



MARK PESTRELLA, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
<http://dpw.lacounty.gov>

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

June 10, 2024

IN REPLY PLEASE
REFER TO FILE: SWP-6
10540-1-1-F
10540-3-1-F

TO: Each Supervisor

FROM: Mark Pestrella, *Mark Pestrella*
Director of Public Works

BOARD MOTION OF DECEMBER 5, 2023, AGENDA ITEM 8 IMPLEMENTATION OF THE LOS ANGELES COUNTY WATER PLAN: A SHARED, REGIONAL PATH TOWARD WATER RESILIENCE

In accordance with the Board's request on December 5, 2023, this report summarizes steps taken to begin implementation of the Los Angeles County Water Plan (CWP). Public Works is committed to achieving a resilient water future for the County and all its residents, which requires us to collaborate deeply and actively implement the CWP.

INTRODUCTION

Climate change is establishing a "new normal" of more frequent and intense droughts, coupled with less frequent but more torrential rains. Recognizing this new climate reality and the need to be thoughtful stewards of future water supplies, Public Works embarked on the development of a Countywide water plan focusing on collaborative management of Los Angeles County's water resources.

On December 5, 2023, the CWP was unanimously adopted by the Board (Agenda Item 38). The CWP is the first comprehensive planning document that articulates a shared, inclusive, regional path forward to sustainably and equitably achieve safe, clean, and reliable water resources for Los Angeles County.

This report discusses the following short-term implementation actions that have occurred since Board adoption:

- Identification of projects to support 600,000 acre-feet of local water supply including 300,000 acre-feet of annual stormwater capture and storage by 2045.
- Water Resiliency Summit held on April 29, 2024, to discuss implementation of the CWP.

- Task Force creation of the following to support the CWP implementation:
 - Water Conservation and Communication
 - Nature-Based Solutions
 - Regional Water Reliability
 - Small, At-Risk Water Systems

LOCAL WATER SUPPLY TARGETS

The County recognizes that a diverse water supply portfolio is necessary for water security. The CWP established ambitious yet achievable targets to increase local water supply. The County further adopted a target of achieving an additional 600,000 acre-feet per year (AFY) of local water supply including 300,000 AFY of stormwater capture and storage by 2045. These targets are aligned with the CWP.

The CWP created targets, strategies, and actions that support the region's progress to diversify its water portfolio and further augment its local water supply through programs and projects that develop stormwater, recycled water, and groundwater. Following the December 5, 2023, Board Motion, Public Works has now identified a suite of projects that could contribute to the adopted targets of 600,000 AFY of local water supply and 300,000 AFY of stormwater capture and storage. A variety of water project lists were compiled, reviewed, and assessed to determine their alignment with the CWP and applicability to the adopted targets. The potential of local water supply by 2045 is estimated at 770,000 AFY (**Figure 1**).

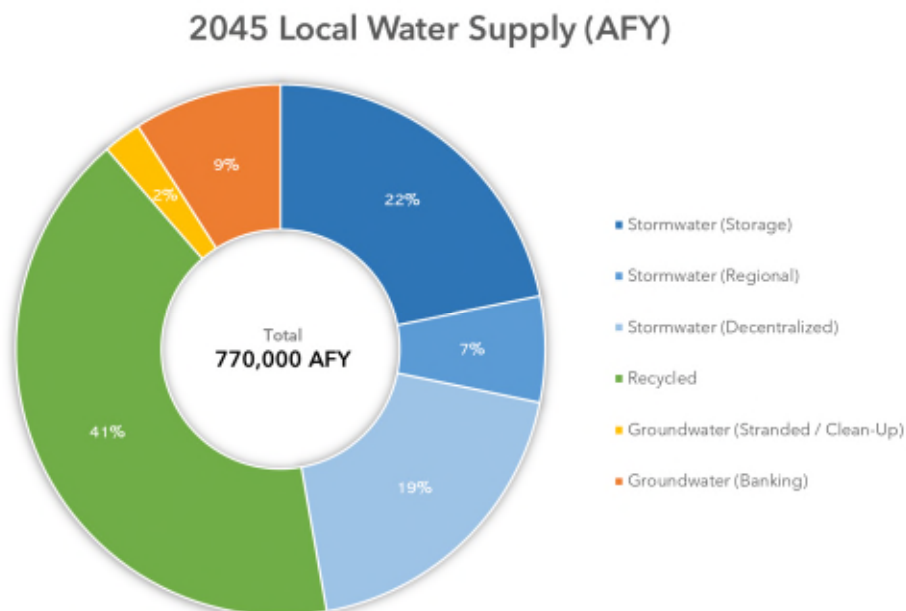


Figure 1 – Local Water Supply Potential

The potential 770,000 AFY of local water supply is comprised of the following supply types:

- **Stormwater Capture and Storage = 360,000 AFY**
 - **Stormwater (Storage)** – Capturing the runoff produced by local rainfall and snowmelt in the San Gabriel Mountains can further increase local stormwater. The Los Angeles County Flood Control District owns and operates 14 dams, which may be retrofitted to increase their storage potential as well as undergo reservoir restoration projects. This storage capacity also includes the United States Army Corps of Engineers' dam capacity enhancement projects.
 - **Stormwater (Regional)** – Enhancing or constructing new centralized, regional stormwater facilities can maximize stormwater capture and recharge within the urban interiors of the County. Regional stormwater projects would provide multiple benefits to adjacent and surrounding communities such as greening and providing open spaces, focus on vacant and underutilized land, and avoid negative impacts like displacement. This includes new spreading grounds and property acquisitions, and enhancements to existing facilities such as the Pacoima Spreading Grounds.
 - **Stormwater (Decentralized)** – Implementing green infrastructure and nature-based solutions that are distributed across the County can increase the capture of stormwater runoff. Decentralized stormwater capture projects are often implemented as multi-benefit stormwater capture facilities that can be funded through the Safe, Clean Water Program.
- **Recycled Water = 320,000 AFY**
 - The region is proceeding with large-scale recycled water projects for indirect potable reuse where treated wastewater will be stored in underground aquifers. In the future, there is the potential for direct potable reuse of recycled water to further increase local supplies. Pure Water Southern California and Operation NEXT are just two key projects currently being implemented.
- **Groundwater = 90,000 AFY**
 - **Stranded / Clean-Up** – The ability to use groundwater that has historically been difficult to access can be enhanced by new wells or emerging treatment technologies. The CWP identified decommissioned groundwater wells that could be brought back online if treated sufficiently.
 - **Banking** – Water banking is a strategy that puts excess water into groundwater storage during wet periods, which can then be recovered during dry periods or emergencies. Partnerships are important for groundwater banking projects. Recently, the Metropolitan Water District of Southern California (MWD) and the Antelope Valley-Eastern Kern Water Agency

partnered to allow MWD to store some excess State Water Project allocations in the Antelope Valley groundwater basin for future supply when needed.

The comprehensive list of potential local water supply projects is included in Enclosure A. The rate of implementation for local water programs and projects to accomplish these targets will be impacted by available funding, permitting timelines, and community engagement. Finally, while this preliminary assessment estimates the potential of local water supply, additional factors must be considered, including but not limited to equity, community benefits, displacement, gentrification, financial viability, etc.

WATER RESILIENCY SUMMIT

The Summit was presented by Chair Lindsey P. Horvath and hosted at Public Works on April 29, 2024. Over 200 water professionals, tribal and community leaders, and an array of diverse people came together to discuss the region's most pressing issues such as water use efficiency and conservation, regional water reliability and resiliency, and sustainability and nature-based solutions. Chair Horvath acknowledged all of the interested parties, partners, water agencies, and environmental organizations that played a crucial role in developing the CWP (**Figure 2**). The Summit had lofty goals and announced key next steps such as identifying CWP topics requiring further effort through task forces.



Figure 2 – Chair Horvath celebrating key CWP partners at the Water Resiliency Summit.

TASK FORCE LAUNCH

Task forces for the CWP were officially launched during the Summit on April 29, 2024. Four task forces were launched with interest sought from participants in the following categories:

- **Water Conservation and Communication** – Led by Charley Wilson of the Southern California Water Coalition.
 - Purpose: Develop a consistent and uniform messaging platform for all things water across Los Angeles County.
 - With over 200 water purveyors in Los Angeles County, it is important that water agencies communicate to their customers through a sustained and consistent platform throughout the region using a unified communication portal. The Water for LA platform (www.WaterForLA.com) aims to remedy this issue.
 - Established by Public Works in 2019, Water for LA is an ongoing water education platform to provide trusted information to the residents of Los Angeles County and inspire them to reevaluate and improve their relationship with water and become water advocates. This will also achieve the Board's goal of creating a water conservation, drought preparedness, and education task force as directed in the December 5, 2023, Board motion.
- **Regional Water Reliability** – Led by David Pedersen of the Las Virgenes Municipal Water District.
 - Purpose: Develop a Countywide water project list, which is vetted and reviewed by water agencies and establishes partnerships to collaboratively pursue funding and policies for regional benefit.
 - The total amount of untapped local water supply potential in Los Angeles County is significant. Without economies of scale, stormwater and recycled water supply projects are often cost-prohibitive for individual water agencies to implement. Partnerships between regional and local agencies on supply development and conveyance can increase the volume of supply generated, the overall cost effectiveness, the potential for outside funding, while decreasing the overall cost to ratepayers.
- **Small, At-Risk Water Systems** – Led by Adam Ariki of Public Works.
 - Purpose: Develop a program that will uplift communities dependent on small water systems.
 - Many small, at-risk water systems serve under-resourced communities within Los Angeles County. As a result, these communities are at a higher risk of not receiving the same level of drinking water quality and reliability as other communities. Providing direct support to smaller at-risk water

systems through a focused, voluntary regional program will greatly increase equity across the region.

- The Chief Sustainability Office (CSO) plans to apply for funds under Senate Bill 552 to develop a drought resiliency plan for small, at-risk, rural water systems. The CWP team will partner with CSO to develop this regional drought resiliency plan.
- **Nature-Based Solutions** – Led by Eileen Alduenda of the Council for Watershed Health.
 - Purpose: Establish standard definitions for nature-based solutions for Countywide use.
 - Collectively, local stormwater efforts can work to increase the overall permeability of County lands, create nature-based recharge opportunities, and potentially allow for local supply development while providing multiple benefits such as improving environmental water quality, ensuring adequate water supplies to ecosystems, and providing greening and recreational opportunities. This will also achieve the Board's goal of creating a Blue-Ribbon Panel as directed in the December 5, 2023, Board motion.

Within 1 week after hosting the Summit, over 30 interested parties have signed up for participation in the task forces.

CONCLUSION

The CWP aims to expand its influence throughout Los Angeles County as the region continues to build on its shared, inclusive, regional path forward to sustainably and equitably achieve safe, clean, and reliable water resources for Los Angeles County. The Los Angeles County Sanitation Districts and Las Virgenes Municipal Water District have already adopted the CWP, with Three Valleys and Foothill Municipal Water Districts intending to adopt the CWP shortly. The CWP team has also presented to various local and regional partners, boards of directors, and panel discussions as shown on Enclosure B.

To advance CWP implementation, task forces will commence work in summer 2024 and additional agencies are anticipated to adopt the CWP resolution. The CWP team in conjunction with the Board offices will actively seek participation of water managers and other interested parties in the CWP implementation in each Supervisorial District through sustained strategic communications. Additionally, InfrastructureLA – a regional hub for partnership of local agencies, collaborating across multiple disciplines, to seek funding opportunities, build support, and effectively create resilient, equitable infrastructure for Los Angeles communities and residents – will be used to garner more CWP adoptions and boost task force participation by its member agencies. The task forces that will be

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convened in summer 2024 will begin working on the CWP's 2-year action plans and build upon ideas gathered during the Summit's breakout sessions.

Continued CWP implementation will uplift all communities Countywide and ensure our residents have sustainable and equitable access to safe, clean, and reliable water. Collaboration is essential to modernize water infrastructure. In the future, our resilient communities will thrive in Los Angeles County.

If you have questions, please contact me or your staff may contact Deputy Director Adam Ariki at (626) 458-4012 or aaariki@pw.lacounty.gov.

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BOARD MOTION 12.05.2023 ITEM 8 - IMPLEMENTATION OF LA CWP_2024.05.07.DOCX

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cc: Chief Executive Office
Executive Office
Chief Sustainability Office

Enclosure A - Potential Local Water Supply Projects

Local Water Supply Type	Agency	Project / Program	Volume (AFY)
Groundwater (Banking)	Metropolitan Water District of Southern California / Antelope Valley-East Kern Water Agency	High Desert Water Bank <u>High Desert Water Bank - Antelope Valley-East Kern Water Agency (avek.org)</u>	70,000
Groundwater (Stranded / Clean-Up)		Stranded Groundwater <u>CWP Appendix B: Targets</u>	18,000
Recycled	Los Angeles Department of Water & Power / LA Sanitation & Environment	Hyperion 2035/Operation NEXT <u>Operation NEXT Los Angeles Department of Water and Power (ladwp.com)</u>	190,000
	Las Virgenes Municipal Water District / Triunfo Water & Sanitation District	Pure Water Project <u>FAQs Pure Water Project Las Virgenes-Triunfo (ourpureh2o.com)</u>	5,000
	Metropolitan Water District of Southern California / Los Angeles County Sanitation Districts	Pure Water SoCal <u>MWD Pure Water Southern California (mwdh2o.com)</u>	116,000
	Palmdale Water District	Pure Water Antelope Valley, Palmdale Regional Water Augmentation Program <u>Palmdale Regional Water Augmentation Program - Palmdale Water District</u>	5,325
	Spadra Basin Groundwater Sustainability Agency	New Spreading Grounds <u>Resources – Spadra Basin Groundwater Sustainability Agency</u>	3,500
Stormwater (Decentralized)	Los Angeles River Upper Reach 2 (ULAR2)	<u>ULAR 2 Watershed Management Plan (WMP)</u> <u>Safe Clean Water Program</u>	2,236
	Rio Hondo / San Gabriel Rivers (RHSGR)	<u>RHSGR WMP</u> <u>Safe Clean Water Program</u>	4,471
	Upper Los Angeles River (ULAR)	<u>ULAR EWMP</u> <u>Safe Clean Water Program</u>	48,472
	Upper San Gabriel River (USGR)	<u>USGR EWMP</u> <u>Safe Clean Water Program</u>	6,572
	Upper Santa Clara River (USCR)	<u>USCR EWMP</u> <u>Safe Clean Water Program</u>	3,511

Local Water Supply Type	Agency	Project / Program	Volume (AFY)
		Complete Streets LA Basin Study	12,515
		Local Stormwater Capture LA Basin Study	31,213
		Low Impact Development LA Basin Study	37,585
Stormwater (Regional)	Los Angeles County Flood Control District <u>LA Basin Study</u>	Enhance: Big Dalton	80
		Enhance: Citrus	75
		Enhance: Eaton Wash	2,000
		Enhance: Little Dalton	25
		Enhance: Live Oak	25
		Enhance: Pacoima	4,150
		Enhance: Rio Hondo	3,600
		Enhance: San Dimas	250
		Enhance: San Gabriel Coastal	600
		Enhance: Santa Anita	45
		Enhance: Sawpit	20
		New Basin: Brown Creek Area Spreading Ground (SG)	1,300
		New Basin: Bull Creek Area SG	1,400
		New Basin: LA Forebay SG	4,400
		New Basin: Miller Pit	4,200
		New Basin: Rock Pit No.3	850
		New Basin: Spadra Basin	1,650
		Stormwater Conveyance Systems	9,000
	United States Army Corps of Engineers <u>LA Basin Study</u>	Enhance: Hansen/Tujunga + New Tujunga SG	11,650
		Enhance: Lopez	45
		New Basin: Sepulveda Dam	4,200
Stormwater (Storage)	Los Angeles County Flood Control District	Storage Solutions - Los Angeles County Flood Control District Dams <u>LA Basin Study</u>	160,750
	United States Army Corps of Engineers	Storage Solutions - United States Army Corps of Engineers Dams <u>LA Basin Study</u>	7,800
Total Local Water Supply Potential (AFY) =			772,516

Enclosure B - CWP Presentations to Local and Regional Partners, Boards of Directors, Panel Discussions, and Educational Resource Booths

Date	Event	Role
2023-09-05	San Gabriel Valley Council of Governments – Water Committee Meeting	Presentation
2023-09-07	Valley Industry & Commerce Association – Energy, Environment, Manufacturing & Utilities Committee Meeting	Presentation
2023-09-19	Council for Watershed Health – 2023 State of the LA River Watershed Symposium	Panel Discussion
2023-09-20	Valley Industry & Commerce Association – Government Affairs Committee Meeting	Presentation
2023-09-29	National Waterways Conference	Presentation
2023-10-31	Local Agency Formation Commission for the County of Los Angeles Meeting	Presentation
2023-11-02	Central Basin Water Association	Presentation
2023-12-05	Los Angeles County Board of Supervisors Meeting	Presentation
2024-01-10	Foothill Municipal Water District Board Meeting	Presentation
2024-01-22	West Basin Municipal Water District Board Meeting	Presentation
2024-01-24	Infrastructure LA – Water Committee Meeting	Presentation
2024-02-15	Asian American Architects / Engineers Association "Future of Water" Event	Panel Discussion
2024-02-22	Los Angeles County Sustainability Council Coordinating (CSCC) Subcommittee Meeting	Presentation
2024-02-22	Los Angeles Regional Water Quality Control Board Meeting	Presentation
2024-02-23	Upper San Gabriel Valley Municipal Water District – San Gabriel Valley Water Supply Tour with Assemblywoman Blanca Rubio (Morris Dam)	Educational Resource Booth
2024-02-27	Catalina Island Study Meeting	Presentation
2024-02-29	Southern California Water Coalition – Stormwater Task Force Meeting	Presentation
2024-03-26	Terratonic Presents: Waters of Change	Panel Discussion
2024-03-27	Metropolitan Water District of Southern California – Southern California Water Dialogue Webinar	Presentation
2024-04-26	Suburban Water Systems – San Gabriel Valley Water Tour with Supervisor Hilda Solis (Morris Dam)	Educational Resource Booth
2024-05-06	Los Angeles County Board of Supervisors – Environmental Sustainability Deputies Meeting	Presentation
2024-05-15	Watermaster Basin Water Management Committee Meeting	Presentation
2024-05-16 to 05-18	California Contract Cities Association – Annual Municipal Seminar	Educational Resource Booth

December 05, 2023

MOTION BY SUPERVISOR LINDSEY P. HORVATH

Implementation of the Los Angeles County Water Plan: A Shared, Regional Path Towards Water Resilience

More frequent and intense wildfires; three years of drought, followed by intense rainfall; and recently, tropical storm Hilary, the first such storm to make landfall in southern California in nearly 100 years, all clearly demonstrate our region's vulnerability to the weather impacts driven by climate change. This unforgiving climate is testing Los Angeles County's (County) already strained and aging water system, including our polluted groundwater basins, and is exacerbating the lack of access to safe, reliable, and affordable water supplies in our most vulnerable communities. Climate change also puts at risk the imported water resources that make up more than 50% of our current supply, which has forced most County communities to adopt emergency conservation orders in the recent years.

Water management in the County is the responsibility of more than 200 agencies, yet there are many issues that are beyond the purview of individual organizations and are best addressed in a coordinated fashion at the countywide level. For these and other reasons, LA County Public Works, dozens of water professionals, community leaders, tribes, and an array of diverse stakeholders came together to develop the inaugural LA County Water Plan (Water Plan): to articulate a shared, inclusive, regional path forward to sustainably and equitably achieve safe, clean, and reliable water resources for the County. The result of their more than two years of work

MOTION

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HORVATH _____

is before the Board of Supervisors today.

The Water Plan complements many existing local and regional water planning efforts by focusing on four key focal areas where experts and stakeholders agree new or additional collaboration is needed. Furthermore, the Water Plan builds upon and addresses many water management objectives of the OurCounty Sustainability Plan, such as development of a local water supply plan and providing support to small water systems. The four focal areas of the Water Plan are:

- Regional Water Supply Reliability: improving regional water supply reliability by better leveraging collective local and imported water resources and infrastructure.
- Groundwater Management and Quality: realizing groundwater management opportunities by sharing expertise and resources to improve stewardship and expand capacity.
- Small, At-Risk System Resilience and Drinking Water Equity: ensuring a consistently high standard of water service for everyone in Los Angeles County by providing regional support for small systems, with focused attention to under-resourced communities.
- Watershed Sediment Management: mitigating the impacts of wildfire on our water supplies through coordinated efforts between land and water managers.

For each of these focal areas, the Water Plan outlines targets and strategies, includes a two-year action plan, and is guided by the values of sustainability, equity, resilience, and

engagement to achieve these goals by 2045. The plan is a living roadmap that will be updated at regular iterations to address the evolving needs of our communities.

In 2017, just 41% of the County's water supply came from local sources. The OurCounty Sustainability Plan includes a target for sourcing 80% of water locally by 2045. The Water Plan articulates strategies to achieve the 80% target by generating 580,000 acre-feet annually, (roughly 162 billion gallons and enough to supply the water needs of five million County residents) of new, locally-generated water supplies by 2045.

Coordination between water agencies on drought messaging and public education is also critical given that people often live, work, and travel within distinct areas of the County, speak different languages, and have diverse cultural norms surrounding water consumption and conservation. Most water agencies in the County have developed their own patchwork of communication and marketing strategies, targeting customers with methods for conservation which are at best duplicative and at worst inconsistent and confusing.

Two of the themes guiding development of the Water Plan are sustainability and resilience. Nature-based water management solutions are increasingly viewed as an effective, multi-benefit approach to addressing water challenges. Natural or nature-mimicking water supply and water quality projects can provide multiple benefits such as creating recreational opportunities, flood control, carbon sequestration, habitat for wildlife, and addressing the urban heat island, but there is often disagreement about what “nature-based” entails and how to measure such projects’ impact versus more traditional “grey” or engineered projects. More

consistent definitions and creation of standards are much needed and will benefit Countywide programs, including the Safe Clean Water Program.

Due in part to climate change, the financial health of the LA County Flood Control District (District) has been compromised. Significantly increased costs for projects such as reservoir restoration to address sediment accumulation from ever-increasing fire activity undermine the ability of the District to capture stormwater for beneficial reuse. Identifying supplemental revenue and funding will be critical to achieving the targets outlined in the Water Plan. These opportunities may include grants, partnerships with other water agencies, and pursuing legislative changes to the 1915 Flood Control Act to increase the District's federal borrowing capacity by hundreds of millions of dollars.

Achieving a resilient water future for the County requires us to actively implement the Water Plan. The County must both double the amount of water it captures from stormwater and double its current supply of local water supplies by 2045. And while government and water suppliers will need to direct significant planning and investment to meet these objectives, these goals around water resiliency cannot be met without far more effective and coordinated customer engagement strategies focused on conservation. This ambitious and necessary plan will set the County towards a resilient and sustainable water future.

I, THEREFORE, MOVE that the Board of Supervisors direct relevant departments to incorporate the goals and directives of the Los Angeles County Water Plan into their work plans.

I FURTHER MOVE that the Board of Supervisors of the County of Los Angeles (Board)

direct the Department of Public Works in coordination with the Chief Sustainability Office, Department of Public Health, and relevant County departments to:

1. Adopt a goal of achieving, in coordination with water agencies throughout the County, an additional 600,000-acre feet of local water supply including 300,000-acre feet of annual stormwater capture and storage by 2045; and to report to the Board, in writing, in six months on a plan to achieve this stormwater capture and storage;
2. In coordination with the Board, convene a Water Resiliency Summit with water agencies and stakeholders including consulting engineers, academics, agency technical staff, tribal organizations, community-based organizations, and labor unions from throughout the County to discuss implementation of the County Water Plan and launch its implementation, including the creation of thematic working groups;
3. Create and lead a Task Force to coordinate water conservation and drought preparedness communications and education countywide, leveraging Water for LA as a countywide communication hub;
4. Establish a Blue-Ribbon panel to develop standards for nature-based water management solutions, involving tribal, non-profit, academic, community, labor, technical experts, and water agencies, and report to the Board, in writing, within twelve months on the findings;
5. Establish and convene, on a bi-weekly basis (twice per month), a meeting of environmental and sustainability policy deputies from each board office, including

appropriate staff from the Chief Sustainability Office, Public Works, and other relevant departments, to discuss and coordinate environmental sustainability efforts at the County, similar to other reoccurring policy deputy meetings;

6. Report to the Board, in writing, in six months with funding needs and opportunities to achieve the goals of the Water Plan including grants, partnerships with other water agencies, and increasing revenue opportunities; and
7. Track and report annually, in writing, to the Board on progress toward achieving the Water Plan goals and targets.

I FURTHER MOVE that the Los Angeles County Board of Supervisors direct the Chief Executive Office, through the Legislative Affairs and Intergovernmental Relations Branch to pursue and sponsor State legislation to amend the Los Angeles County Flood Control District's borrowing capacity and authorize the County's Sacramento advocates to take all appropriate legislative advocacy actions to advance this effort.

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