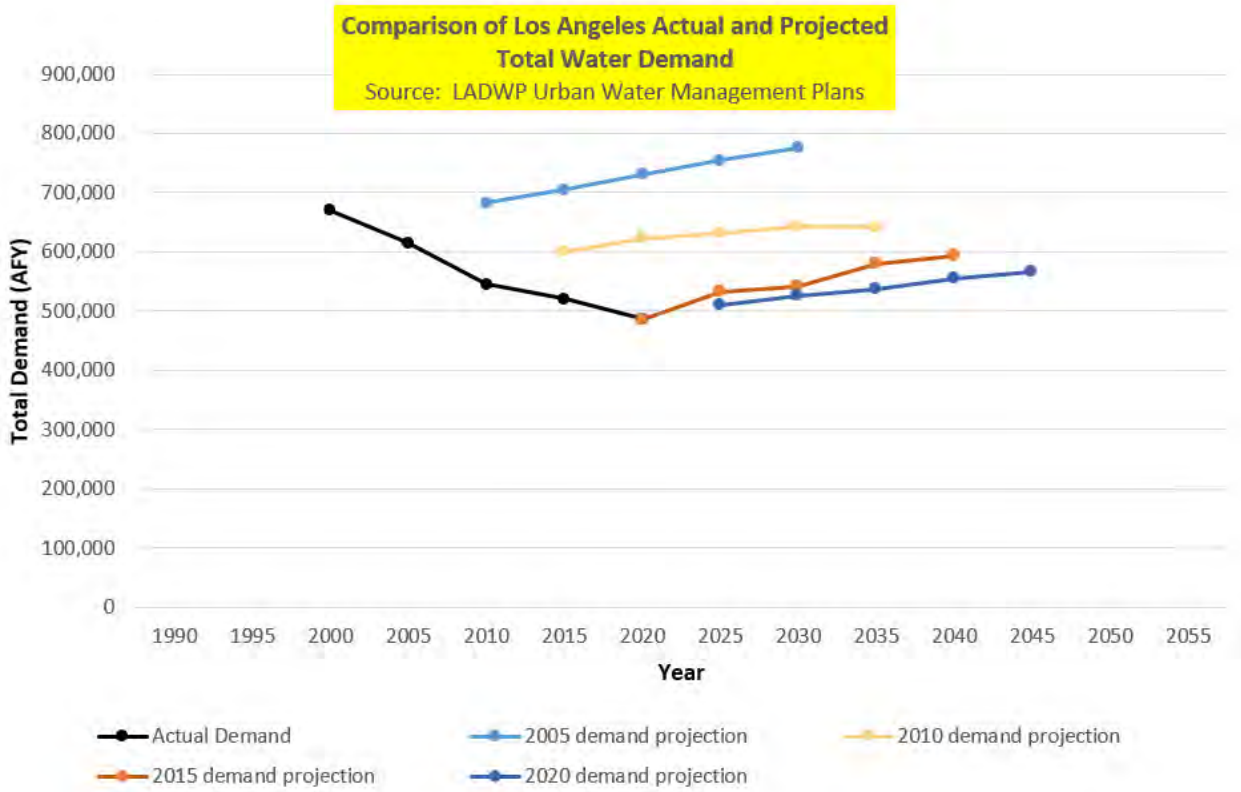
Today, Los Angeles is better prepared for drought than it was before 2014. This is of critical importance as Los Angeles and all of California once again face critically dry conditions. Every drop of conserved water means that existing water supplies can be stretched that much further, providing greater sustainability and water reliability as our communities adapt to climate change.

Consider where LA would be today if the City was using water at its 1990 level of efficiency of 182 GPCD: LA's water use would exceed an eye-popping 800,000 acre-feet per year (AFY). To meet this demand, LA would need another 350,000 AFY of costly water supplies. Water efficiency and conservation have proven to be LA's least expensive and most climate-resilient sources of new water.

2. The draft 2020 UWMP overstates future water demand.

The UWMP forecasts that LA's water demand will rise by a total of nearly 80,000 acre-feet between 2020 and 2045. This forecast is inconsistent with actual water use data, which shows that LA's demand has declined continuously over the past two decades due to improved water efficiency and other measures.

Using LADWP's data, the graphic below compares actual Los Angeles water use with UWMP water demand projections made in 2005, 2010, 2015, and 2020. LADWP has consistently underestimated water conservation potential and overestimated water demand in the past three UWMPs.



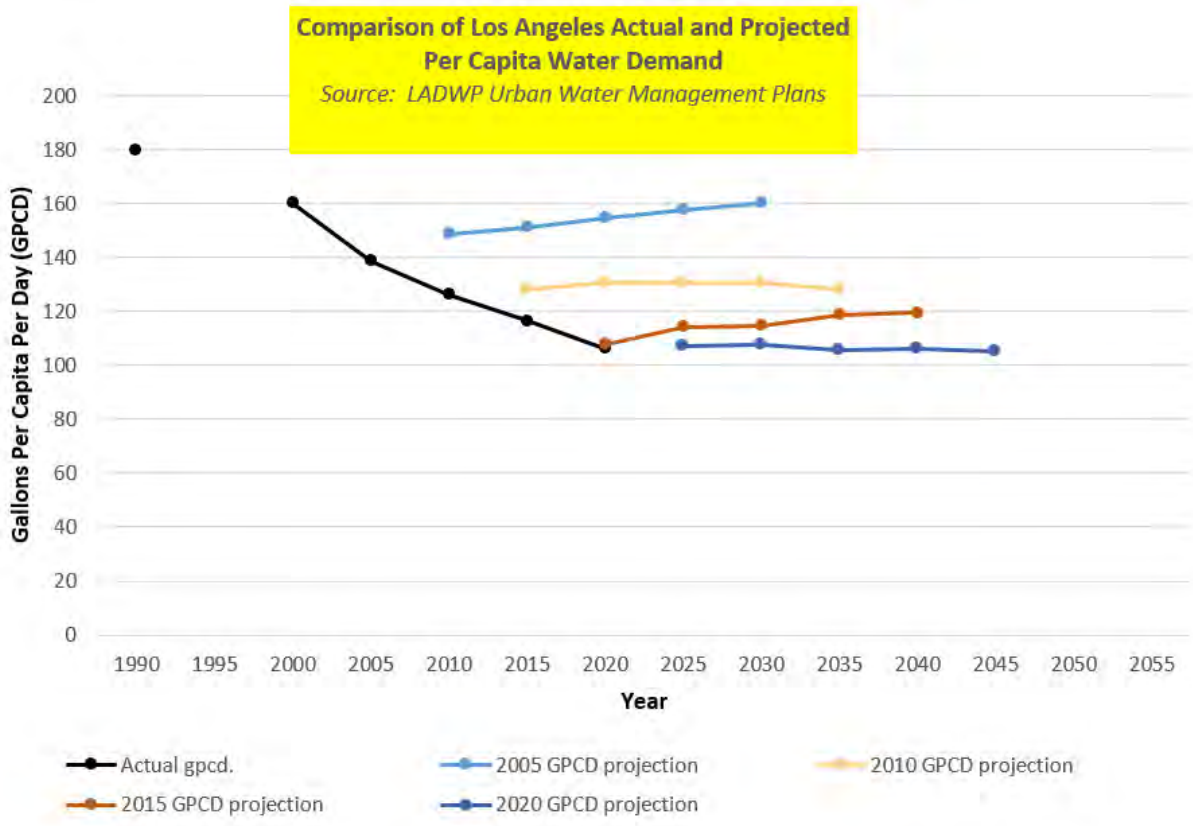
The following assumptions made in the draft UWMP contribute to LADWP's overestimate of future water demand:

- The UWMP places an arbitrary cap on future water efficiency improvements.

The UWMP states that "LADWP's water efficiency goal is to achieve 100 GPCD by 2035 and to maintain this usage through 2050" (UWMP 2-7, emphasis added). This goal is inconsistent with the spirit of the Sustainability pLAn, which anticipated that the City could target better levels of water efficiency below the 100 GPCD goal.

Because LADWP assumes that future per capita water use will remain flat for the next 25 years as population increases, future water demands are forecasted to rise by 80,000 AFY by 2045. This projected trend is inconsistent with the last two decades of water use experience by Los Angeles.

Using LADWP's data, the graphic below compares the actual per capita water use with UWMP per capita water use projections made in 2005, 2010, 2015 and 2020. Despite the current hot and dry weather, Los Angeles appears roughly on track to achieve 100 GPCD within the next few years.



- The UWMP assumes that LA will achieve less than 12,000 AFY of new "additional" water savings between 2025 and 2045.

LADWP's arbitrary cap on future water efficiency improvements is reflected in the UWMP's estimate of the "additional conservation savings" that are calculated to offset future water demand in the UWMP.

The UWMP Exhibit 2M, shown below, identifies nearly 145,000 acre-feet of "additional conservation savings" that LADWP expects to achieve between 2025 and 2045. However, the majority of these savings are not new; they comprise water saved between 2014 and 2020. As explained in the note below Exhibit 2M, these savings come from a combination of water savings "retained" from earlier years and future active and passive water conservation.

The UWMP water savings as presented by LADWP are cumulative. The net additional water saved between 2025 and 2045 is projected to be less than 12,000 AFY. The result is that these assumptions inappropriately inflate the City's projected future water needs.

Exhibit 2M
LADWP Water Demand Projections by Sector

Year	Single-family	Multi-family	Commercial/ Government	Industrial	NRW	Additional Conservation Savings*	Total
2025	228,529	192,727	156,407	13,651	51,321	133,133	509,501
2030	233,366	205,728	157,341	12,902	50,826	133,506	526,658
2035	237,297	219,798	158,236	12,171	51,334	142,688	536,148
2040	242,761	233,602	159,030	11,418	51,026	143,351	554,486
2045	246,779	244,853	157,680	10,503	50,687	144,752	565,751

*Additional Conservation Savings includes projected future active and passive savings and additional retained passive savings. Details on future active and passive savings are provided in Chapter 3, *Water Conservation*.

- The UWMP appears to assume that LA's water demand will rebound between 2020 and 2025 to a higher, less efficient level of water use.

As presented, the UWMP forecasts that the City's population will increase by 148,000 people and its water demand will increase by 21,000 AFY over the next five years. This large increase in water use is equivalent to assuming that all new people will use roughly 130 gallons per person per day, not 106 gallons assumed as the per capita use of LA's current population.

Effectively, and without explanation, LADWP is projecting that the City will become less water efficient over the next few years, rolling back a significant share of the City's current water savings achievements. This assumption results in an inflated 2025 starting point for the UWMP's water demand projections.

- The UWMP relies on water use factors that are likely out of date.

The UWMP states that water use factors were obtained from MWD water forecast modeling tools (UWMP, 2-6). Recently MWD recognized that past use of this forecasting tool has resulted in inflated water demand projections.

MWD is currently evaluating how to improve the forecast model, but two key assumptions stand out as potentially impacting the accuracy of LADWP's UWMP demand forecasts: (1) the failure of the model to appropriately account for increased density of new growth (which is accompanied by significantly reduced outdoor water use[2]); and (2) the model's assumption that 50% of new development will NOT comply with local Model Water Efficiency Landscape Ordinances because they are not adequately enforced by cities (MWDSC, 2020) (MWD, p. 2-9).

- The UWMP assumes no meaningful reductions in non-revenue water usage.

[2] Density was identified in MWD's 2010 UWMP as a key variable in reducing demand (see MWD 2010 UWMP, Appendix A.28). Housing density estimates used in the 2010 MWD-MAIN models were based on 1993 land use and housing data provided by SCAG and SANDAG. These modeling assumptions were not updated in MWD's 2015 Integrated Resources Plan (see 1/7/2016 technical comment letter from Joe Grindstaff to Deven Upadahyay). It is unclear whether MWD made updates as of 2020.

The UWMP states that its percentage of non-revenue water loss (unbilled water that includes distribution system leaks) will decline by 1% over the next 25 years UWMP, 2-8). However, LADWP does not expect to substantially reduce this volume. As shown in Exhibit 2M (column labeled NRW), the non-revenue water remains about 51,000 AFY. The percentage decline appears to be related to LADWP's assumption that total water demand will increase while non-revenue water doesn't change.

3. Future continued water efficiency improvements are achievable, necessary and should be factored into the UWMP demand projections.

Seven years ago, the Mayor's Sustainability pLAn's 2035 water conservation goals were considered ambitious. As of 2021—15 years early—they have almost been met. This trajectory, although the product of the Mayor's vision, is not unique to Los Angeles. Dramatic declines in urban water use over the past 20 years are a well-documented nationwide trend that is expected to increase based on current water efficiency standards, technologies, and additional investments in conservation, landscape transformation, and distributed stormwater capture projects (Abraham, 2020; Cooley 2020; Public Policy Institute of California 2019).

LADWP should develop a more realistic demand forecast that is based on current realities and trends, and advances the Mayor's goal of climate resilience. Research published in 2018 by the UCLA Environment and Sustainability Program suggests that Los Angeles should aim at achieving water use level of 75–80 GPCD by 2035 (UCLA, 2018 p. 105). UCLA estimates that improving LA's water efficiency from its 2017 level of 104 GPCD to 75 GPCD by 2035 would reduce LA's water needs by 200,000 AFY, from 536,000 AFY to 365,000 AFY (UCLA, 2018 p. 61).

4. The UWMP does not account for new local water supplies being developed to achieve the City's Sustainability pLAn goals.

The UWMP describes the City's many initiatives to expand its groundwater, stormwater capture and recharge, and recycled water resources, consistent with the goals of the Sustainability pLAn, LADWP's 2015 Stormwater Capture Master Plan, the 2016 Los Angeles Basin Study for Conservation, and the newly formed Safe Clean Water Program. However, LADWP's future water supply forecasts do not reflect the water produced from these important projects.

For example, Operation Next is the City's flagship potable reuse project, yet NO water supplies from this project are included in the projections, not even by 2045—ten years after Operation Next is expected to be fully operational. Effectively this means that the City's goal to use 100% of its recycled water by 2035 is not part of LADWP's official 2020 UWMP water supply projections. The UWMP states that staff will provide future updates as the project is

constructed.[3] However, preliminary estimates of the expected water produced by Operation Next should be incorporated into the UWMP supply forecasts.

Similarly, LADWP should quantify and incorporate the water supply created through its water conservation programs and the Safe Clean Water Program. Stormwater projects have already been funded through this program, are under construction, and more annual funding will become available. However, the UWMP merely states that these project will "increase water supply" without quantification (UWMP, p. 6-28).Given the realities of climate change, LADWP should increase its stormwater capture goal to be consistent with the "aggressive capture potential" of 178,000 AFY shown in Exhibit 6F (UWMP, p. 6-11).

5. The UWMP does not adequately address water affordability and equity concerns for LA's disadvantaged communities.

According to recent studies some of the best opportunities for water efficiency continue to be in lower-income neighborhoods where the housing stock and water pipes are older and uptake of rebates has not been as high (AWE, 2017). These studies also document the value of conservation programs to improving water affordability within disadvantaged communities (AWE, 2019, p. 9).

In the 1990s manyof Los Angeles' community based organizations (CBOs) partnered with LADWP to install low-flow toilets within their communities. CBOs are viewed as trusted community members and have had significant success in implementing conservations programs. These CBO-led initiatives also generated jobs and revenue for community members. By 2001, the City had installed over one million toilets.

A 2020 version of these programs should be developed that similarly invest in efficiency projects that make water services more affordable for low-income residents, create jobs and job training programs and ensure that LADWP's rebate programs are accessible toand fully benefit Los Angeles' low-income communities. This is a particularly pressing need given the health and economic impacts of COVID-19 on these communities. This work would be consistent with LADWP's expanded Equity Metrics Data Initiative, where recent feedback emphasized the need to for more involvement of CBOs in the design and implementation of these programs, along with improved customer segmentation to better understand the characteristics of those who have trouble accessing LADWP's programs and services.

[3] The California Water Code 10631(b) requires water suppliers to identify and quantify, to the extent practicable, the existing and planned sources of water available in five year increments to 20 years or as far data is available. See the 2020 UWMP Guidebook, p. 6-4, by the California Department of Water Resources: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans/Final-2020-UWMP-Guidebook/UWMP-Guidebook-2020---Final-032921.pdf.

6. The UWMP does not achieve Los Angeles' goal to obtain 70% of its water from local sources.

One of the transformative water management goals in the Sustainability pLAn is to obtain 70% of the City's water supplies from local sources, defined as conservation, groundwater, and recycled water, by 2035. This goal directly addresses the expected impacts of climate change on the City's imported water supplies including a shrinking snowpack, warmer temperatures, and more extreme droughts and rainfall events. The imported water supply target is 30%, provided by a combination of Los Angeles Aqueduct (LAA) deliveries and MWD purchases.

Using the UWMP data, LADWP estimates that 46% of the City's water supply will be locally sourced (including conservation), while 54% will come from imported water supplies. By 2045, the percentage of the City's imported water increases to 57%—in other words, Los Angeles becomes more dependent on imported water, not less.

One reason for this discrepancy is that LADWP does not count the recycled water produced from Operation Next, described earlier, nor do they account for distributed stormwater capture. Another significant factor is the artificial cap LADWP places on future conservation, also described earlier. But in the end, LADWP's fundamental assumption is that the City will continue to rely on climate-vulnerable imported water supplies from the Eastern Sierra and MWD for the majority of its water.[4]

7. LADWP has the opportunity to do more through local water supply development and conservation to significantly reduce LA's dependence on imported water from the Eastern Sierra as well as from MWD.

It is time to consider a new joint integrated water resources management plan for the Los Angeles Aqueduct.

Local and Tribal governments in Mono and Inyo Counties share the same concerns as Los Angeles regarding the impacts of climate change on their environment and communities.

The future of our two watersheds are intertwined, connected by the physical structure of the Los Angeles Aqueduct. LADWP's diversions will continue—the City's choice is how these diversions will be managed. The Eastern Sierra has already experienced environmental and economic harm due to these diversions. Climate change is expected to intensify these impacts.

But climate change does not have to result in increased conflict between our watersheds. As highlighted in the UWMP, there is more than enough water between the two regions, particularly with the construction of Operation Next, to free LADWP from fighting and losing endless rounds of court and regulatory battles. LA's wealth of local water supplies enables the two regions to

[4] The UWMP maintains, with minor adjustments for climate change, LAA diversions in the 185,000–190,000 AFY range between 2025-2045. MWD purchases are reduced by 50% from the 2014 baseline, but then are similarly assumed to plateau in the 158,000-220,000 AFY range.

work together to shape a new climate-resilient future, one in which both achieve water reliability.

We have done this before. In the 1990s Los Angeles recognized its connection with the Eastern Sierra and pledged water efficiency and recycled water improvements to help provide the water needed to save Mono Lake. Through the efforts of the Mono Lake Committee, the State of California and the Federal Government made over $120 million available to LADWP to invest in conservation and water recycling as part of developing a shared solution.

Los Angeles and the Eastern Sierra can do this again. Together, we have the opportunity to overcome more than 100 years of history by developing an integrated water resources management plan for the Los Angeles Aqueduct that achieves more flexibility, water reliability and ecological resilience for both regions as we cope with the impacts of climate change.

In conclusion, the UWMP needs to meaningfully implement the City's Sustainability pLAn and deliver on its promise of making the City truly water secure and climate resilient. To that end we submit the following recommendations:

1. Provide a more realistic future water demand scenario that retains and builds upon Los Angeles' existing water efficiency achievements and helps to secure the Green New Deal Sustainability pLAn goal of obtaining 70% of the City's water supply from local sources.

2. Remove LADWP's per capita water use efficiency "cap" of 100 gallons, establish a new, bold conservation target to achieve 75–80 gallons per capita by 2045 and address other water use factors that inappropriately inflate forecasted water demands.

3. Count local water supplies created by Operation Next in the UWMP supply scenario, recognizing these are estimates. These new local recycled water supplies are an essential part of LADWP's commitment to obtain 70% of its water from local sources.

4. More fully quantify local water supplies to be created by the Stormwater Capture Master Plan and Safe Clean Water Program, including all planned and anticipated stormwater capture/reuse projects, regardless of whether such projects are being led by LADWP or other City Departments (e.g. LASAN), outside agencies (e.g. LAUSD) or other third-party groups, including NGOs.

5. Build on and expand Los Angeles' and LADWP's existing programs addressing equity and affordability issues. Increase Los Angeles CBO involvement in the design and implementation of water efficiency, distributed stormwater capture, and conservation projects and programs. Augment outreach and funding for rental housing conservation improvements and provide more detail on tracked metrics.

6. Commit to the development of a sustainable Integrated Water Resources Management Plan for the Los Angeles Aqueduct in partnership with the Eastern Sierra Tribes, local communities and governments and conservation organizations. There are opportunities for shared stewardship and efficiency improvements in both watersheds that are more cost-effective and environmentally beneficial than continued litigation and will achieve a more

climate-resilient and sustainable future for both the Eastern Sierra and Los Angeles.

As California confronts another serious drought, we cannot be complacent about the climate-related water challenges facing our communities. LA's Green New Deal Sustainability pLAn needs to be fully implemented in every aspect of City planning.

LADWP's 2020 Urban Water Management Plan needs to reflect the City's commitment to building a climate-resilient water future. This is the time for LADWP and this UWMP to be as bold—if not even more audacious—as Mayor Garcetti's Sustainability pLAn. We look forward to working collaboratively with you to make this water future a reality.

For questions regarding these comments please contact Bartshé Miller, Mono Lake Committee Eastern Sierra Policy Director, at (760) 647-6595 x121 or *bartshe@monolake.org*.

Sincerely,

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CENTER for BIOLOGICAL DIVERSITY Because life is good.

protecting and restoring natural ecosystems and imperiled species through science, education, policy, and environmental law

Submitted via email

April 13, 2021

Los Angeles Department of Water and Power
Attn: Benjamin Wong
111 N. Hope Street, Room 308
Los Angeles, CA 90012
uwmp@ladwp.com

RE: Comments on the Draft 2020 Urban Water Management Plan

Dear Mr. Wong,

Please accept the following scoping comments on the Draft 2020 Urban Water Management Plan on behalf of the Center for Biological Diversity (the "Center"). The Center is a non-profit environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. These comments are submitted on behalf of the Center's 1.7 million staff, members and online activists throughout California and the United States. Many of the Center's members live in and/or spend time in Los Angeles and in the communities and landscapes of the eastern Sierras, Owens Valley, Mojave Desert, Liebre Mountains, and other places where the Los Angeles Aqueduct infrastructure is located. Both members, staff and activists enjoy visiting the City of Los Angeles, and the rural and wild areas of the eastern Sierras, Owens Valley, the western Mojave Desert, and the Liebre Mountains for numerous reasons. The latter more natural areas allow for the enjoyable activities of hiking, botanizing, wildlife watching, and enjoyment of the scenic grandeur and open landscapes of these areas by our members, staff, and activists.

We are concerned that the Draft Urban Water Management Plan has a number of flaws that need to be remedied prior to finalization. We joined in comments submitted by numerous groups that identified flaws in the analyses of the amount of water use that cause the draft plan to over-estimate the amount of water needed, along with other flaws (please see comments submitted by the Mono Lake Committee et al. dated 4-12-21).

Our concerns in this letter are focused on rare and endangered plants, animals and their habitats that rely on natural hydrological systems and available water for at least part of their lifecycle in Inyo and Mono counties. The current diversions into the Los Angeles Aqueduct if continued will cause further harm to these plants and animals that are already teetering on the brink of extinction. And if there are any increased diversions, those impacts will likewise increase. Based on modeling of climate change effects, many of these species will most likely be pushed closer towards extinction as climate change progresses. Therefore, proactive

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planning in the UWMP is needed to allow for more water to remain in the habitats that these rare species rely on.

Based on the records from the California Natural Diversity Database and other sources, the action area is home to numerous threatened, endangered, and unique species (see Table 1. below) that rely specifically on surface hydrology including seeps/springs/rivers as well as high groundwater tables. Fourteen threatened, endangered, or sensitive plants are tied directly to habitats that are currently impacted by LADWP's water diversions and/or would be impacted if further water diversions/extractions occur. Three rare plant communities, which support some of the rare plants and animals, are also affected by water diversions/extractions. One species of springsnails are wholly dependent on surface water as are five species of fishes including two federally and state-listed species, one of which is a fully protected species under State law. Eleven species of birds are reliant upon riparian or wet meadows for brood rearing with six federally and/or state-listed bird species and other sensitive species such as the Bi-State sage grouse population. The namesake Owens Valley vole is also solely dependent on moist meadow soils for existence.

The UWMP states that the Metropolitan Water District's State Water Project allocation faces "Operational constraints include pumping restrictions related to fish species listed as either threatened or endangered under the federal or state Endangered Species Acts." (at pg. 9-8). It fails to address that the same type of constraints must be taken into account for the numerous threatened and endangered species that are affected by both LADWP's water diversion and groundwater pumping activities that affect sensitive species and their habitats directly and indirectly.

The UWMP also must take into account LADWP's water diversions and ground water pumping effects on the federally designated critical habitat for the Fish Slough milkvetch. Further, several of the federally listed species including the Fish Slough milkvetch, the Owens pupfish and Owens tui chub are included in the U.S. Fish and Wildlife Service's Owens Basin Wetland and Aquatic Species Recovery Plan[1], as well as other sensitive species including the State-listed Owens Valley checkerbloom, the Inyo County mariposa lily, the Owens speckled dace, the Long Valley speckled dace, the Owens Valley vole, and the Owens, Fish Slough, and Aardhal's springsnails. It is unclear how the UWMP would support recovery actions for the listed species and the recovery of the ecosystems that they rely on. This should be addressed in the CEQA analysis. In addition, two other species - the southwestern willow flycatcher[2] and the least Bell's vireo[3] - also have federal Recovery Plans, and the UWMP needs to address how the UWMP will support the recovery efforts for these species. We are particularly concerned that the remaining habitat and hydrological regimes that sustain these wetland/riparian systems be conserved and ultimately expanded due to their current, very limited availability on the landscape.

1 https://ecos.fws.gov/docs/recovery_plan/980930b.pdf
2 https://ecos.fws.gov/docs/recovery_plan/020830c_combined.pdf
3 https://ecos.fws.gov/docs/recovery_plan/980506.pdf

Thank you for your consideration of these comments. Please add the Center to the distribution list for all notices associated with this project and other LADWP projects that have the potential to impact sensitive resources within its service area and the areas affected by water diversions and groundwater pumping at the address below, with email being preferable. Feel free to reach out to me with any questions.

Sincerely,

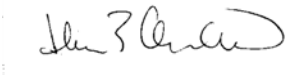

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Table 1. Sensitive Species with Water Dependent Habitat for Part/All of their Lifecycle

Common Name	Scientific Name	Federal/State Status
Plants		
silver-leaved milk-vetch	*Astragalus argophyllus var. argophyllus*	S/2B.2
Horn's milk-vetch	*Astragalus hornii var. hornii*	S/1B.1
Lemmon's milk-vetch	*Astragalus lemmonii*	S/1B.2
Fish Slough milk-vetch	***Astragalus lentiginosus var. piscinensis***	**FT/1B.1**
Hillman's silverscale	*Atriplex argentea var. hillmanii*	-/2B.2
smooth saltbush	*Atriplex pusilla*	-/2B.1
upswept moonwort	*Botrychium ascendens*	S/2B.3
Inyo County star-tulip	*Calochortus excavatus*	S/1B.1
hot springs fimbristylis	*Fimbristylis thermalis*	-/2B.2
alkali ivesia	*Ivesia kingii var. kingii*	S/2B.2
Inyo phacelia	*Phacelia inyoensis*	S/1B.2
Owens Valley checkerbloom	***Sidalcea covillei***	**S/SE**
alkali tansy-sage	*Sphaeromeria potentilloides var. nitrophila*	S/2B.2
foxtail thelypodium	*Thelypodium integrifolium ssp. complanatum*	S/2B.2
Rare Plant Communities		
Alkali Seep	Alkali Seep	Monitored by the State
Transmontane Alkali Marsh	Transmontane Alkali Marsh	Monitored by the State

Water Birch Riparian Scrub	Water Birch Riparian Scrub	Monitored by the State
Mollusk		
Fish Slough springsnail	*Pyrgulopsis perturbata*	
Fish		
Owens sucker	*Catostomus fumeiventris*	-/SSC
Owens pupfish	***Cyprinodon radiosus***	**FE/SE;FP**
Owens speckled dace	*Rhinichthys osculus ssp. 2*	S/SSC
Long Valley speckled dace	*Rhinichthys osculus ssp. 5*	-/SSC
Owens tui chub	***Siphateles bicolor snyderi***	**FE/SE**
Amphibians		
Inyo Mountains slender salamander	*Batrachoseps campi*	S/SSC
northern leopard frog	*Lithobates pipiens*	-/SSC
Birds		
Swainson's hawk	***Buteo swainsoni***	**S/ST**
sage grouse	*Centrocercus urophasianus*	S/SSC
western snowy plover	***Charadrius nivosus***	**FT/SSC**
western yellow-billed cuckoo	***Coccyzus americanus occidentalis***	**FT/SE**
southwestern willow flycatcher	***Empidonax traillii extimus***	**FE/SE**
yellow-breasted chat	*Icteria virens*	-/SSC
least bittern	*Ixobrychus exilis*	BCC/SSC
osprey	*Pandion haliaetus*	S/WL
summer tanager	*Piranga rubra*	-/SSC
bank swallow	***Riparia***	**S/ST**
least Bell's vireo	***Vireo bellii pusillus***	**FE/SE**
Mammals		
Owens Valley vole	*Microtus californicus vallicola*	S/SSC

Federal Designation

FE – Federally listed as endangered.
FT - Federally listed as threatened.
BCC - U.S. Fish and Wildlife Service Bird of Conservation Concern.
S – BLM and/or Forest Service Sensitive

State Designation

SE - State listed as endangered.
ST - State listed as threatened. Species that although not presently threatened in California with extinction are likely to become endangered in the foreseeable future.
SSC California Department of Fish and Wildlife's "Species of Special Concern." Species with declining populations in California.
WL – California Department of Fish and Wildlife's Watch List
California Rare Plant Rank
1B.1 Rare and endangered in California and elsewhere, and seriously threatened in CA
1B.2 Rare and endangered in California and elsewhere, and fairly threatened in CA
2B.1 Rare and endangered in California but more common elsewhere; seriously threatened in CA
2B.2 Rare and endangered in California but more common elsewhere; fairly threatened in CA
2B.3 Rare and endangered in California but more common elsewhere, not very threatened in CA

cc: (electronically via email)
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Leslie McNair, CDFW, Leslie.McNair@wildlife.ca.gov

BIG PINE PAIUTE TRIBE OF THE OWENS VALLEY

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JAMES RAMBEAU
TRIBAL COUNCIL CHAIRMAN

April 12, 2021

Los Angeles Board of Water and Power Commissioners
Los Angeles Department of Water and Power
111 North Hope Street, Room 1555-H
Los Angeles, CA 90012
(submitted by email)

Subject: Comments on 2020 draft Urban Water Management Plan

Dear Commissioners:

The Big Pine Paiute Tribe of the Owens Valley ("Tribe") thanks you for this opportunity to submit comments on the Los Angeles Department of Water and Power ("LADWP") 2020 draft Urban Water Management Plan ("draft Plan").

There is a large body of information associated with the draft Plan, which the Tribe used to compile these comments. LADWP held public workshops and a public hearing in the months leading up to preparing the draft Plan, and Tribal staff participated in some of the public meetings and obtained copies of the presentations. The draft Plan itself presents a wealth of information. It has many graphs and tables, but sometimes the data presented in graphs were not also repeated in tabular form (the final Plan should include tabular data to accompany graphs). Also, in a notice dated March 15, 2021, LADWP announced its Operation NEXT, and useful information about this new project became available on your agency's website.

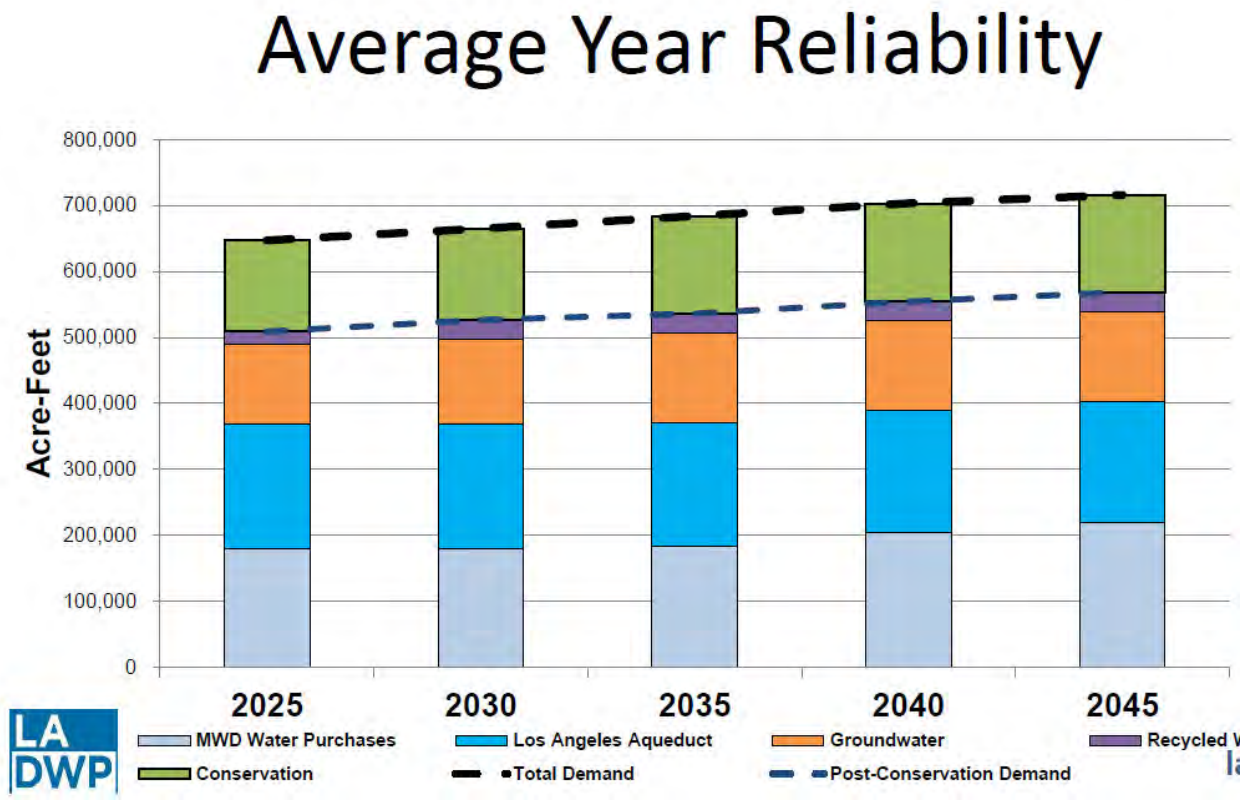
The Tribe understands that Tribal consultation is not required by law when water agencies prepare and update Urban Water Management Plans, but efficient, effective, and transparent communication with the Tribe regarding plans that will set the course for future LADWP policy decisions is the basis of the LADWP Tribal Engagement Policy recently readopted by your Commission. The law encourages water agencies to engage with "stakeholders," and LADWP did reach out to several entities. Most of these were based in the Los Angeles area; a list available to the Tribe showed only two nongovernmental stakeholders from the Eastern Sierra. Nevertheless, the Eastern Sierra is discussed throughout the draft Plan, and the Los Angeles Aqueduct takes from the valley sacred waters once used extensively by the valley's Indigenous peoples. A purpose of the draft Plan is to present the water sources to be tapped to provide for LADWP customers, and because the Eastern Sierra is a significant source, the Tribe is directly affected by LADWP's plans. The Tribe was late in learning about the Plan update, because LADWP did not publicize it widely in our area or write directly to the Tribe. In the future, and

for all LADWP water-planning efforts, the Tribe respectfully requests notification. Should the Tribe request participation, your Commission should honor the request.

The Tribe acknowledges the impressive reductions in per capita water usage by LADWP customers. The draft Plan contains information showing per capita water usage is likely to continue to decline at a significant rate, for example on page 1-10. Furthermore, the draft Plan indicates that, when LADWP requests or mandates water conservation, customers comply and exceed LADWP targets. However, the draft Plan proceeds to forecast for the future based on only a very modest decline in per capita usage in the next 25 years.

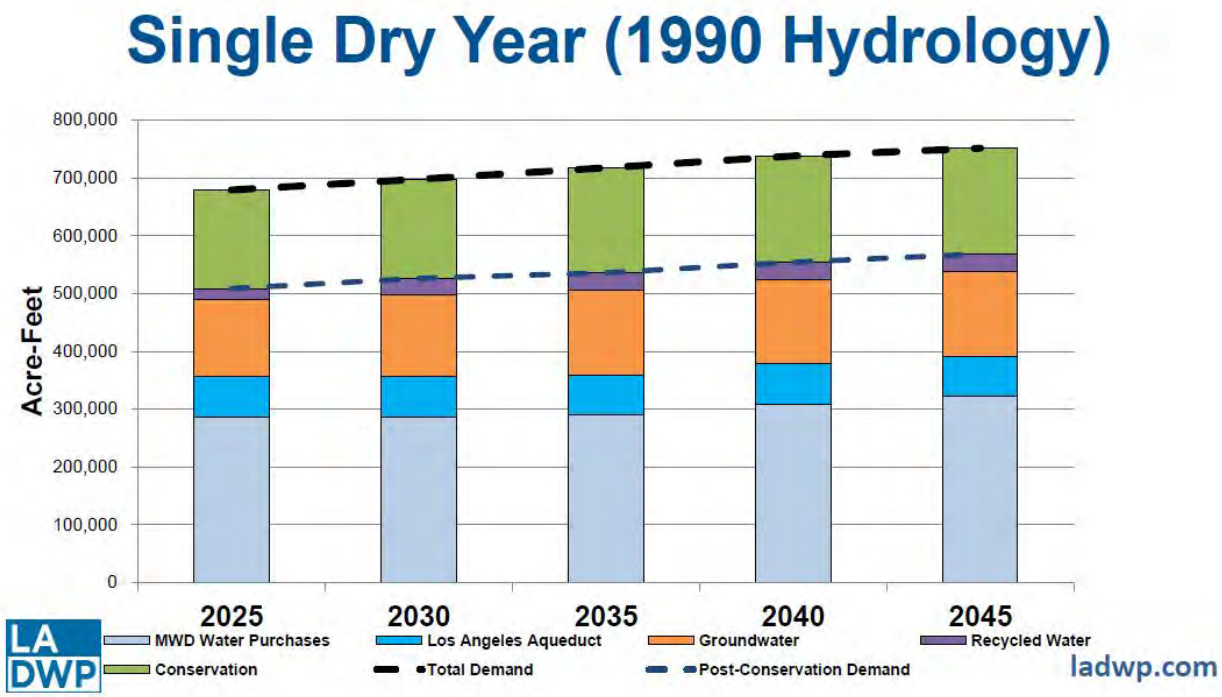
The Tribe applauds Los Angeles Mayor Eric Garcetti's goal of achieving a sustainable city; his vision is leading the City of Los Angeles in the right direction with regard to people and resources. As you may know, Indigenous peoples managed water and other resources sustainably for thousands of years prior to the arrival of "western culture." The Mayor's 2015 pLAn was welcomed by many in the City and beyond, and since its release, applied research, innovation, and actual construction have moved forward quickly showing that its goals are achievable.

The Tribe suggests LADWP begin moving toward the Mayor's sustainability goals for water soon and at a faster rate than presented in the draft Plan. The Mayor's goals are deferred in the draft Plan and tangentially mentioned with references to and discussions of Operation NEXT. A review of the data presented by LADWP staff at the public meetings shows LADWP could greatly reduce water exports from the Eastern Sierra, even without implementing Operation NEXT or the Mayor's pLAn.



The above figure is from LADWP, and it shows where water is projected to come from in the years 2025 through 2045. Interpreting the bars shows LADWP importing about 70% of its water supply during this 25-year period, with about half of the imported water coming from the Eastern Sierra (from the Los Angeles Aqueduct, "LAA") and about half from the Metropolitan Water District ("MWD"). The figure suggests 185,000-190,000 acre-feet per year supplied by the LAA and 180,000-210,000 acre-feet per year from MWD.

As part of the draft Plan, LADWP was required to present how it anticipates water to be supplied given various drought scenarios. Below is the figure LADWP staff presented for a "single dry year."



According to the figure above, in a dry year, LADWP would need to greatly reduce its reliance on LAA water, acquiring approximately only 50,000 acre-feet from the Eastern Sierra. The difference would be supplied by MWD in amounts equaling about 300,000 acre-feet.

The above figures in combination with other information in the draft Plan and from MWD show LADWP could supply all or nearly all its water needs from a combination of local and MWD water. The LAA is not critical to LADWP's supply. For this reason, the Tribe asks that LADWP greatly reduce water exports from the Eastern Sierra and take its allotted water from MWD. During the public meetings, Tribal staff asked about LADWP's access to MWD water, and although a staff person responded, no answer was given in terms of actual volume. The draft Plan also does not provide the answer either, but in several places, such as the figure above, it is clear that LADWP could acquire 300,000 acre-feet or more from MWD in any given year through 2045.

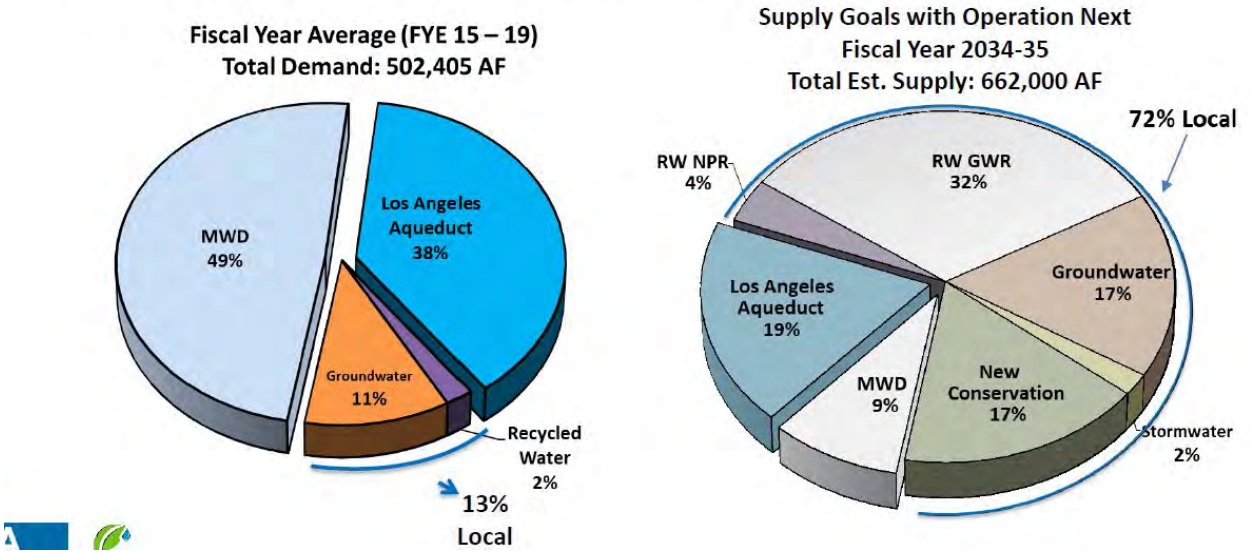
The reason given for LADWP avoiding MWD water is the fact that your agency must purchase it, and the price fluctuates. LADWP has stated that the costs are passed along to customers, who of course object to rate increases.

The Tribe sees this situation differently: paying a little extra for precious water is a small ask. Owens Valley and other parts of the Eastern Sierra have paid a huge price as a result of water exports by LADWP from our naturally closed hydrologic basin. LADWP diverted the entire flow of Owens River in 1913, which resulted in the desiccation of Owens Lake, a lake that would have water today and a functioning lacustrine ecosystem were it not for LADWP. Not satisfied with its access to surface water runoff, LADWP began pumping water, and pumps went on in earnest in 1970 when LADWP's second barrel of the LAA was put into service. LADWP extended its LAA into the Mono Basin, another closed, intermountain basin, separate from Owens, and began exporting water from the fragile Mono Lake ecosystem. LADWP was able to lay claim to and take advantage of the Eastern Sierra's water during a time when California water and environmental laws were insufficient to protect remote lakes and valleys or to give local people a voice. LADWP's ignoble actions took advantage of the region's Indigenous peoples as well as of others. As a result, Los Angeles has flourished at the expense of communities in Owens Valley. The Tribe and others in the valley have paid the price in terms of ecological devastation and strangled economic opportunities brought on by LA's colonization of the valley. For these and other reasons, the Tribe thinks it is time for the "cost" burden to be shifted to water users and away from the victims of LADWP's environmental offences.

Somewhat in parallel with the Mayor's vision of a sustainable city, LADWP in February 2019 initiated "Operation NEXT" in coordination with other agencies. Chapter 8 of the draft Plan discusses how, once the infrastructure is in place, LADWP will be able to capture and use large quantities of storm water and recycled waste water. A target contained in the Mayor's 2019 Green New Deal is to source at least 70% of LA's water locally.

Based on information obtained from the various documents and presentations regarding Operation NEXT, the Tribe notes that by the year 2035 LADWP should be able to supply 72% of its water to from "local" sources. Below are figures excerpted from LADWP presentations, then interpreted by Tribal staff.

Program Background: Water Supply Reliability



The left pie diagram above shows current (2015-2019) average annual customer water demand as 502,405 acre-feet. The diagram on the right presents supply goals in 2035, when Operation NEXT is functioning. Converting supply percentages to acre-feet gives values shown in the table below:

SOURCE	Current (2015-19)			In 15 years (2035)	
	%	Acre-feet		%	Acre-feet
Local	13%	65,312		72%	476,640
MWD	49%	246,179		9%	59,580
LA Aqueduct	38%	190,914		19%	125,780

Operation NEXT in 2035 projects 476,640 acre-feet to come from local source, while imported water totals 185,360 acre-feet. Clearly, this entire imported amount can be acquired through purchases from MWD, because, as shown for the draft Plan above, as much as 300,000 acre-feet could be purchased from MWD in a given year. The Tribe requests LADWP curtail imports via the LAA and shift to using water supplied by MWD to make up any water demands that cannot be supplied locally. The Tribe understands that, like the City of Los Angeles, MWD is also focusing on developing sustainable water sources and greater storage capacity. Also, its member agencies likewise are implementing water recycling and other water conservation measures. These should help lessen impacts on places of origin, such as the California Delta.

The numbers presented by LADWP in the draft Plan and other documents show:

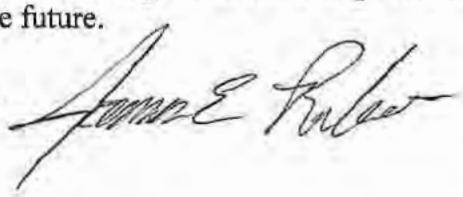
- LADWP water customers are willing and able to conserve water, and the trend is toward even greater conservation;
- Vast quantities of Owens Valley water have needlessly ended up in the Pacific Ocean, leaving desiccated lakes, dead springs, habitat loss, and other forms of environmental damage to be dealt with by the Tribe and others in the Eastern Sierra;
- Climate change will affect the Eastern Sierra, so our communities need the water which would naturally occur here; and

- Visionary leadership in LA has shifted away from externalizing costs of resource acquisition to far-off disadvantaged communities and shifted to innovation and a goal of sustainability, which, if applied more broadly, can be of immense benefit to other areas of the west.

The draft Plan and Operation NEXT provide the Tribe with hope that LADWP's water exports from the Eastern Sierra may soon be reduced or eliminated. As LADWP reduces its reliance on LAA water, the Tribe would like to see surface water used to meet in-valley needs and cessation of groundwater pumping. Note that this will save energy costs in the Eastern Sierra so that more (hydroelectric) energy flows to Los Angeles.

Finally, the Tribe recommends LADWP or other City officials reach out to and work with the Tribe so that the Tribe has an opportunity to meaningfully participate in planning future water management. Water is more than "a commodity" to people in the Tribal community; it is time the people of Los Angeles acknowledge this fact and allow us to begin working together on a sustainable future.

Sincerely,



James E. Rambeau, Sr.
Tribal Chairman

C: Ben Wong, uwmp@ladwp.com

EL CAMINO SIERRA

BOARD OF SUPERVISORS
COUNTY OF INYO

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April 13, 2021

Benjamin Wong
Los Angeles Department of Water and Power
111 N. Hope Street, Room 308
Los Angeles, CA 90012

Subject: Inyo County Comments on LADWP Draft 2020 Urban Water Management Plan.

Dear Mr. Wong,

Inyo County appreciates this opportunity to comment on the Draft 2020 Urban Water Management Plan (UWMP). The Plan states that, "The availability of water has significantly contributed towards the economic development of the City." Much of that water originated in the Eastern Sierra, and the fortunes of Inyo County and the City have been intertwined since the diversion of the Owens River in 1913. Unfortunately, many negative socioeconomic and environmental consequences of LADWP water gathering activities and land management practices persist in the Owens Valley. Inyo County's comments on the draft 2020 UWMP therefore pertain to policies and actions that could affect the water exports from the Eastern Sierra via the Los Angeles Aqueduct (LAA).

The County commends the water conservation efforts by LADWP and Los Angeles residents who embraced conservation as a permanent way of life. Total water deliveries to the City are similar to the 1970's despite a population increase of over 1 million residents (Section ES-1). LADWP has invested approximately $250 million in the last ten years on conservation efforts, and the decline in per capita water use has been significant (Exhibit 2B). While some water conservation measures are approaching saturation, other areas still show potential for additional savings. For example, outdoor water use is still a significant proportion of the largest single water use category, single family residential (Section 3.3.2). The average cost of the water saved by LADWP conservation measures was $410 AF making these efforts the most cost-effective means to meet part of the City's demand (Section 3.5). The County encourages further investment in creative water conservation measures and requests that LADWP exceed the conservation targets included in the UWMP to reduce the demand on deliveries from the LAA.

The County supports LADWP's goal to reduce reliance on purchased imported water and the potential environmental benefits to the Bay Delta and Colorado River (Section ES-1) provided that it does not result in increased export from the Eastern Sierra. LADWP's goal of reducing reliance on imported water should expressly apply to the LAA as well because water derived from the Eastern Sierra and delivered via the LAA is imported, not local, water.

LADWP's stated intention is to maintain LAA exports at the average of the 1984-2014 period (Section 11.2.1). The UWMP also describes the substantial reductions in LAA deliveries since 1992 from weather variability, reduced groundwater pumping, and water delivery to projects to offset environmental impacts in the Eastern Sierra (Section ES-2). The UWMP should recognize that reductions in groundwater pumping and the implementation of environmental projects were not magnanimous decisions, but were instead the result of persistent litigation by the County and others to compel LADWP to address the negative impacts caused by LADWP land and water management plans and practices. LADWPs policy should also expressly provide that some water gained from new projects in the Owens Valley remain in the valley and dedicated for environmental purposes. Additionally, data in Section 4 are expressed alternately in fiscal or runoff year totals, and that practice confuses the analysis. We recommend the UWMP rely on a consistent measure, preferably runoff year or the standard hydrologic water year.

The UWMP provides a detailed explanation of projects to increase reliance on local water sources, including local groundwater. Those efforts are commendable, and we hope the emphasis reflects a recognition that continuing to develop or expand access to distant water sources is neither sustainable nor cost effective. The County is concerned, however, that LADWP's idea of local ignores the fact that some Eastern Sierra water is banked after being exported through the LAA. In particular, the UWMP describes efforts to remediate groundwater in the San Fernando Basin in the hopes of increasing that water source for conjunctive use management. Some groundwater in that basin is imported LAA water stored for pumping later to meet future demands (Sections 5.0 and 5.12). Thus, some of the increased reliance on local groundwater could lead to further environmental degradation in the Owens Valley given the export of water to a Southern California basin rather than storing it where it would naturally recharge and support the valley's environment.

Furthermore, the UWMP suggests that additional water banking projects are being explored for areas along the LAA south of Haiwee Reservoir (Section 5.12) including in the Antelope Valley (Section 5.6). The Inyo/Los Angeles Long Term Water Agreement (LTWA) recognizes implementation of groundwater banking and recharge facilities in the Owens Valley may be beneficial (LTWA, Section VIII). The LTWA also provides that the Inyo County Board of Supervisors shall not unreasonably refuse to agree to feasible water banking projects that will not cause significant effects on the environment. LADWP should give water banking and recharge projects located in Owens Valley preference over projects outside the valley.

Thank you for the opportunity to comment on the UWMP and we look forward to continuing cooperation between our two agencies to manage the water resources of Inyo County for mutual benefit.

Sincerely,

Jeff Griffiths, Chairperson
Inyo County Board of Supervisors

Water and Power Associates, Inc.
932 Easy Street.
Los Angeles, CA 90042
April 9, 2021
Tel: (323) 240-1234

Water and Power Associates, Inc.

Los Angeles Department of Water and Power
Attn: Benjamin Wong
111 N. Hope Street, Room 308
Los Angeles, CA 90012

Comments on the Los Angeles Department of Water and Power (LADWP) Draft 2020 Urban Water Management Plan

Dear Mr. Wong,

I am writing to submit comments on behalf of the Los Angeles Water and Power Associates (Associates), a 501c(4) corporation established in 1971 to support sound water and energy policies for the City of Los Angeles, Southern California and the State of California. Included on our Board of Directors are three past Assistant General Managers-Water for the Los Angeles Department of Water and Power.

We applaud LADWP for taking leadership in completing the Water Conservation Potential Study as well as the Stormwater Capture Master Plan. These studies set a new standard in urban water resource planning and are critically necessary for a comprehensive planning effort.

We recommend that LADWP coordinate with the Metropolitan Water District of Southern California (MWD) and other agencies such as the Los Angeles County Department of Public Works, the Groundwater Replenishment District and local water supply agencies on recycled water transmission projects to avoid duplication of effort, unnecessary infrastructure spending, negative impacts on basins receiving recycled water and to make sure supply and demand are coordinated throughout the service area.

We encourage recycled water projects that emphasize augmenting potable water supplies as opposed to expanding the non-potable (purple pipe) infrastructure system.

The Associates fully support the development and implementation of the State Water Resources Control Board's Division of Drinking Water (DDW) policies that appropriately allow for the implementation of water recycling projects for potable uses. We intend to support state approval of

regulations that will facilitate the augmentation of potable water supplies with recycled water as the regulatory process moves forward.

The San Fernando Groundwater Basin is one of the most important resources of water supply for the City of Los Angeles. Cleanup of the basin to allow it to store and supply water will be critical to providing water supply in emergencies as well as meeting local water supply goals . The Associates fully supports the basin management efforts and the projects currently underway to provide treatment and operational flexibility for the basin.

The Associates urges LADWP to closely work with and support MWD regarding efforts to pursue appropriate enhancements to achieve water supply reliability in the event of seismic events affecting the California Water Project and in protecting MWD's access to Colorado River supplies.

The Associates commend the water system staff for the forward thinking and long-range planning associated with Operation NEXT. We do recommend, however, that staff thoroughly analyze the costs and rate impacts of the component projects of Operation NEXT and verify that DDW regulations will allow the feasible implementation of the augmentation of potable water supplies before contractually obligating LADWP's rate-payers.

The Associates urge LADWP to continue to aggressively pursue cost-effective water conservation projects as a primary strategy in water supply planning.

We also recommend LADWP continue to aggressively pursue outside funding and make sure the City of Los Angeles receives its fair share of statewide funding mechanisms.

The Associates look forward to the opportunity to comment further policy initiatives of both the water and power systems in the future.

Yours truly,

Gerald A. (Jerry) Gewe, President
Water and Power Associates

The Nature Conservancy
Protecting nature. Preserving life.™

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nature.org/california

April 13th, 2021
LADWP JFB
111 No. Hope Street, Room 308
Los Angeles, CA 90012,
Attn: Benjamin Wong

RE: LADWP's 2020 Urban Water Management Plan (UWMP) Final Public Review Draft Comment Letter

Dear Mr. Wong,

The Nature Conservancy (Conservancy) is committed to working with the Los Angeles Department of Water and Power (LADWP) to ensure a climate resilient future for the City of Los Angeles. LADWP's 2020 Urban Water Management Plan (UWMP) Final Public Review Draft lays out much-needed goals to continue to build resilient urban water management systems in Los Angeles in the face of challenges such as climate change, groundwater contamination, increased demand, and economic stressors. Utilizing and prioritizing nature-based solutions (NBS) have been proven to provide multiple benefits for addressing urban challenges including the quality of life of community members, a strong economy, and a trained workforce.

The Conservancy is an international non-profit organization dedicated to conserving the lands and waters on which all life depends. Our on-the-ground work is carried out in all 50 states and in 72 countries around the world and is supported by more than one million members. To date, we have helped conserve approximately 120 million acres (including nearly 1.5 million acres in California) and 5,000 river miles around the world. We have been engaged in the protection and management of natural resources across the U.S. since 1951.

Protecting and restoring California's diverse ecosystems has never felt more urgent as we face the unprecedented global challenge of COVID-19 and the regional challenges that affect California's water supply, within a global context of climate change. We commend LADWP's efforts to invest in local groundwater, recycled water, stormwater capture, and water conservation and use efficiency. Droughts have taken a toll on Californians and our water supplies year after year, and they are projected to continue threatening our communities. We encourage LADWP to keep groundwater recharge, stormwater capture, and NBS as top-of-mind solutions to effectively address water supply and water quality goals in Los Angeles.

In addition, the Conservancy offers the following general comments on the Final Public Review Draft.

The Conservancy strongly supports LADWP's efforts to improve water conservation and use efficiency, to increase stormwater capture capacity, and to maximize water reuse, among other 2020 UWMP goals. We also believe that an enhancement of local water supplies is crucial for Los Angeles to create resilience against climate change impacts and reduce impacts of hazard

to communities in the future, especially considering the actual risk of climate-driven megadroughts, prognosticated by a 2020 study from Columbia University for the western United States.[1] Considering that Los was identified as the most water stressed city in the United States by the Conservancy's global survey on megacities in 2014,[2] and future drought scenarios, the UWMP needs to take a much more aggressive approach to water conservation and improving stormwater capture capacity to recharge local groundwater basins using NBS.

NBS which restore and/or enhance natural systems, can increase human, ecosystem, and infrastructure resilience to climate impacts, and can reduce damage from natural hazards as well as, or even better than, gray infrastructure solutions, often at a lower cost. In line with that, we believe that the goal for 3,400 AFY by 2035 through distributed stormwater capture projects can be increased and needs a stronger emphasis on vegetated NBS. Vegetated NBS increase the infiltration and ground water recharge, enhance stormwater treatment and flood control, and can also provide much-needed habitat for a broad range of native species. Vegetated NBS also reduce air, soil, and water pollution, benefit urban communities through increased shade and green spaces, and reduce contributions to the heat-island effect, providing much-needed open space for underserved communities. We believe that vegetated NBS are an essential tool to address equity issues, considering the disproportionate impacts on disadvantaged communities, such as increased pollution and lack of green space and healthy outdoor recreation opportunities. Additionally, vegetated NBS can have co-benefits such as improved mental and physical health.

In line with the above-mentioned measures, we also recommend researching the possibility of implementing vegetated approaches to centralized stormwater capture projects such as spreading grounds, for example, by converting them to constructed wetlands or hybrid solutions of wetlands and maintained infiltration areas that would provide local habitat enhancement and many other environmental and social co-benefits.

We commend LADWP for partnering with local non-profit organizations to effectively engage with communities within their specific context, challenges, and opportunities. Community-based organizations themselves know best what community needs should be compensated and prioritized. When partnering with community-based organizations who have limited funding and capacity, the Conservancy recommends providing a budget to compensate any anticipated outreach costs, in addition to stipends compensating community participants for their time participating. Other best practices include providing free food at all public events, supporting childcare options, and compensating transportation costs. The Conservancy also recommends incorporating recommendations from community-based organizations about how to proactively address barriers to community participation, including technological access, language, culture, and message relevance.

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[1] Williams, A. P., Cook, E. R., Sheron, J. E., Cook, B. I., Abatzoglou, J. T., Bolles, K., Baek, S. H., Badger, A. M., Livneh, B. (2020): Large contribution from anthropogenic warming to an emerging North American megadrought. Science. 17 Apr 2020: Vol. 368, Issue 6488, pp. 314-318 DOI: 10.1126/science.aaz9600.

[2] McDonald, R. I., Weber, K., Padowski, J., Floerke, M., Schneider, C., Green, P., Gleeson, T., Eckman, S., Lehner, B., Balk, D., Bourcher, T., Grill, G., Montgomery, M. (2014): Water on an urban planet: Urbanization and the reach of urban water infrastructure. Global Environmental Change. Volume 27, July 2014, Pages 96-105. DOI: https://doi.org/10.1016/j.gloenvcha.2014.04.022.

Community engagement includes incorporating community expertise about the issues at hand, including integrating diverse world views and relationships to nature and water. Information sharing is a two-way street and LADWP has much to benefit from the profound water-related connections and knowledge that diverse communities have. In particular, the Conservancy recommends that LADWP consider robust community engagement with tribes and tribal organizations who continue to connect with and relate to water in Los Angeles in important ways. Tribes and tribal organizations continue to be key stewards and caretakers of scarce resources in the face of significant challenges.

The Conservancy looks forward to the opportunity to work with LADWP to ensure a sustainable, safe, and reliable water supply for Los Angeles.

Sincerely,

Kelsey Jessup
Urban Conservation Program Manager
The Nature Conservancy

Range of Light Group
Toiyabe Chapter, Sierra Club
Counties of Inyo and Mono, California
P.O. Box 1973, Mammoth Lakes, CA, 93546
RangeofLight.sc@gmail.com

April 13, 2021

Los Angeles Department of Water and Power
Attn: Benjamin Wong
111 N. Hope Street, Room 308
Los Angeles, CA 90012
uwmp@ladwp.com

Dear Mr. Wong,

The Executive Committee of the Sierra Club Range of Light Group, representing over 400 members in Inyo and Mono Counties, is commenting on the Los Angeles Department of Water and Power draft 2020 Urban Water Management Plan (UWMP). It is a wonderfully progressive plan for a sustainable, resilient water future that shows what can be done with determination.

The plan shows significant reductions in the amount of water the City of Los Angeles will need to purchase from the Metropolitan Water District. The need for water will be further reduced when Operation Next comes online and as the City strives to meet the state's per capita water use goal of 55 gallons cutting the current use nearly in half. These reductions were not reflected in the calculations in the UWMP, but will be realized within the timeframe of the plan.

With less need to import water, we had hoped LADWP's water policies affecting the Eastern Sierra would leave more water in this region to improve the health of our vital ecosystems. Mono Lake has yet to reach its healthy lake level, the vegetation, meadows and springs of the Owens Valley have yet to recover from the groundwater over-pumping of the 1970s-1990s, and the lower Owens River requires peak flows to be a healthy, sustainable river. The ecosystems and economies of the Eastern Sierra need additional water to stay in the region - and this plan does not do that.

Nevertheless, in spite of the progress proposed by the UWMP, the reduction in overall water demand and the increase in water supplies in the Los Angeles area do not translate to a reduction in exports from the Eastern Sierra. The planned 190,400 AFY in 2025 to 184,200 AFY in 2045 reflects minor reductions over the 30-year average of 192,000 AFY due to climate change. Painfully, for both the Eastern Sierra's ecosystems and economy, the plan is still to extract the most water possible for the next 25 years.

The UWMP does not describe where the 190,400 AFY will come from, but should. Thousands of LADWP rate payers come to the Eastern Sierra to enjoy its breathtaking beauty and the great outdoors. It is a place loved by many. Those who care about the environment in the Eastern Sierra – local residents and visitors alike - would want to understand the areas to be impacted. For example, rate payers should know that LADWP is looking to extract water from the deeper aquifers and be aware that could cause unknown and untraceable environmental damage on the surface. LADWP is also looking to revoke longstanding irrigation practices for ranchers in Long Valley, which will reduce wetlands and impact wildlife. There is a steep cost to the environment and local economic sectors from water exports from the Eastern Sierra.

The UWMP also describes water banking projects for recharge in the San Fernando Valley that might come from Los Angeles Aquifer (LAA) water. Already infrastructure is in place for high-runoff in the Eastern Sierra to be banked in Antelope Valley. The Indian Wells Valley Groundwater Authority has asked for water from the LAA to recharge its over-drafted basin. We ask that you implement water banking and recharging groundwater in the Eastern Sierra first, before using LAA for other regions. We ask that our ecosystems come first before those outside of the LADWP territory.

The whole Eastern Sierra is a wildlife corridor linking the deserts of the southwest to the Canadian Rockies. It offers important microclimates and is a refuge from climate change for many species. Some of Los Angeles' gains in water conservation and shifts to more local water supplies should be passed on to the Eastern Sierra. It is time to restore the important ecosystems here and fortify them for a warmer world, for us, for the citizens of Los Angeles, and for visitors from around the world.

Lynn Boulton, Chair
Range of Light Group
Toiyabe Chapter, Sierra Club

April 13, 2021

Los Angeles Department of Water and Power
Attn: Benjamin Wong
111 No. Hope Street, Room 308, Los Angeles, CA 90012
Sent Via Email: uwmp@ladwp.com

Re: *Request for LADWP Staff to Revise Demand Projection Scenarios and Conservation Trends, and Quantify Operation NEXT, the Safe Clean Water Program, and Groundwater Remediation as Alternative Water Supplies*

Dear LADWP staff and Board of Directors:

On behalf of Los Angeles Waterkeeper (LAW), a nonprofit advocacy organization that fights for the health of the region's waterways and for sustainable, equitable, and climate-friendly water supplies, I am writing to provide our feedback and recommendations on the Los Angeles Department of Water and Power (LADWP) 2020 Urban Water Management Plan (UWMP). First, we would like to thank LADWP for extending the deadline for public comment on the UWMP. Recognizing the time-consuming steps that need to happen within LADWP and the City of Los Angeles to get this plan approved, LAW appreciates the extra time that has allowed us to properly review this plan and provide the following feedback.

The 'pump-and-dump' approach to water planning has for too long been the hallmark of the L.A. region and, indeed, California as a whole. And while such an approach has undeniably played an essential role in the growth of the region, it has also had devastating and increasingly unacceptable impacts on our environment and communities. Such an energy-intensive approach has made the water sector a major driver of climate change, has resulted in far too much pollution of local waterways from urban runoff and sewage discharges, has dramatically impacted many Western communities and ecology from where we get the majority of our water, and has increasingly impacted water rates as we now find ourselves needing to invest in our outdated gray infrastructure.

In order to reverse these trends, LAW has long advocated for a '4R' approach to the region's water supplies – Reduce (water waste), Reuse (stormwater), Recycle (wastewater) & Restore (contaminated groundwater). Such a multi-faceted and multi-benefit approach will not only make the L.A. region more water secure and climate resilient, but it will also help to improve the overall health of our local waterways and communities as well as provide a tremendous number of green jobs as we transition to a green economy.

We are thrilled that our priorities are largely reflected in Mayor Garcetti's L.A.'s Green New Deal Sustainability pLAn 2019, as well as in many of the actions of the City of Los Angeles in general, and LADWP in particular. Not only has the Mayor talked about this being a 'new Mulholland moment', but he has also implemented many concrete actions and plans, including successful conservation programs, the ongoing cleanup of the San Fernando Valley Groundwater Basin (SFVGB), the existing and

planned expansion of wastewater recycling through Operation NEXT, and groundbreaking stormwater capture and reuse (first through 'Prop O' and later through the City's strong support of Measure W/the Safe Clean Water Program). Many of these efforts are also reflected in the 2020 UWMP.

With that said, however, we unfortunately think the UWMP fails to go far enough in outlining a sustainable and equitable water future for Los Angeles. In some areas, the UWMP does not reflect the ambitious goals of the L.A. Green New Deal or efforts already underway in the City. In other areas, we would ask that the UWMP go beyond what is in the 2019 pLAn based on a better understanding today of our need as well as what is possible to achieve.

In the face of the daunting climate crisis and the 'new water normal', we can no longer safely rely on our 'business-as-usual' model. It is now imperative that the LADWP 2020 UWMP meets the moment in clearly setting out a bold vision for a sustainable and climate resilient water future. UWMPs provide the roadmap for decision and policy makers when it comes to managing our water supplies, and they are thus essential in ensuring that water demands are met efficiently and that water supplies are available to meet existing and future water needs. Planning for maximizing a '4R' water approach will help drive us to meet these critical goals, especially as many planned projects, such as Operation NEXT, still have many hurdles to overcome. Alternatively, planning for a future where demand goes up as conservation flatlines could encourage decisions that bring this unacceptable reality to fruition.

As such, we urge LADWP to amend its 2020 UWMP to:

- Revise demand projections or create a new demand scenario to convey recent declining demand trends in lieu of projections assuming no further conservation or efficiency efforts past 2035;
- Clarify conservation projections and revise the projections to be more consistent with recent conservation trends;
- Quantify and incorporate water supply created by Operation NEXT, which is designed to allow for 100% beneficial use of recycled water by 2035, into the supply projections; and
- Quantify and incorporate maximum potential yields from stormwater capture (from the Safe Clean Water Program) and groundwater remediation into the supply projections.

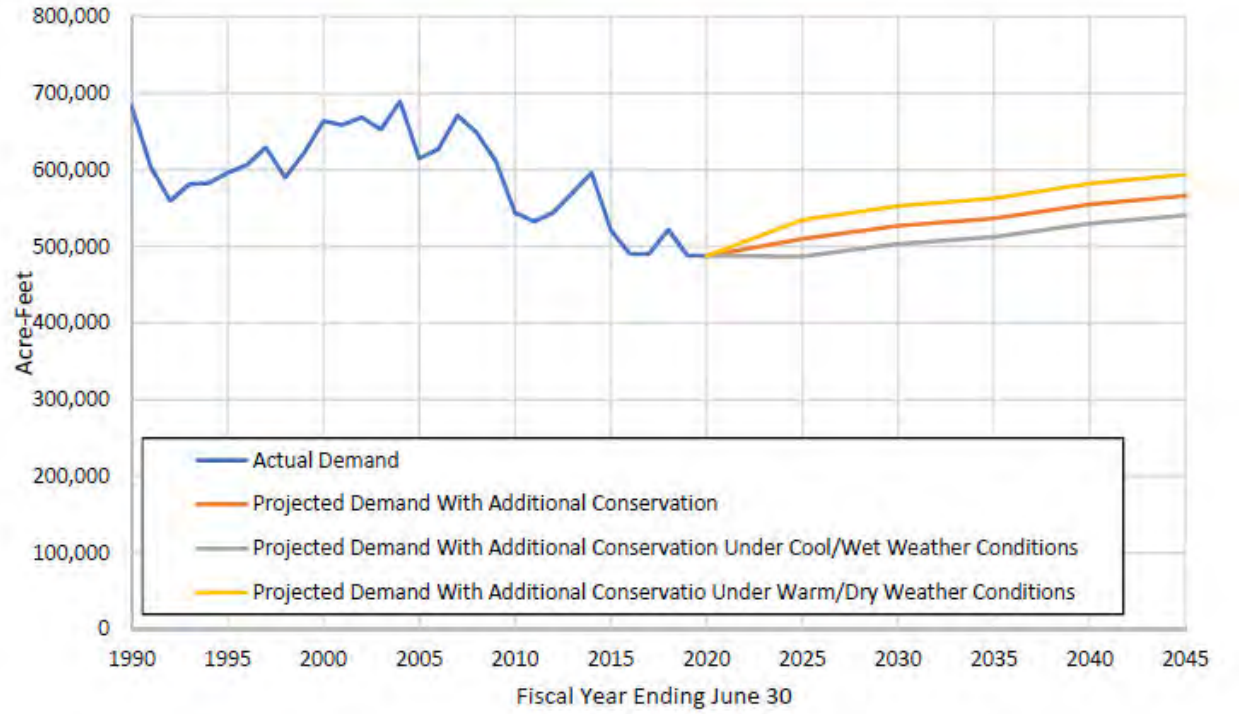
A. The UWMP Inaccurately Depicts Water Use Trends And Thereby Creates Faulty Demand Projections

Water use in the greater Los Angeles region typically varies based on the annual amount of rain received, the total population in the region, the amount of conservation occurring, and many other factors. Despite this annual variability, water demand in Los Angeles (City or L.A.) has declined since 1991, after LADWP started to implement water conservation measures (UWMP, p. E-8). In the last five years alone, average water demand has dipped below the average demand of 50 years ago, a time during which there were one million fewer people in the City than there are today. This juxtaposition of increasing population and decreasing demand speaks volumes to the policies and conservation measures the City has implemented. However, the UWMP does not incorporate this trend in any of its demand projection scenarios.

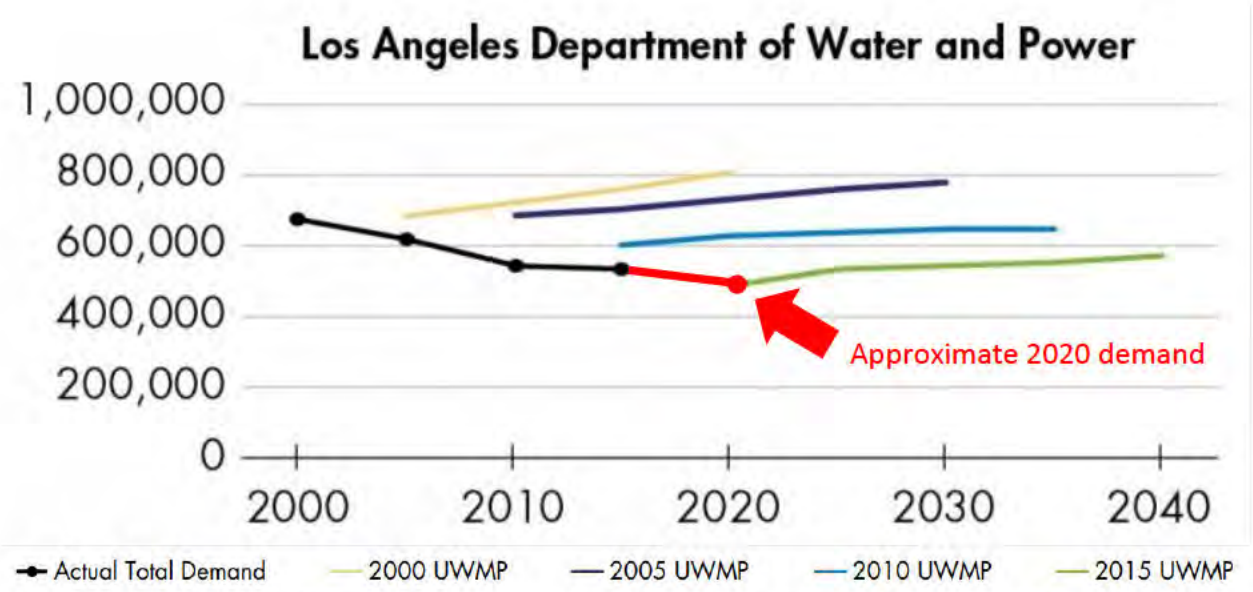
Even though the UWMP recognizes demand reductions within the LADWP service area in its historical demand descriptions, it fails to recognize or incorporate the overall declining water use trends

in its future demand projections. Despite overwhelming evidence that water use trends have decoupled from population growth trends, Exhibit 2O shows increasing water use in the City until ultimately recovering to 2015 demands or higher for every future demand scenario (UWMP, p. 2-11).

Exhibit 2O
Projected Water Demand Weather Variability



The conservation aspect of the demand projections is largely reliant on the Water Conservation Potential Study (WCPS) written in 2017 that uses 2014 goals as a baseline (UWMP, p. 2-7). Using 2014 goals as a baseline for the 2020 water demand projections ignores the actual rate of reduction in demand over the last seven years, as the 2014 baseline goals for water reduction are on track to be surpassed long before the 2035 deadline. For example, based on 2014 goals, Los Angeles had originally planned in its 2015 UWMP to reduce its water use to 142 gpcd by 2020 (UWMP, p. 3-5). In reality, by 2020, demands had decreased down to 106 gpcd, which is only 6 gpcd from the City's original goal of 100 gpcd (UWMP, p. 3-5). Moreover, as the chart above demonstrates (and as LADWP has noted), it appears that conservation trends may be 'hardening', meaning there is less of an upward water use 'bounce' immediately following severe drought. Hardening is a result of the public becoming more accustomed to the need for "conservation as a way of life", so we should therefore be able to continue smoother downward trends in demand without large increases after drought periods. Projecting an increase in overall demand shows that the UWMP is ignoring both the actual demand trends in the City and the decoupling of population from demand. This is not the first time this has happened, either. As shown below in the graph produced by the Pacific Institute[1], LADWP has routinely overestimated its future demands, and unfortunately the 2020 UWMP is no different.



"Actual and Projected Total Demand Trends for the Ten Selected Water Suppliers (in Acre-Feet)" by Abraham, Diringer, and Cooley (2020)[1]

Inaccurate demand projections have substantial tangible consequences. As is the case for many water agencies, inaccurately planning for higher water usage can lead to unnecessary investment in new water infrastructure[1]. Planning and constructing unnecessary infrastructure not only appropriates valuable space in a space-poor Los Angeles, but it also burdens ratepayers with higher average costs. The extra burden on ratepayers for unneeded infrastructure is unnecessary and wasteful, especially as Los Angeles plans on "continuing [its] trend of using less water per capita to reflect that conservation is a California way of life"[2].

Given that L.A.'s Green New Deal is currently being used as a road map for a more climate-resilient Los Angeles, LADWP's choice to only consider scenarios involving an increase in demand despite current declining trends suggests that LADWP is not fully committed to Los Angeles' goal of becoming a more sustainable city. We request that the UWMP include at least one demand scenario in which LADWP incorporates declining demand based on current demand trends and the Green New Deal's goal of using less water per capita.

B. The UWMP Fails to Envision Los Angeles as a Leader in Conservation Long-Term

Of course, the flip-side of too-high demand projections is the failure to include sufficiently robust water conservation targets. The City of Los Angeles has been a leader in conservation and must be applauded for its tremendous improvements in becoming more water efficient through its use of conservation programs and water use efficiency measures. The City has actively managed to reduce its per capita demand *to nearly its 2035 goal* of 100 gpcd a full 15 years ahead of schedule. However, the

[1] "An Assessment of Urban Water Demand Forecasts in California" by Sonali Abraham, Sarah Diringer, and Heather Cooley (2020).
[2] "L.A.'s Green New Deal: Sustainable City pLAn" by Mayor Eric Garcetti (2019).

UWMP assumes these efforts will cease, and it fails to project increased conservation trends into the future.

With so much success to date, now is not the time for LADWP to rest on its laurels. We should instead build on the success we have had thus far to continue moving L.A.to be a world leader on per capita water usage. This is especially true as we recognize the important role increased conservation, derived mostly from a reduction in outdoor water use, would have on reducing the leading source of pollution of local waterways (urban and stormwater runoff). Further, continued conservation must be a centerpiece of future water policy as it is clear that conservation represents a cost-effective way to substantially reduce our carbon footprint. The UC Davis Center for Water-Energy Efficiency documents this water-energy nexus, demonstrating that investing in water conservation can actually be a more cost-effective way to reduce energy consumption than investing in energy conservation itself[3].

Next, the UWMP utilizes the WCPS to show that LADWP is aiming for the calculated "maximum cost-effective potential" rather than the "technical maximum potential" (UWMP, p. 3-34, 3-43). While the "maximum cost-effective potential" metric may have initially resulted in an aggressive usage goal, it now sets a hard limit on the amount of water LADWP plans to conserve. Exhibit 2I and Exhibit 3L show that Los Angeles is planning to surpass its maximum cost-effective potential *in addition to* its technical maximum potential for 2025 (UWMP, p. 2-8, 3-35). Because the UWMP sees the maximum cost-effective potential as a hard limit on the amount of water that can be conserved, it fails to follow actual faster-than-anticipated declining conservation trends in its projections. For example, the UWMP projects hardly any additional conservation savings from 2025-2030, increasing conservation savings by only 8% compared to an estimated 20% increase from 2014 to 2025 (UWMP, p. 2-8, 118). As such, the UWMP largely misses the opportunity to set a new goal for the technical maximum potential savings.

Exhibit 2I

Additional Conservation Savings from FYE 2014 Required to Meet LADWP Water Demand Targets

Year	Projected Conservation Savings (Average Conditions) (AF)
2025	133,732
2030	133,506
2035	142,688
2040	143,351
2045	144,752

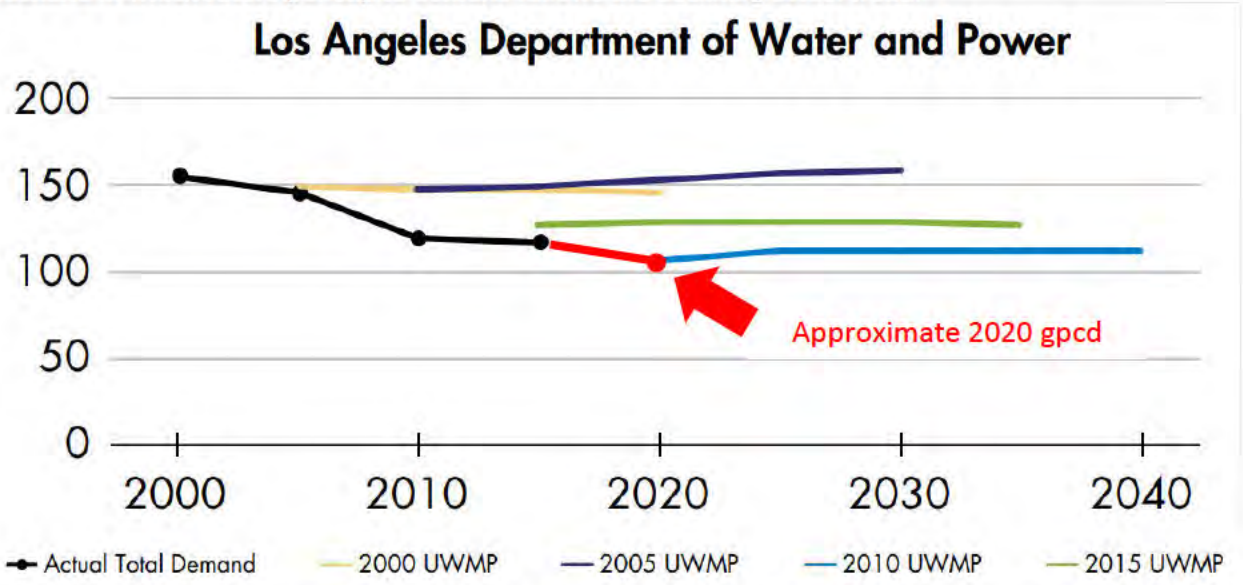
[3] "Want to Save Energy and Fight Climate Change? Try Using Less Water." by Sammy Roth, Los Angeles Times (2021)

Exhibit 3L
Water Conservation Potential Study Results (AFY)

WCPS Water Conservation Potentials	Fiscal Year Ending			
	2020	2025	2030	2035
Technical Maximum Potential	96,000	132,000	168,000	204,000
Maximum Cost-Effective Potential	77,000	107,000	127,000	140,000
Passive Program Potential	55,000	74,000	84,000	88,000

Figure 9-5. WCPS Water Conservation Potentials

While faster-than-anticipated demand reduction is excellent news for the City in reaching its original goal of 100 gpcd, the UWMP implies that there will be no further attempts to reduce demand any lower than 100 gpcd over the next 30 years, as it states that it plans to "maintain this usage through 2050" (UWMP, p. 2-7). The graph below produced by the Pacific Institute[4] illustrates LADWP's previous overestimation of per capita demand and the downward trend of per capita water use. The 2020 UWMP is no different in its overestimation of per capita demand and should therefore show at least one scenario in which future per capita demand follows the declining actual trend.



"Actual and Projected Per Capita Trends for the Ten Selected Water Suppliers (in Gallons per Capital per Day)" by Abraham, Diringer, and Cooley (2020)[4]

Moreover, it is important to note some of the inherent flaws with both the "maximum cost-effective potential" and "technical maximum potential". The former takes a very limited approach to assessing cost-effectiveness. LAW favors a much more rigorous methodology that uses full-cost accounting principles to undertake a true benefit-cost assessment for water conservation. For example, does the 'maximum cost-effective potential' account for the economic benefits of improved water quality (and as

[4] "An Assessment of Urban Water Demand Forecasts in California" by Sonali Abraham, Sarah Diringer, and Heather Cooley (2020).

such, TMDL compliance) from reduced urban runoff pollution, or reduced energy demands and climate resiliency benefits resulting from reduced water waste and nature-based water infrastructure, to name just a few examples?

As far as technical maximum potential, as was pointed out above, it is hard to understand how accurate "technical maximum potential" could be when we are actually on track to exceed that goal by 2025. LADWP should more fully explore world-wide best practices and better assess what we have been able to already accomplish locally to understand (and aim for) a true technical maximum potential. One such example of a global leader in conservation is Australia. The New South Wales territory, which includes Sydney, is similar in climate and population to Los Angeles and can be used as an example for water conservation in L.A. Since Australia's Millennium Drought, the greater Sydney area has been able to continually decrease urban water use and now has a per capita water use of approximately 80 gpcd[5]. As such, LAW recommends a new conservation goal of at least 80 gpcd or lower for urban water use moving forward.

Setting no further goals of water reduction shows that LADWP is not actually planning to stick to the City's goal of becoming more reliant on local supplies and more effective in demand management. By not including even one scenario showing further per capita reductions, the UWMP is essentially saying that LADWP has no interest in further pushing the envelope in conservation and water efficiency.

C. The UWMP Fails to Incorporate Large-Scale Alternative Water Supply Programs

Operation NEXT, the Safe Clean Water Program (SCWP), and large-scale cleanup of the contaminated San Fernando Valley Groundwater Basin are some of the incredible efforts already being undertaken by LADWP, LASAN, and the City of Los Angeles as a whole to utilize local sources of water as supply. Operation NEXT will ultimately lead to the reuse of 100% of all wastewater in Los Angeles, the SCWP will provide new sources of water through the use of captured stormwater, and cleaning up contaminated groundwater basins will provide the dual benefits of salvaging what is now a wasted resource while also ensuring our basins can provide storage for new sources of stormwater and treated wastewater. Each of these programs will help Los Angeles in meeting the 70% local supply goal stated in the Mayor's Green New Deal, but the UWMP fails to quantify and recognize the full potential of these two local sources of water in its future supply projections.

Recycled Water

Recognizing the inherent and profound waste associated with transporting water hundreds of miles, only to treat it, use it once, then treat it again before discharging it into our ocean, we applaud the ambitious goal of Operation NEXT to recycle 100% of all wastewater in Los Angeles by 2035. Yet, the UWMP describes the program as simply "maximizing" water reuse, which completely disregards the true goal of the program (UWMP, p. ES-15, 7-11). The consequence of minimizing the impact of the program is apparent in the recycled water use projections. Supply from Operation NEXT is not quantified at any point throughout the UWMP, and the recycled water use for 2035 and later as presented in Exhibit 7O show a total recycled water use much less than the City's recycled water capacity (UWMP, p. 7-27). The UWMP shows a projected recycled water use of 67,600 AFY (UWMP, p. 7-27), which represents an increase of only 31,600 AFY over current recycled water use. Yet, pursuant to Mayor Garcetti's 100%

[5] https://www.soe.epa.nsw.gov.au/all-themes/human-settlement/urban-water-supply

recycled wastewater pledge, LASAN is looking to reclaim up to 174 mgd[6] (or ~195,000 AFY) from the approximately 225 mgd that flows through the Hyperion Water Reclamation Plant, far exceeding what is accounted for in the UWMP. The failure to incorporate the ultimate goals of Operation NEXT into the recycled water projections suggests that LADWP's long-term planning is incomplete and does not account for this historic effort now underway. As such, LAW recommends that LADWP incorporate Operation NEXT into its future recycled water supply projections.

Stormwater

Stormwater capture and reuse, particularly when done using nature-based solutions, offers perhaps the most multi-benefit approach to enhance local water supplies. The addition of new parks and the greening of schools, streets, homes, and other facilities available to capture, treat, and infiltrate or reuse stormwater can aid communities and community health in a myriad of ways. These benefits can range from enhanced recreational opportunities and air quality improvements to carbon sequestration, increased wildlife habitat, and cooling neighborhoods impacted by urban heat island, which will particularly benefit frontline communities. Such an approach is aligned with LADWP's efforts to promote greater equity and community health and safety, as evidenced by its recent adoption of equity metrics.

The City of Los Angeles and its residents have long recognized these opportunities as well, as demonstrated by the 2004 passage of Proposition O and the City's leadership in helping craft and pass Measure W, the countywide Safe Clean Water Program, in 2018. Through this leadership, it is estimated that the City captured and reused 84,200 AFY of stormwater in 2020 (UWMP, p. 6-30). While not detailing all of the City's planned stormwater projects in its 2020 UWMP, LADWP does account for an additional 70,800 AFY in stormwater capture slightly surpassing L.A.'s Green New Deal goal of 150,000 AFY, which would result in a total of 155,000 AFY by 2035.

However, in light of the myriad of community and environmental benefits of stormwater capture (and the fact that urban and stormwater runoff is the region's leading source of water pollution), LAW recommends that LADWP consider whether additional stormwater capture beyond the planned 70,800 AFY is possible. According to the City's 2018 One Water L.A.2040 Plan, 425,700 AFY of urban and stormwater flow is discharged into our rivers, streams, and channels, with 395,100 AFY ultimately discharged in the ocean[7]. Moreover, the vast majority of this total comes from the Upper L.A. River watershed, an area that could particularly benefit from stormwater capture since much of the area has excellent soil for infiltration and because such upstream capture could reduce flood pressure on downstream communities (and perhaps even allow for greater L.A. River naturalization eventually).

In particular, the passage of Measure W in 2018 provides the largest source of ongoing funding for stormwater projects (~$280M/year) that the region has ever seen. Yet, SCWP projects are not sufficiently identified or quantified in the UWMP; for example, the MacArthur Lake Rehabilitation Project submitted by L.A. Sanitation and Environment that is proposed to provide 122.5 AFY of captured stormwater to offset potable uses is not adequately included[8]. With the passage of Measure W, aggressive stormwater capture is more feasible than ever, and projects funded through Measure W are already underway. As such, LAW recommends that the UWMP be updated to quantify greater

[6] "Hyperion 2035 Technical Advisory Group Meeting #1", L.A. Sanitation and Environment Zoom Meeting (2021)
[7] One Water L.A.2040 Plan Volume 3: Stormwater & Urban Runoff Facilities Plan (2018)
[8] SCWP Feasibility Feasibility Study Report for the MacArthur Lake Rehabilitation Project

stormwater capture and reuse potential from the Safe Clean Water Program, including identifying a greater number of City and non-City projects being funded by the SCWP, to fully depict future stormwater supply in L.A. At a minimum, LADWP should use its 'aggressive' stormwater capture scenario of 178,000 AFY from the UWMP as a baseline (UWMP, p. 6-30).

Groundwater

Groundwater remediation is another critical component of a sustainable local water supply for Los Angeles, as groundwater serves as the 'foundation' for many of our other supplies, including stormwater that is infiltrated and wastewater that is recharged into our aquifers. While LAW is encouraged by LADWP's efforts to remediate the SFVGB, the UWMP is largely unclear about whether the entirety of the remediation efforts for the basin are incorporated into future supply projections. Total yields are not succinctly summarized for the future remediation facilities listed for the basin, and the projected groundwater production table in Exhibit 5J does not include a detailed view for the breakdown of groundwater production for each basin (UWMP, p. 5-12 to 5-14, 5-28). As such, it is unclear whether the projected numbers fully include remediation efforts. LAW recommends including a detailed table showing how much of the future groundwater supply will be from remediating the SFVGB.

Implications

When asked why some of these planned sources were not included in the 2020 UWMP at public forums, the response from LADWP staff has been that these projects are not sufficiently defined and/or that the horizon of the UWMP is only five years. Yet, the UWMP incorporates many not-yet-built water supply projects, and also looks far beyond a five-year horizon (to 2035 and beyond). In fact, such an approach is essential as water planning by its nature must necessarily include long-term projects and planning. As such, it is critical to include long-term assessments so that LADWP is able to determine what actions it must take now. Moreover, the projects articulated above, including estimated water yields, have been included in numerous City plans, such as L.A.'s Green new Deal, and are already underway in review and planning.

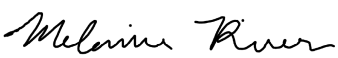
By underestimating these potential local, low-carbon and relatively cost-effective water sources, the UWMP projects meeting unjustified extra future demand largely through the use of imported water. Relying on imported water has negative consequences, including higher energy use that ultimately contributes to climate change and more water supply reliability risk, as importing water from afar leaves the supply more susceptible to interruptions from catastrophic events in more locations. While the Mayor's Green New Deal states a goal of utilizing 70% local water supply by 2035[2], the UWMP projects the average use of only 43% locally sourced water in 2045, with the remaining 57% percent from imported water (UWMP, p. ES-19). The UWMP's failure to fully quantify the large-scale local water enhancement programs identified above moves Los Angeles further from its 70% local supply goal and sets the City on a path toward more reliance on imported water. Planning for alternative water supply is essential in creating a climate-resilient Los Angeles, and the UWMP fails to do this.

Conclusion

In closing, we reiterate our call to adopt the recommendations outlined throughout this letter to create an UWMP that aligns more closely with the Mayor's vision for Los Angeles and in some instances spurs advancement beyond what is articulated in L.A.'s Green Dew Deal in order to drive the creation of a truly sustainable, resilient, and equitable future for all Angelenos.

Should you have any questions, please feel free to contact me at melanie@lawaterkeeper.org.

Sincerely,



Melanie Rivera
Staff Scientist, Los Angeles Waterkeeper

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April 13, 2021

Los Angeles Board of Water and Power Commissioners
Los Angeles Department of Water and Power
111 North Hope Street, Room 1555-H
Los Angeles, CA 90012
(submitted by email)

Re: 2020 draft Urban Water Management Plan Comments

Dear Commissioners:

The Lone Pine Paiute-Shoshone Reservation appreciates the opportunity to comment on the Los Angeles Department of Water and Power ("LADWP") 2020 draft Urban Water Management Plan ("draft Plan").

The Lone Pine Paiute-Shoshone Reservation understands that Tribal consultation is not required by law when water agencies prepare and update Urban Water Management Plans, but efficient, effective, and transparent communication with the Tribes located in Payahuunadü (Owens Valley/Eastern Sierra) regarding plans that will set the course for future LADWP policy decisions is the basis of the LADWP Tribal Engagement Policy recently readopted by your Commission. Therefore, the Tribes should have been consulted.

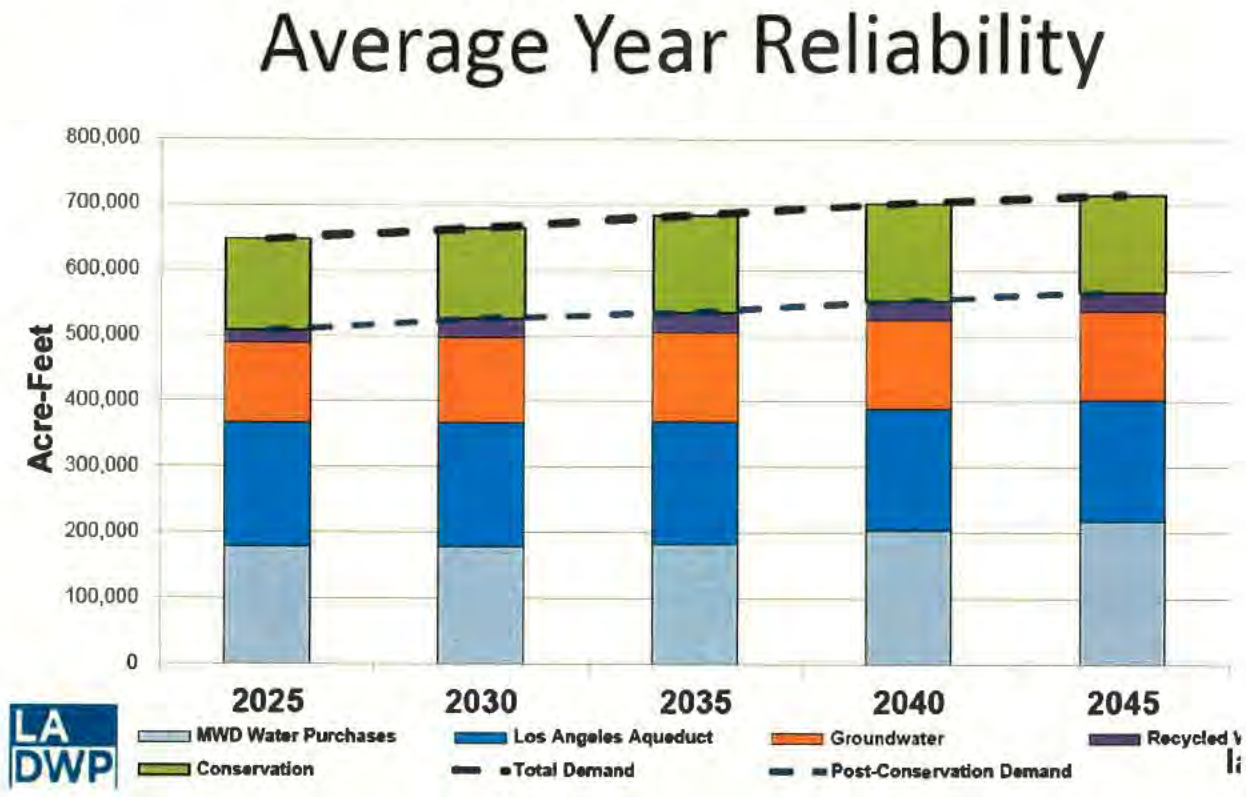
Further, LADWP did not publicize the draft Plan widely in our area or write directly to the Owens Valley Indian Water Commission as instructed to do so by some of the Tribes in Eastern Sierra including the Lone Pine Paiute-Shoshone Reservation. In the future, and for all LADWP water-planning efforts, the Lone Pine Paiute-Shoshone Reservation respectfully requests notification and consultation via the Owens Valley Indian Water Commission.

The Lone Pine Paiute-Shoshone Reservation acknowledges the impressive reductions in per capita water usage by LADWP customers. The draft Plan contains information showing per capita water usage is likely to continue to decline at a significant rate, for example on page 1-10. Furthermore, the draft Plan indicates that, when LADWP requests or mandates water conservation, customers comply and exceed LADWP targets. However, the draft Plan proceeds to forecast for the future based on only a very modest decline in per capita usage in the next 25 years.

The Lone Pine Paiute-Shoshone Reservation applauds Los Angeles Mayor Eric Garcetti's goal of achieving a sustainable city; his vision is leading the City of Los Angeles in the right direction with regard to people and resources. As you may know, Indigenous peoples managed water and other resources sustainably for thousands of years prior to the arrival of "western culture." The Mayor's 2015 pLAn was welcomed by many in the City and beyond, and since its release, applied research,

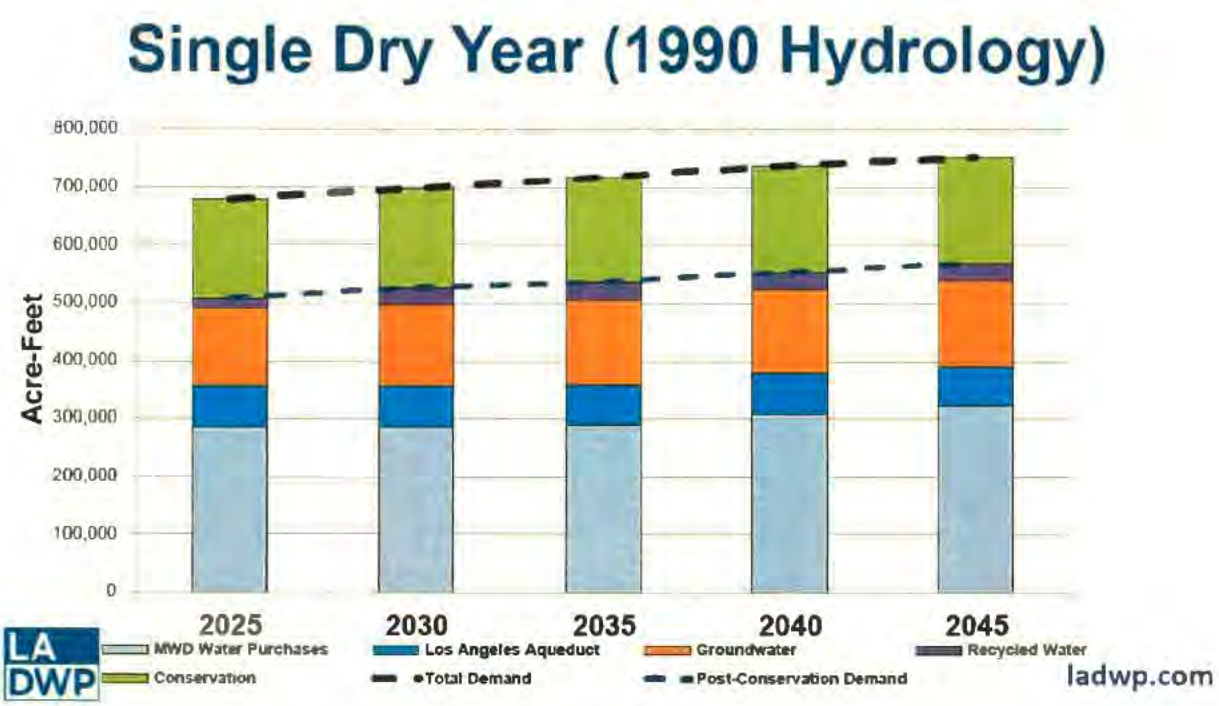
innovation, and actual construction have moved forward quickly showing that its goals are achievable.

The Lone Pine Paiute-Shoshone Reservation suggests LADWP begin moving toward the Mayor's sustainability goals for water soon and at a faster rate than presented in the draft Plan. The Mayor's goals are deferred in the draft Plan and tangentially mentioned with references to and discussions of Operation NEXT. A review of the data presented by LADWP staff at the public meetings shows LADWP could greatly reduce water exports from the Eastern Sierra, even without implementing Operation NEXT or the Mayor's pLAn.



The above figure is from LADWP, and it shows where water is projected to come from in the years 2025 through 2045. Interpreting the bars shows LADWP importing about 70% of its water supply during this 25-year period, with about half of the imported water coming from the Eastern Sierra (from the Los Angeles Aqueduct, "LAA") and about half from the Metropolitan Water District ("MWD"). The figure suggests 185,000-190,000 acre-feet per year supplied by the LAA and 180,000-210,000 acre-feet per year from MWD.

As part of the draft Plan, LADWP was required to present how it anticipates water to be supplied given various drought scenarios. Below is the figure LADWP staff presented for a "single dry year."



According to the figure above, in a dry year, LADWP would need to greatly reduce its reliance on LAA water, acquiring approximately only 50,000 acre-feet from the Eastern Sierra. The difference would be supplied by MWD in amounts equaling about 300,000 acre-feet.

The above figures in combination with other information in the draft Plan and from MWD show LADWP could supply all or nearly all its water needs from a combination of local and MWD water. The LAA is not critical to LADWP's supply. For this reason, the Lone Pine Paiute-Shoshone Reservation asks that LADWP greatly reduce water exports from Payahuunadü (Eastern Sierra) and take its allotted water from MWD. It is clear that LADWP could acquire 300,000 acre-feet or more from MWD in any given year through 2045.

The reason given for LADWP avoiding MWD water is the fact that your agency must purchase it, and the price fluctuates. LADWP has stated that the costs are passed along to customers, who of course object to rate increases.

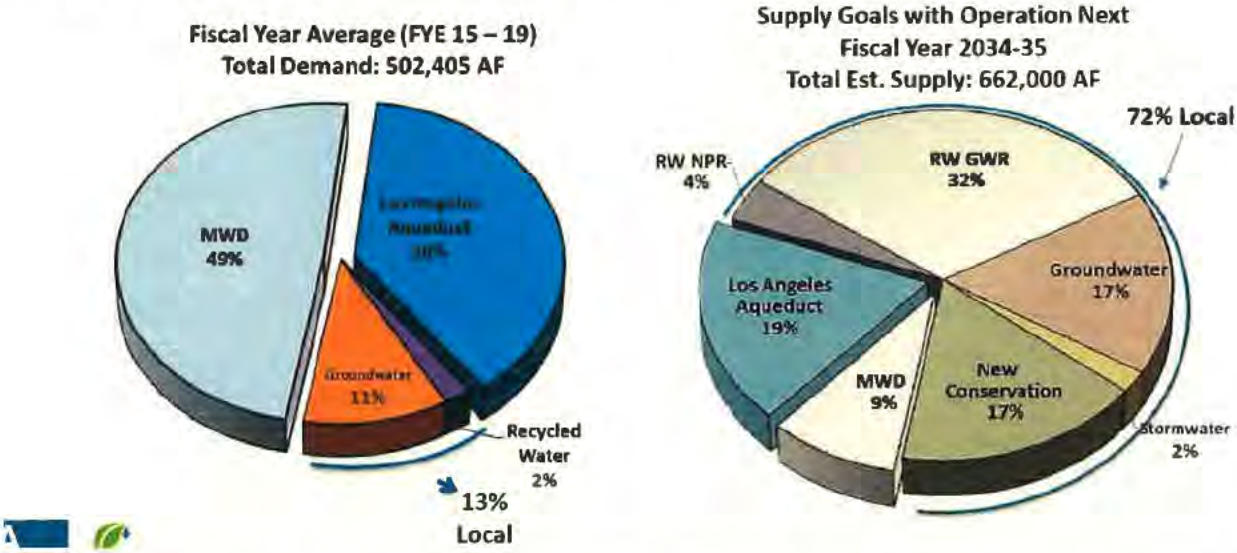
The Lone Pine Paiute-Shoshone Reservation sees this situation differently: paying a little extra for precious water is a small ask. Owens Valley and other parts of the Eastern Sierra have paid a huge price because of water exports by LADWP from our naturally closed hydrologic basin. LADWP diverted the entire flow of Owens River in 1913, which resulted in the desiccation of Owens Lake, a lake that would have water today and a functioning lacustrine ecosystem were it not for LADWP. Not satisfied with its access to surface water runoff, LADWP began pumping water, and pumps went on in earnest in 1970 when LADWP's second barrel of the LAA was put into service. LADWP extended its LAA into the Mono Basin, another closed, intermountain basin, separate from Owens, and began exporting water from the fragile Mono Lake ecosystem. LADWP was able to lay claim to and take advantage of the Eastern Sierra's water during a time when California water and environmental laws were insufficient to protect remote lakes and valleys or to give local people a voice. LADWP's ignoble actions took advantage of the region's Indigenous peoples as well as of others. As a result, Los Angeles has flourished at the expense of communities in Eastern Sierra. The

Tribes and others in the valley have paid the price in terms of ecological devastation and strangled economic opportunities brought on by LA's colonization of the valley. For these and other reasons, we think it is time for the "cost" burden to be shifted to water users and away from the victims of LADWP's environmental offences.

Somewhat in parallel with the Mayor's vision of a sustainable city, LADWP in February 2019 initiated "Operation NEXT" in coordination with other agencies. Chapter 8 of the draft Plan discusses how, once the infrastructure is in place, LADWP will be able to capture and use large quantities of storm water and recycled wastewater. A target contained in the Mayor's 2019 Green New Deal is to source at least 70% of LA's water locally.

Based on information obtained from the various documents and presentations regarding Operation NEXT, the Lone Pine Paiute-Shoshone Reservation notes that by the year 2035 LADWP should be able to supply 72% of its water to from "local" sources. Below are figures excerpted from LADWP presentations, then interpreted by Tribal staff.

Program Background: Water Supply Reliability



The left pie diagram above shows current (2015-2019) average annual customer water demand as 502,405 acre-feet. The diagram on the right presents supply goals in 2035, when Operation NEXT is functioning. Converting supply percentages to acre-feet gives values shown in the table below:

SOURCE	Current (2015-19)		In 15 years (2035)	
	%	Acre-feet	%	Acre-feet
Local	13%	65,312	72%	476,640
MWD	49%	246,179	9%	59,580
LA Aqueduct	38%	190,914	19%	125,780

Operation NEXT in 2035 projects 476,640 acre-feet to come from local source, while imported water totals 185,360 acre-feet. Clearly, this entire imported amount can be acquired through purchases from MWD, because, as shown for the draft Plan above, as much as 300,000 acre-feet could be purchased from MWD in a given year. The Lone Pine Paiute-Shoshone Reservation requests LADWP curtail

imports via the LAA and shift to using water supplied by MWD to make up any water demands that cannot be supplied locally. The Lone Pine Paiute-Shoshone Reservation understands that, like the City of Los Angeles, MWD is also focusing on developing sustainable water sources and greater storage capacity. Also, its member agencies likewise are implementing water recycling and other water conservation measures. These should help lessen impacts on places of origin, such as the California Delta.

The numbers presented by LADWP in the draft Plan and other documents show:

- LADWP water customers are willing and able to conserve water, and the trend is toward even greater conservation.
- Vast quantities of Owens Valley water have needlessly ended up in the Pacific Ocean, leaving desiccated lakes, dead springs, habitat loss, and other forms of environmental damage to be dealt with by the Tribe and others in the Eastern Sierra.
- Climate change will affect the Eastern Sierra, so our communities need the water which would naturally occur here.
- Visionary leadership in LA has shifted away from externalizing costs of resource acquisition to far-off disadvantaged communities and shifted to innovation and a goal of sustainability, which, if applied more broadly, can be of immense benefit to other areas of the west.

The draft Plan and Operation NEXT provide the Tribes with hope that LADWP's water exports from the Eastern Sierra may soon be reduced or eliminated. As LADWP reduces its reliance on LAA water, the Tribe would like to see surface water used to meet in-valley needs and cessation of groundwater pumping. Note that this will save energy costs in the Eastern Sierra so that more (hydroelectric) energy flows to Los Angeles.

The draft Plan needs to meaningfully implement the City's Green New Deal Sustainability pLAn and deliver on its promise of making the City truly water secure and climate resilient. To that end we submit the following recommendations:

1. Provide a more realistic future water demand scenario that retains and builds upon LA's existing water efficiency achievements and helps to achieve the Green New Deal Sustainability pLAn goal of obtaining 70% of the City's water supply from local sources.

2. Remove LADWP's per capita water use efficiency "cap" of 100 gallons, establish a new, bold conservation target to achieve water use efficiency of 75-80 gallons by 2045 and address other water use factors that inappropriately inflate forecasted water demands.

3. Count local water supplies created by Operation Next in the draft Plan supply scenario, recognizing these are estimates. These new local recycled water supplies are an essential part of LA's commitment to obtain 70% of its water supplies from local sources.

4. More fully quantity local water supplies to be created by the Safe Clean Water Program, including all planned and anticipated stormwater capture/reuse projects, regardless of whether such projects are being led by LADWP or other City Departments (e.g., LASAN), outside agencies (e.g., LAUSD) or other third-party groups, including NGOs.

5. Build on and expand LA's diversity programs to address equity and affordability concerns for lower income communities. According to recent studies some of the best opportunities for water efficiency continue to be in lower income neighborhoods where the housing stock and

water pipes are older and uptake of rebates has not been as high as in other areas of the city. Programs should be developed that invest in making water more affordable for low-income residents, reducing leaks, creating jobs and job training programs, and ensuring that LADWP's rebate programs are accessible by and fully benefit LA' s low income communities. This is a particularly pressing need given the economic impacts of COVID on these communities.

6. Invest in desalination technologies to increase water supply and reliability.

7. Commit to the development of a sustainable Water Resource Management Plan for the Los Angeles Aqueduct in partnership with the Tribes. There are opportunities for shared stewardship and efficiency improvements in both watersheds that are more cost-effective than continued litigation and will achieve a more climate-resilient and sustainable future for both the Eastern Sierra and Los Angeles.

As California confronts another serious drought, we cannot be complacent about the climate-related water challenges facing our communities. LA's Green New Deal Sustainability pLAn needs to be fully implemented in every aspect of City planning.

LADWP's 2020 Urban Water Management Plan needs to reflect the City's commitment to building a climate-resilient water future. This is the time for LADWP and this draft Plan to be as bold -- if not even more audacious -- as Mayor Garcetti's Green New Deals. And we look forward to working collaboratively with you to make this water future a reality.

Finally, the Lone Pine Paiute-Shoshone Reservation recommends LADWP or other City officials reach out to and work with the Tribes and the Owens Valley Indian Water Commission so that we have an opportunity to meaningfully participate in planning future water management. Water is more than "a commodity" to people in Tribal communities; it is time the people of Los Angeles acknowledge this fact and allow us to begin working together on a sustainable future.

Sincerely,

Richard Button
Tribal Chairman

cc: Benjamin Wong, uwmp@ladwp.com

Pertaining to Chapter 4 on the LA Aqueduct and the related Eastern Sierra water supply and use by LADWP:

1. Restoration and preservation of the Eastern Sierra environment on a sustainable basis should be stated as the top priority in managing water resources.
2. Number two consideration, but with commensurate importance, should be stated as the fair and just treatment of preexisting land and water users. Especially in this time of increased awareness of our society's unjust and oppressive mistreatment of various races and classes of people, LADWP as a corporate instrument of the people of LA should be proactive in acknowledging, addressing and compensating for its past and current role in perpetuating the taking advantage of less powerful individuals and communities in CA. Obviously this includes the Native American peoples of the Eastern Sierra. To that end, the UWMP should include a pledge to work to restore sufficient water supplies to the Native American communities and the land they currently occupy, as well as allocations to restore at least part of the greater valley which they cared for prior to LA's takeover of much of the land. This work should not be solely in response to litigation and governmental regulatory action, but part of LADWPs greater civic responsibility on behalf of the citizens of LA and in support of our brothers and sisters that we are impacting in other parts of the state and nation.
3. On the supply side, a greater emphasis should be placed on cleaning up the SF Valley aquifer, stormwater capture, recycling including DPR, along with conservation. The investments in the first three should be increased and timelines accelerated with the commensurate supply amount increased in the models. Conservation should be drastically stepped up for the multi-year drought scenarios and further education and incentive programs initiated now, rather than waiting until we are in the middle of a 5 year scenario. This should include outreach and installation assistance with residential rain capture and landscaping use. With respect to DPR, LADWP should be accelerating the buildout of the infrastructure to support this, as well as working with the state legislature to develop the appropriate regulatory framework to make it practical and widespread.
4. Given the adverse environmental and social impacts of a possible Delta Tunnel project, reliance on MWD supplies should be minimized (after satisfying items 1 and 2 above) and mitigated by the actions in item 3 above.

Respectfully submitted and thankful for your conscientious consideration,
Bob McDuff
Lifetime Sierra Club Member and ELCA SW CA Synod Justice Team Member

Owens Valley Indian Water Commission

46 TuSu Lane • Bishop, CA 93514 • 760-873-3300 • www.oviwc.org

April 12, 2021

Los Angeles Board of Water and Power Commissioners
Los Angeles Department of Water and Power
111 North Hope Street, Room 1555-H
Los Angeles, CA 90012
(submitted by email)

Re: 2020 draft Urban Water Management Plan Comments

Dear Commissioners:

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The OVIWC understands that Tribal consultation is not required by law when water agencies prepare and update Urban Water Management Plans, but efficient, effective, and transparent communication with the Tribes located in Payahuunadü (Owens Valley/Eastern Sierra) regarding plans that will set the course for future LADWP policy decisions is the basis of the LADWP Tribal Engagement Policy recently readopted by your Commission. Therefore, the Tribes should have been consulted.

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The OVIWC applauds Los Angeles Mayor Eric Garcetti's goal of achieving a sustainable city; his vision is leading the City of Los Angeles in the right direction with regard to people and resources. As you may know, Indigenous peoples managed water and other resources sustainably for thousands of years prior to the arrival of "western culture." The Mayor's 2015 pLAn was welcomed by many in the City and beyond, and since its release, applied research, innovation, and actual construction have moved forward quickly showing that its goals are achievable.

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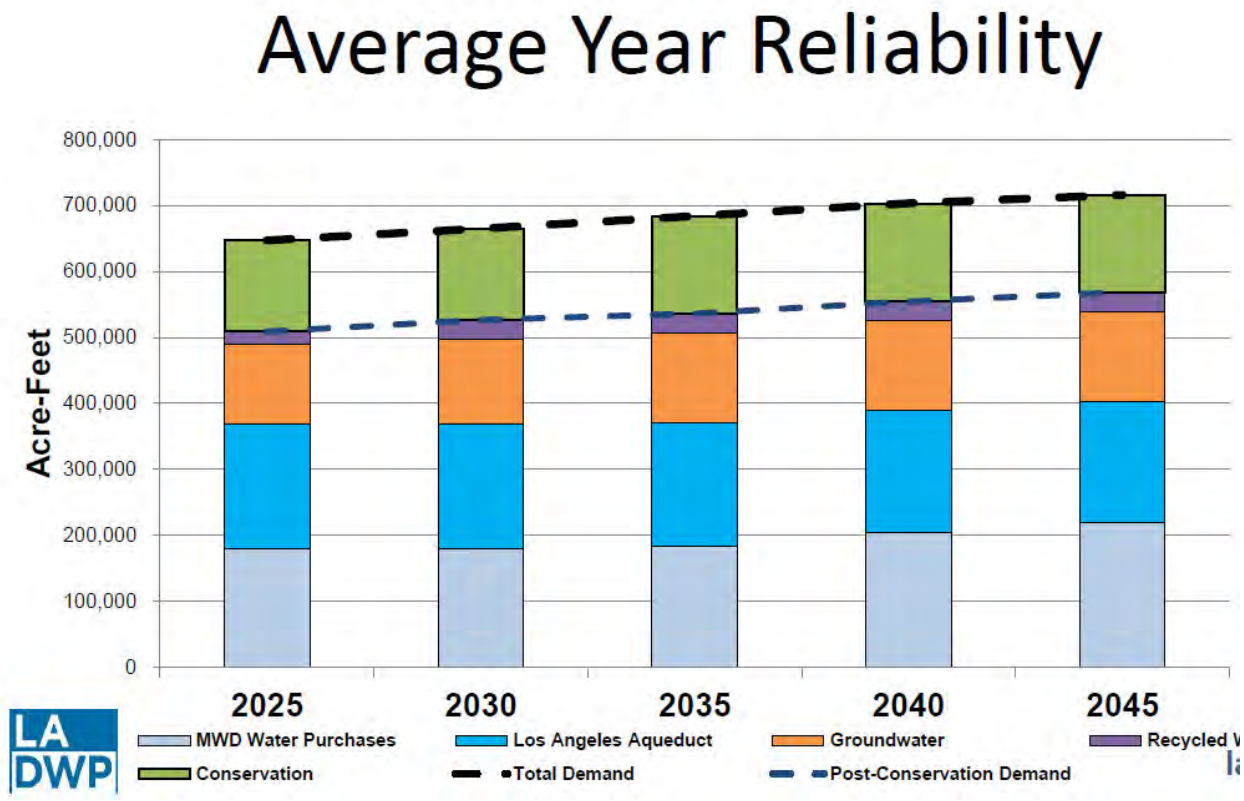

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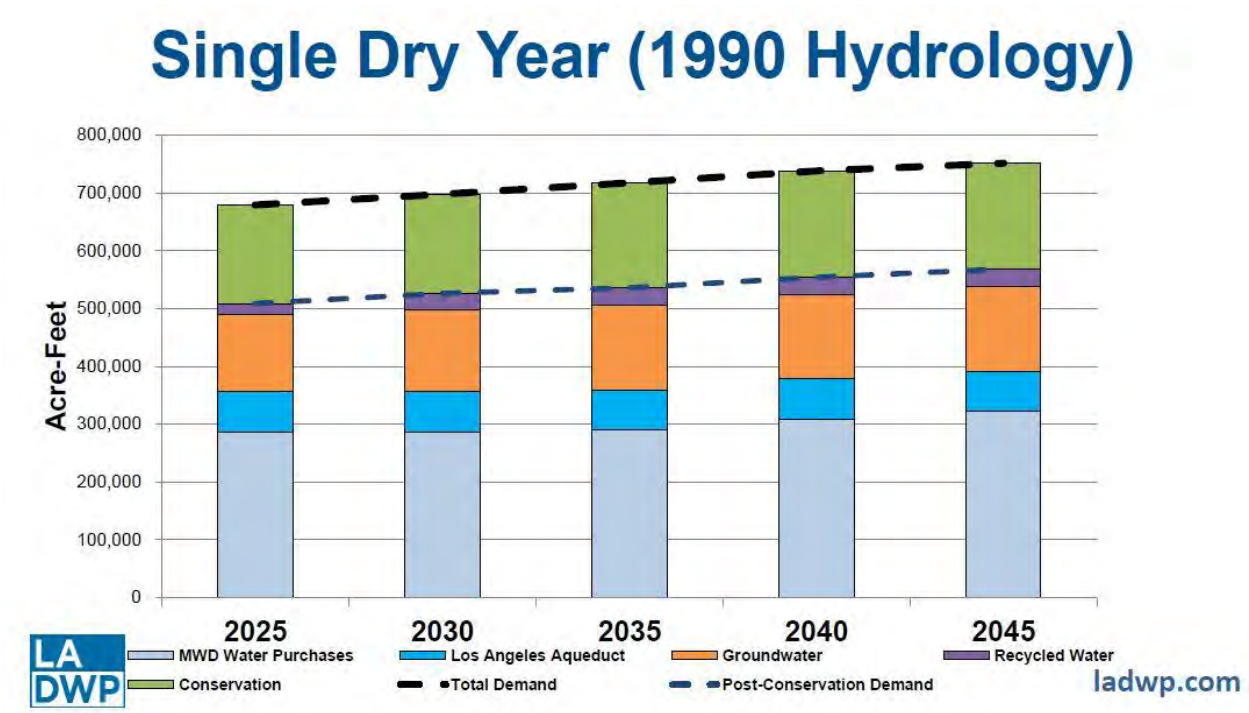

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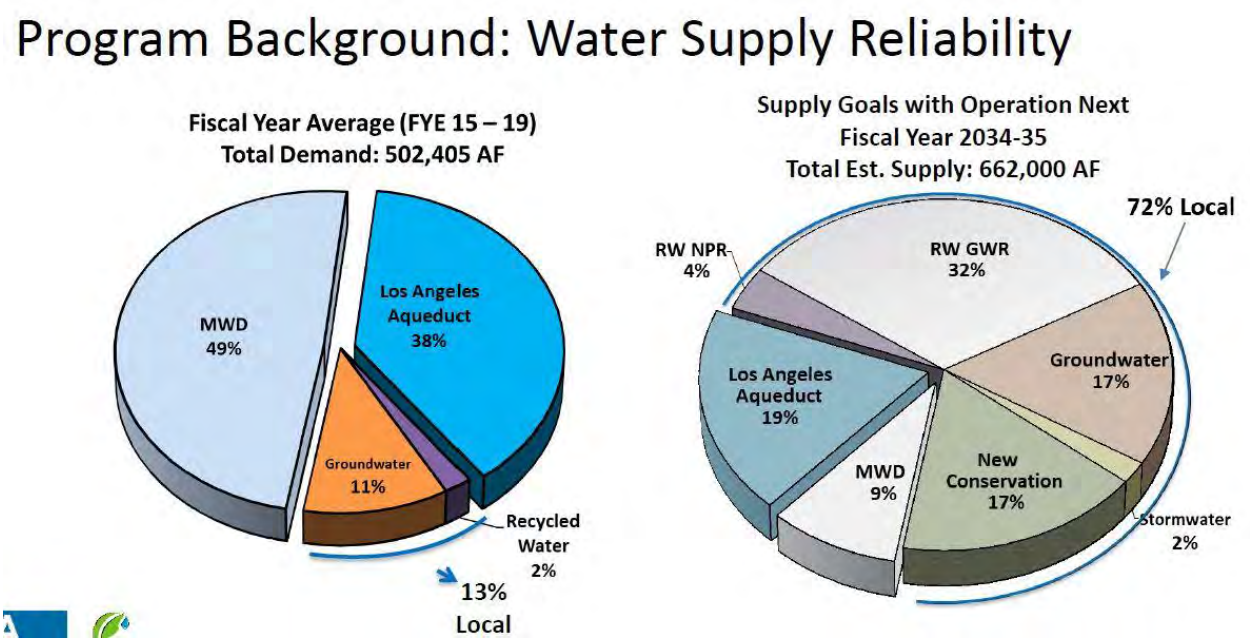
The reason given for LADWP avoiding MWD water is the fact that your agency must purchase it, and the price fluctuates. LADWP has stated that the costs are passed along to customers, who of course object to rate increases.

The OVIWC sees this situation differently: paying a little extra for precious water is a small ask. Owens Valley and other parts of the Eastern Sierra have paid a huge price because of water exports by LADWP from our naturally closed hydrologic basin. LADWP diverted the entire flow of Owens River in 1913, which resulted in the desiccation of Owens Lake, a lake that would have water today and a functioning lacustrine ecosystem were it not for LADWP. Not satisfied with its access to surface water runoff, LADWP began pumping water, and pumps went on in earnest in 1970 when LADWP's second barrel of the LAA was put into service. LADWP extended its LAA into the Mono Basin, another closed, intermountain basin, separate from Owens, and began exporting water from the fragile Mono Lake ecosystem. LADWP was able to lay claim to and take advantage of the Eastern Sierra's water during a time when California water and environmental laws were insufficient to protect remote lakes and valleys or to give local people a voice. LADWP's ignoble actions took advantage of the region's Indigenous peoples as well as of others. As a result, Los Angeles has flourished at the expense of communities in Eastern Sierra. The Tribes and others in the valley have paid the price in terms of ecological devastation and strangled economic opportunities brought on by

LA's colonization of the valley. For these and other reasons, we think it is time for the "cost" burden to be shifted to water users and away from the victims of LADWP's environmental offences.

Somewhat in parallel with the Mayor's vision of a sustainable city, LADWP in February 2019 initiated "Operation NEXT" in coordination with other agencies. Chapter 8 of the draft Plan discusses how, once the infrastructure is in place, LADWP will be able to capture and use large quantities of storm water and recycled wastewater. A target contained in the Mayor's 2019 Green New Deal is to source at least 70% of LA's water locally.

Based on information obtained from the various documents and presentations regarding Operation NEXT, the OVIWC notes that by the year 2035 LADWP should be able to supply 72% of its water to from "local" sources. Below are figures excerpted from LADWP presentations, then interpreted by Tribal staff.



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using water supplied by MWD to make up any water demands that cannot be supplied locally. The OVIWC understands that, like the City of Los Angeles, MWD is also focusing on developing sustainable water sources and greater storage capacity. Also, its member agencies likewise are implementing water recycling and other water conservation measures. These should help lessen impacts on places of origin, such as the California Delta.

The numbers presented by LADWP in the draft Plan and other documents show:

- LADWP water customers are willing and able to conserve water, and the trend is toward even greater conservation.
- Vast quantities of Owens Valley water have needlessly ended up in the Pacific Ocean, leaving desiccated lakes, dead springs, habitat loss, and other forms of environmental damage to be dealt with by the Tribe and others in the Eastern Sierra.
- Climate change will affect the Eastern Sierra, so our communities need the water which would naturally occur here.
- Visionary leadership in LA has shifted away from externalizing costs of resource acquisition to far-off disadvantaged communities and shifted to innovation and a goal of sustainability, which, if applied more broadly, can be of immense benefit to other areas of the west.

The draft Plan and Operation NEXT provide the Tribes with hope that LADWP's water exports from the Eastern Sierra may soon be reduced or eliminated. As LADWP reduces its reliance on LAA water, the Tribe would like to see surface water used to meet in-valley needs and cessation of groundwater pumping. Note that this will save energy costs in the Eastern Sierra so that more (hydroelectric) energy flows to Los Angeles.

The draft Plan needs to meaningfully implement the City's Green New Deal Sustainability pLAn and deliver on its promise of making the City truly water secure and climate resilient. To that end we submit the following recommendations:

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Sincerely,

Teri Red Owl

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Executive Director

cc: Benjamin Wong, uwmp@ladwp.com

BISHOP TRIBAL COUNCIL

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111 North Hope Street, Room 1555-H
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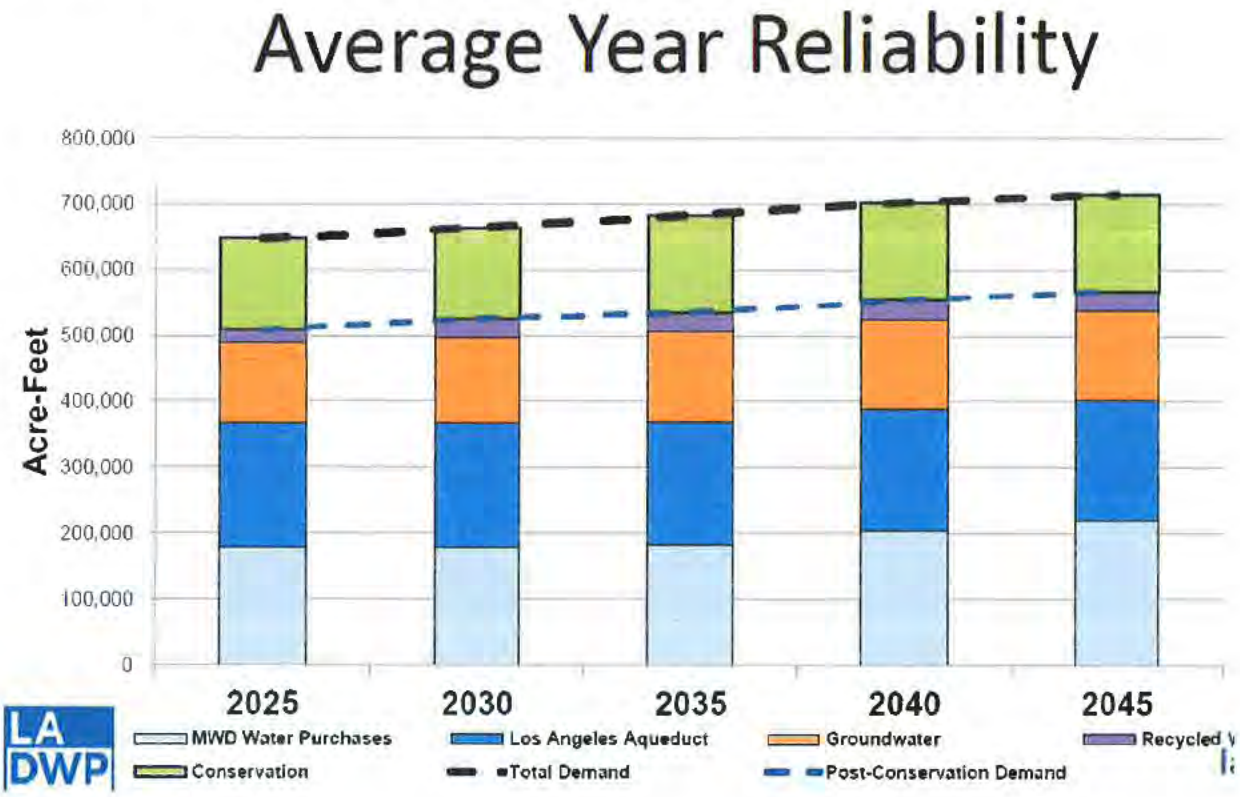

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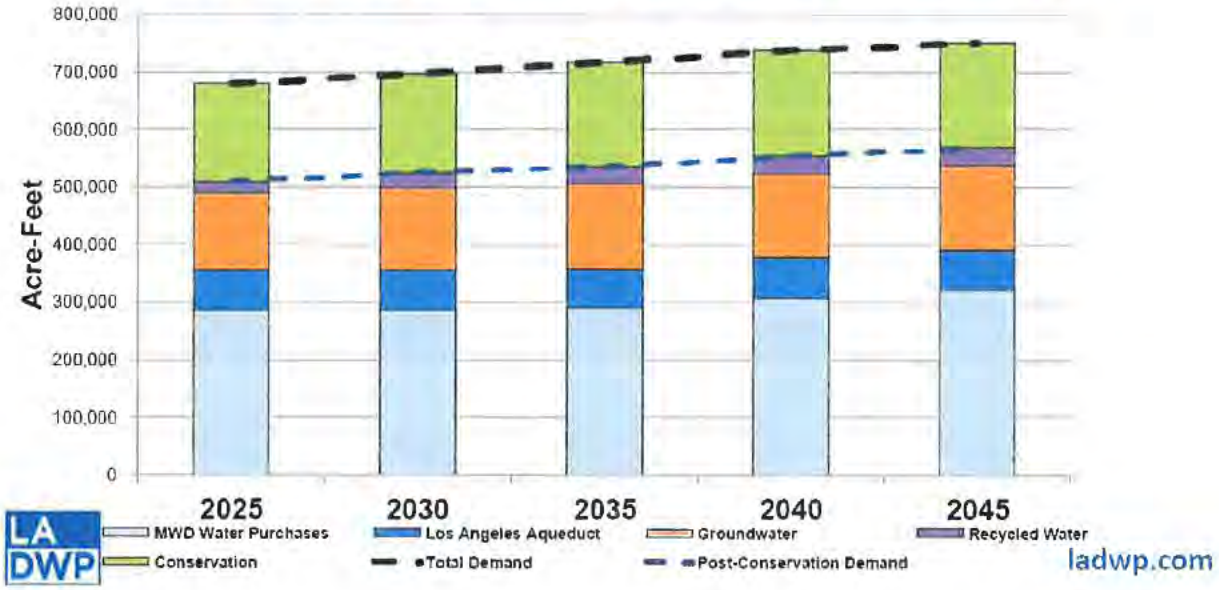

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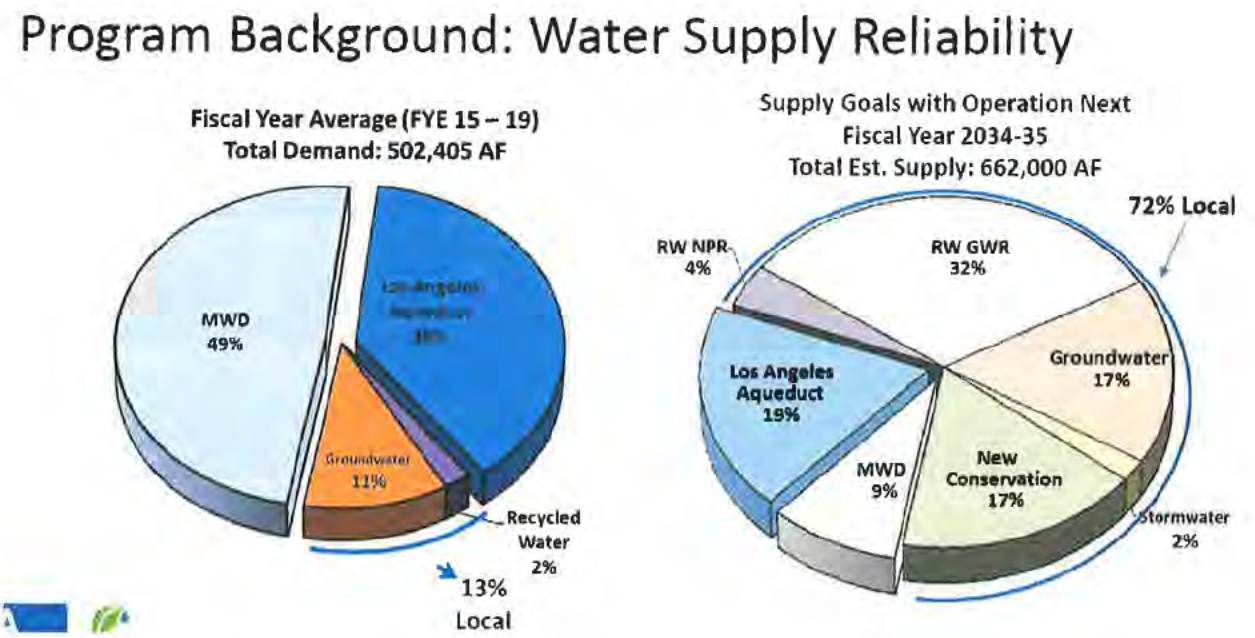

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Sincerely,

Tilford P. Denver
Tribal Chairman

cc: Benjamin Wong, uwmp@ladwp.com

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DATE: April 13, 2021
TO: UWMP@ladwp.com, OperationNEXT@ladwp.com
Attn: Benjamin Wong benjamin.wong@ladwp.com
Attn: Christopher Lopez christopher.lopez@ladwp.com
Environmental Planning and Assessment
111 No. Hope Street, Room 308 and Room 1044, Los Angeles CA 90012
CC: LA City Board of Public Works

FROM: Charming Evelyn, Sierra Club, Angeles Chapter, Conservation Committee, Co-Chair
Co-Chair Water Committee, Sierra Club California 213-385-0903

Dr. Tom Williams, Sierra Club, Angeles Chapter, Water Committee, UWMP Review
323-528-9682 4117 Barrett Rd. LA, Ca 90032-1712

SUBJECT: 2020/2021 Draft UWMP and Scoping & Draft PEIR
RE: **Current Comments Submittal Date to 041321, more to come**

We are reviewing the 250+page Urban Water Master Plan plus associated documents (>500 pages) but find the document to be totally inadequate, incomplete, poorly organized, and incomprehensible to the general public. The absence of appropriate maps, flow charts and system/flow diagrams in the first 100 pages renders the document incomplete and inadequate for public review. Similarly, the absences of CEQA considerations and references to some 2022 documents is totally inappropriate and exposes the process to further considerations and judicial review.

At this time I request that the LADWP withdraw the current NOP and revise and recirculate an upgraded NOP for the Programmatic EIR and have every document referenced or cited available through web access, including:

Draft outline for PEIR for proposed project/program, and any scoping documents,
Lead Agency Agreement (MOU/MOA) for Dept. Public Works (BoE/BoS-E)
and Dept. Water & Power regarding the PEIR,
Draft PEIR table of contents, table of tables, and table of figures/exhibits,
Draft Text for general sections with references to appropriate documents and appendices,
Current/Draft Calendar for Documents and Program for May 01, 2021 to anticipated Month of Construction, say 06/2023,

Provide Programmatic Goals and Objectives suitable for developing Public-sourced Alternative Programs or elements within the programmatic "project" suitable for mitigation and compensatory effects

Provide current Program elements and dependencies amongst the elements

As several administrative actions may be required between DWP, DPW, DB&S, DCP and others within the City of LA and perhaps LACounty, PROVIDE current and anticipated joint-powers, agreements, and understandings regarding the UWMP.

As a PEIR, PROVIDE the process for initiation and project-level planning and implementation, as currently known and expected and a formal process within the MMRPlan for future project-specific CEQA review

Ben Wong 04/12/21:
two separate LADWP initiatives….clarify that the UWMP development process and the public scoping process for Operation NEXT are **two independent processes**
…have their **own individual CEQA and statutory requirements**.
…submit your comments, please direct your **comments to a specific process** to help us better understand …the context of comments provided.
…unclear which requests are directed towards which initiative…:

As the UWMP references the CEQA process and forms the "Project/Program Description" for any CEQA review and preparation of the "Programmatic EIR" comments regarding the UWMP must be considered and responded to in any further CEQA consideration at the Program and Project levels.

As the UWMP is the "Program Description" for the overall Program and the NOW elements form a part of the Program, the Public must be provided with appropriate, adequate, and complete documents for consideration, review, and comments/mitigation/

· The **UWMP does not include CEQA considerations** because CEQA does not apply to the preparation and adoption of UWMPs (California Water Code Section 10652). Instead, CEQA requirements will be considered at the time of implementation of specific projects and programs described in the UWMP as necessary.

Programmatic EIR referenced three time in UWMP (8-5/5 and 8-7/1). Complex projects with many "projects" are provided with Programmatic EIRs which can be further augmented and supplemented/revised as SEIRs for specific large elements within the Programme/Program.

· A table of contents, list of tables and figures, and list of references will be included in the **final UWMP**.

UWMP totally inadequate for public review if no TOC, TOF/TOT, and References. Final version must be provided with an adequate period/opportunity for public review, comments, and revisions (therefore no final).

"· LADWP recognizes that the UWMP is a comprehensive document which can take some time to review and has already extended the public comment and review period by three weeks from the original March 22,· 2021 deadline. The UWMP has a statutory submission deadline of July 1, 2021 and extending the comment period further would jeopardize our ability to meet this requirement. Thus, the UWMP comment period cannot be extended beyond the April 13, 2021 deadline.
For questions specific to the Operation NEXT Water Supply Program, please visit www.ladwp.com/operationNEXT or www.ladwp.com/operationNEXT/ceqa. Additional Program information is available on these websites, in addition to instructions on how to submit comments. Please note that the Notice of Preparation for Operation NEXT was released on March 15th with a 60-day Public Scoping Period, through May 14th. The Public Scoping period was recently extended from the original 30-days and will not be extended any further."

Include all relevant and appropriate comments in both the UWMP/Program Description for a PEIR and the Project-EIR(s) as public comments on the completeness and adequacy of both documents in addition to additional comments which will be submitted for the subsequent deadline, 05/14/21.

Some specific examples, many more are being processed and will be submitted periodically:

8-5/5 8.5 Environmental Considerations **Programmatic environmental studies** to comply with CEQA are currently being conducted and are required prior to the start of construction.

Provide listing and current scopes for all environmental studies currently underway or to be contracted within 2021.

Provide alternative sanitary sewage treatment and IPR/DPR treatments for discharges within LACity which could divert flows from Hyperion and allow for higher elevation reuse for DPR or IDR, e.g., within San Fernando Valley, between SR-134 and I-10/I-110, I-110 - I-405 and I-405 – SR-1. Project Reject effluent to be discharged into downslope pipelines going to Hyperion similar to LACo systems discharging to Terminal Island.

Provide a City draft ordinance for inclusion in current State efforts for Direct Potable Reuse (DPR) and identification of involved regulatory agencies, and alternative strategies for engagement with regulators and Best Practices.

Provide a City draft ordinance to facilitate permitting of the various aspects of the Program and projects within the City of Los Angeles.

Provide a single listing of Constituents/Contaminants of Emerging Concern (CEC) and develop a single standard definition and current annually updated listing of CECs along with current and anticipated treatment for their removal and discharge.

5-9/2 Operation NEXT:…includes delivering **advanced treated recycled water** from the Hyperion

Water Reclamation Plant…to **local** groundwater basins for **indirect potable reuse**. …NEXT,…is a system of the Program that will convey **advanced treated recycled water to the San Fernando Valley**. This high-quality water will: a) replenish the San Fernando Groundwater (SFB) through infiltration at the various spreading grounds, and b) supplement purchased imported supplies at the Los Angeles Aqueduct Filtration Plant (LAAFP) **through potable reuse by raw water augmentation**….of available groundwater storage capacity. This component will allow for future increased extractions and help to make the SFB a sustainable local water supply.

Provide supporting documents as to "advanced treated recycled water" CECs consideration, along with quality/risks for reject waters discharged to Santa Monica Bay.

Provide risk assessment for maintaining IDR water mixing with urban groundwater and the extent of such being reused within the City of LA.

Provide flowchart/process-flow diagrams for "potable <u>reuse</u> by raw water augmentation" and clarify as to what this means and relationships as to LAAFP waters within the SFB.

5-9/3 Groundwater Quality …elevated levels of the contaminants…improper chemical handling and disposal practices of industries in the San Fernando Valley….Most recently, 1,4-dioxane has become an **emerging chemical of concern** with an increasing trend of concentration.

Provide current known/recorded levels of any CECs found through the LACity areas.

5-9/4 ….Various **contaminants** have been recorded in 47 wells at concentrations exceeding the Maximum Contaminant Level (MCL) or Notification Level (NL) established by State and Federal regulatory agencies. Among these **contaminants of concern**…However, LADWP remediates groundwater and blends with other sources to remove or lower contaminants to **concentrations** below the MCL to ensure groundwater delivered to customers complies with **State and Federal safe drinking water standards.**

5-10/2 The Remedial Investigation included: (a) 88 shallow and clustered monitoring wells to monitor **contamination plumes** of…in the SFB installed in 1992;…(c) on-going monitoring for TCE, PCE, nitrates, and **emerging contaminants**.

Provide a listing of all known CECs in LA, current uses if any, and current treatments and discharge requirements for CEC related treatment.

5-10/5 The Remedial Investigation included: ….; (b) the development of a groundwater flow model (**Flow Model**) and the preparation of the **Remedial Investigation report** that was completed for the USEPA in 1992;…emerging contaminants.

Provide access to "Flow Model, and supporting reports and how the EPA-RIRpt has been incorporated into the UWMP.

5-26/5 /6 **<u>Managing</u>** Emerging **Contaminants** of Concern

Others use Chemicals rather than Contaminants which pre-judices the review. Not all chemicals are contaminants at some levels while others generally accept "chemicals" (NaCl, CaCO3…etc) may be considered as contaminants at higher levels. Provide specific and clear definition of "contaminants" and "chemicals".

Provide single uses and acronyms for CEC, as Chemical of Emerging Concerns and clearly/scientifically define: contaminants by composition and concentrations.

If needed, define a new category of ECC, Emerging Contaminants of Concern, and provide clear tables and documentation ("Good Science") for such designation and their separation of Existing contaminants.

LADWP addresses **emerging contaminants** on many levels by:

1. Encouraging the development of standardized testing to enable early detection and supporting the regulatory framework by providing early occurrence data,
2. **Advocating good science** and a **balanced approach** to **risk assessment**,
3. Seeking to gain a risk perspective with other **existing contaminants** to manage the emerging contaminants in the absence of regulations,
4. Supporting early interpretation of **emerging contaminants** in collaboration with research and regulatory

agencies, and

5. Supporting the research to develop cost-effective treatment for the removal and management of these **emerging contaminants**.
LADWP is currently engaged with other **agencies and associations** through workgroups and task forces to address **emerging contaminants**. As new research, science, and information becomes available, LADWP will develop monitoring technology and support programs to address **emerging contaminants**.
"Managing" is so abstract as to render this discussion as useless and requiring a totally separate appendices/studies for definition and use. Provide a "REAL" risk assessment without prejudices indicated herein.
Define and provide catalogue of "Good Science" regarding chemical of emerging concern CECs and for Emerging Contaminants of Concern, ECCs.

5-27/2 /3 Another recent group of emerging contaminants are **pharmaceutically active compounds and personal care products** that are emerging in rivers, lakes, and waterways from urbanized areas. **Concerns exist regarding the occurrence and effects** of endocrine disrupters, hormone-shifting compounds, and pharmaceuticals. Technology now allows the detection of **compounds down to the parts per trillion levels**, thus some of these **previously invisible compounds** are now being detected in water supplies. The risk assessment **sector is having difficulty keeping pace with rapid advances in analytical detection technology**. The question of what health risks these contaminants **pose at low levels needs more investigation**.
"Concerns" and "more investigation" are so abstract as to render this discussion as useless and requiring a totally separate appendices/studies for definition and use. Provide a "REAL" assessment of future "CECs" and ECCs without prejudices indicated herein.

LADWP will continue to **proactively address emerging contaminants** through **early monitoring and utilization of a balanced approach to risk management**.
"Proactively address" and "early monitoring" & "early use" of a "balanced approach" are so abstract as to render this discussion as useless and requiring a totally separate appendices/studies for definition and use. Provide a "REAL" assessment of future "CECs" and ECCs with balanced approach as indicated herein. Is this part of the UWMP? Provide details and supporting documents.

5-27/3 LADWP will be incorporating appropriate treatment processes into future groundwater treatment facilities. LADWP has and will continue to solicit input from stakeholders to carefully plan and develop processes for removal and treatment of **emerging contaminants**.
Provide current "appropriate processes" and the ranges of CECs which can be/are being treated. Provide anticipated future treatment of CEC including multi-passes, as in RO units.

9-6/2 9.1.1.3 Water Quality Issues
Water quality issues…cover **high salinity levels, perchlorate, nutrients, uranium, and hexavalent chromium (chromium-6)**. High salinity levels present the most significant issue and the only foreseeable water quality constraint for the Colorado River supply. MWD expects its **source control** programs for the CRA to adequately **address** other water quality issues, including **constituents of emerging concern**…
Provide current source controls and related treatments used currently and anticipated to 2045. Provide CEC review and status for salts, all perchlorate, nutrients, uranium and Cr-6 and any treatment for such within LA County.

9-9/1 9.1.2.3 Water Quality Issues
Water quality issues for SWP supplies include disinfection byproduct precursors such as total organic carbon (TOC), bromide, and low alkalinity; arsenic, and nutrient levels. Other **constituents of emerging concern** include…
Provide clear definitions and differentiation between CECs, ECCs, and Constituents of Emerging Concern, CnECs (vs CmECs).

William Helmer
[redacted]
Independence, CA 93526
April 13, 2021

LADWP JFB,
111 North Hope Street,
Room 308, Los Angeles, CA 90012,

Attn: Benjamin Wong

Re: Comments on the Draft 2020 Urban Water Management Plan

Dear Mr. Wong,

As a resident of Owens Valley who is impacted by the Los Angeles Aqueduct, I am extremely disappointed in the lack of publicity for the *Draft 2020 Urban Water Management Plan*. I found out about this Plan yesterday, and apparently there has been only a month comment period. Every resident in Inyo and Mono Counties should have been informed of this Plan. The City of Los Angeles should also have engaged in government-to-government consultation with all tribal governments in Inyo County and Mono County. I request that the comment period be extended until June 13, 2021, and be accompanied by real public outreach which specifically invites Owens Valley residents to provide their input.

I appreciate the local water source improvements for Los Angeles, but more can and should be done with the goal of phasing out the Los Angeles Aqueduct and all water extraction from the Mono Lake and Owens Lake watersheds as soon as possible. Climate change in the form of intensified global warming obviously show that it is impossible to sustain the water-depleted ecosystems of Mono Lake and the Owens Valley with indefinite water extraction into the future. Los Angeles needs to create a truly sustainable water plan which would be dependent on local sources of water. The Aqueduct has only been taking water from the Owens Valley for a little over a hundred years. It is not "forever," it was a massive engineering mistake which can be corrected by removal, just like the dams currently being removed in the Northwest.

In summary, the City of Los Angeles' draft 2020 Urban Water Management Plan needs to begin the rapid phasing out of water extraction from the Owens Lake and Mono Lake watersheds via the Los Angeles Aqueduct. Los Angeles needs to ramp up its good work on developing and using local water sources. Otherwise, the plan is not sustainable, and will hold back real sustainable development in Los Angeles as well as the Eastern Sierra.

This is the time when we need to be bold in dealing with global warming which seems to be increasing exponentially each year. As an Owens Valley resident, I look forward to working with others here and with the City of Los Angeles in realistically trying to restore these Eastern Sierra ecosystems. The waters of the Eastern Sierra creeks need to return to Mono Lake and Owens Lake. This will be real ecosystem restoration and the best way to prepare for the increased intensification of global warming and human-induced climate change, which is already here.

Sincerely,

William Helmer
Independence, California