ECOS
ENVIRONMENTAL
COUNCIL
OF SACRAMENTO

Post Office Box 1526 | Sacramento, CA 95812-1526

May 25, 2023

Mr. Scott Johnson, Senior Planner
Community Development Department
300 Richards Blvd. Third Floor
Sacramento, CA 95811
Sent via email to srjohnson@cityofsacramento.org

Subject: Comments on Draft Environmental Impact Report, City of Sacramento Groundwater Master Plan Well Replacement Program (DEIR)

Dear Mr. Johnson:

We appreciate the opportunity to provide both specific comments and suggestions for improvement on the subject DEIR. The Environmental Council of Sacramento (ECOS) has participated in the development of the region's Groundwater Sustainability Plans and is currently participating with the City of Sacramento (City) and other Water Forum members in discussions to update the current Water Forum Agreement. As such we are cognizant of the region's efforts to address future water demands and the impacts of climate change.

ECOS's supports the City's efforts to modernize and improve its water system. However, we believe the DEIR document may not fully present the possible conditions the region and the City may face because of our changing climate. We suggest that the final EIR address the questions we provide below.

The DEIR's modeling in support of the impacts of the Well Replacement Program appears to rely upon the sustainability of the two impacted Subbasins – North American Subbasin (NASb) and South American Subbasin (SASb) – as reflected in each Subbasin's 2022 Groundwater Sustainability Plan (GSP). However, these GSP findings on future sustainability do not expressly evaluate a hot dry climate scenario. Both the American River Basin study and recent work done by the Water Forum have considered the impacts of this set of climate change conditions. Since the hot dry scenario is reasonably a bounding condition, we believe the City should treat this scenario as a planning boundary for the Project and address any impacts that may result if this scenario is experienced in the coming years. As such, it is appropriate to consider this climate change scenario in the potential impact's sections of the DEIR.

The Draft makes the statement that the groundwater Impact assessment is consistent with findings made by the potentially affected Groundwater Sustainability Agencies (GSA) in their 2022 GSPs. The technical modeling that accompanied the referenced GSPs was largely completed in the 2019-21 timeframe and conditions may well have changed since that time. For example, other new wells may have been permitted or are under consideration. This may especially be true in the SASb where, according to the DEIR, the amount of pumping is anticipated to increase substantially. We believe it is both appropriate and necessary that both Subbasin coordinating GSAs be formally queried regarding their current

assessment of subbasin impacts resulting from the City's well replacement project and that their assessments be included in the final document.

The DEIR makes use of certain modeling data that is tied to the GSP development work of the potentially affected GSAs. It is important to note that in the current annual reports from both GSAs there are significant differences between the modeling results and the actual monitoring data for several the monitoring wells. These differences lead to different conclusions regarding each Subbasin's status regarding groundwater levels and storage condition. The need to improve groundwater modeling/monitoring continues to be a priority in both Subbasin's GSP Projects and Management Actions. We believe this points to a need to continue to rely on actual monitored results. We suggest that reliance on the initial GSP modeling data without fully discussing its potential variability/shortcomings is a potential shortcoming of the DEIR. Additionally, monitoring results for the wells utilized in the modeling work are available through the fall of 2022 in each Subbasin's annual report to the state, and potentially the spring of 2023 monitoring results may be available as well. It would improve the DEIR if this information was presented to substantiate the groundwater impact findings.

ECOS has a long history of concern regarding the impacts of groundwater pumping on Groundwater Dependent Ecosystems (GDE) and surface/groundwater interactions. We also remain concerned that the monitoring and modeling used to monitor and manage both subbasins are not fully developed and vetted and require continuous assessment and improvement. The following specific areas within the DEIR punctuate our concerns in this important area.

1. Page 3.3-33 of the DEIR discusses operational impacts of pumping on wetlands. The document notes that the new wells will have screened depths similar to the old wells and concludes there is minimal potential for interconnection to surface waters and impacts to GDEs. However, the locations of most of the wells are in new areas. Replacement wells 24, 38, 5, and 6 are located quite close to the American River. Without specific information on the aquifer condition, pumping rates, and well construction, this conclusion is difficult to support.

Also, the DEIR's Appendix E attempts to describe impact to existing GDE and ISW monitoring wells, however, the actual project impacts are difficult to discern because the baseline 2021 GSP modeling seems to have included significant aspects of the proposed project. It isn't clear that the model results show the true impact of this project.

Page 2-17 indicates that drilling at new wells sites would "include depth specific monitoring wells to access the major aquifers underlying the site. Actual well designs and depths would be based on site-specific hydro-stratigraphy, soil types and location relative to ISW and GDEs". "During the exploratory drilling phase, if any well is identified as infeasible, a new well location would be identified using 2.5.1 Project Siting Criteria". The criteria found in 2.6.1 (not 2.5.1) do not provide additional information as to what would be "infeasible" nor what sort of analysis would be done to ensure no impact to ISW or GDEs, nor how that would be communicated to the public and the GSAs who are responsible for preventing unacceptable impacts.

In addition, the GSA approved GDE and ISW monitoring networks should be reexamined in light of the significant new pumping locations. New monitoring wells may be needed to observe the city's new impact. This can add significant costs to the GSA implementation programs. CDFW's letter on the initial scoping document requested that modeling of GDE impacts be verified by physical monitoring of GDEs. Any new monitoring well resulting from this significant shift in pumping locations should be included in the City's mitigation commitments, rather than placing the burden on the GSAs.

2. HYD-2 "Substantially decrease groundwater supplies or interfere with groundwater recharge such that the Project may impede groundwater management of the basin" is shown as Less than Significant and no mitigation is proposed. (ES-14) The document and analysis do not clearly support this statement. See specific comments below.

a. The Project will shift approximately half of the City's groundwater pumping from NASb to SASb. The document offers a confusing array of water years and pumping amount (this information would be much clearer in a tabular form of comparable amounts and years, as suggested by CDFW), but Appendix E shows SASb pumping of 1,761 Acre-feet (AF) in wet years which would increase with this Project to 43,029 AF in drier and critical water years. Appendix E shows an estimated average pumping increase in SASb from 4,217 AF to 19,661 AF. This is a significant increase in groundwater extraction from the SASb. Increased City pumping in the SASb reduces the GSAs ability to manage other existing and future demands on the basin. While included in the GSP analysis, it does not mean there is no impact. Increased pumping of over 40,000 AF in dry years is significant. This is especially evident in a hot dry climate scenario. We believe this reinforces the need for the City to closely consult with the GSAs on pumping impacts once aquifer information is obtained at the specific well drilling sites to determine if the City should institute additional measures to provide new monitoring wells or monitoring programs in support of the GSA sustainability needs.

b. There is no data provided in the DEIR showing existing wells in the areas where the 15 new SASb wells are planned to be located. This lack of data makes it impossible to discern if these new pumping centers will impact existing agricultural, industrial or domestic wells. Under SGMA these are beneficial users to be considered in the GSA definition of Sustainability. The GSPs were adopted under one set of pumping conditions, the changing well locations and pumping rates alter those assumptions. The DEIR should provide this information.

c. The DEIR text offers a confusing series of statements concerning GSP impacts. Page 2-10 states that the new well depths will be "much deeper than the Minimum Thresholds". Similarly, Page 3.9-9 states that existing and replacement wells are screened below the root zones of GDEs. The writers then imply that there will be no effect on existing GSP monitoring wells or GDEs. This is not necessarily the case. Wells with lower screened intervals in unconfined aquifer conditions can affect water levels in wells within the cone of depression. As stated above no analysis of new well cones of depression presented. Section 3.9 provides distances to known GDEs and potential GDEs, but there is no information on how far the well pumping influence zone is to understand the relationship. This information is necessary to determine impacts on local wells (agricultural, industrial, domestic and monitoring) as well as GDEs and Interconnected Surface Water (ISW).

d. Appendix E attempts to determine overall future well impact through modeling, however a confusing mix of future condition parameters and modeling assumptions appear to obscure the immediate and local effects of the project as well as those that can occur, should future supply projects not materialize. Wells could be drilled at 1-4 times per year, so SASb wells could be installed and operable in less than 4 years, if those areas are drilled first. The Appendix E modeling discussion appears to include new recharge projects and assumptions that would not accurately predict the near-term impacts. It is not clear what projects are included in the modeling and how likely they are to be realized.

3. The DEIR modeling assumed that any needed water not supplied by the existing well field in the no project alternative would be made up from surface water supplies. This "filling in" with new surface water supplies leads to the conclusion that there would be increased beneficial surface water flows and infiltration from surface water bodies in the proposed project alternative. It is not clear that these supplies are available to the City under their water rights and Water Forum agreements. Recent work by the Water Forum staff implies that climate change will impact the availability of surface water supplies. The DEIR

should be clear on the source of the modeled surface water. The technical memorandum discussion makes the modeling assumptions very difficult to discern.

4. The DEIR does not reflect current information developed for the Sustainable Groundwater Management Act (SGMA). The NASb and SASb 2022 GSP findings should be represented in the document (see page 2-3). Similarly, it is unclear why the document references the 2015 Urban Water Management Plan (UWMP) and not the 2020 UWMP.

5. The Governor's Executive Order relating to SGMA requires that permitting agencies get verification from the GSAs that new or modified wells will not decrease the likelihood of achieving sustainability and that the proposal wells will not interfere with the production and functioning of nearby wells. It exempts those wells that are being used to provide public water supply systems. The Executive Order highlights the concerns of the GSAs. While not required in the current Order, the City should commit to the same type of coordination and analysis that other well owners are required to do. The DEIR provides the City's analysis of future impact. The City should provide the analysis to the NASb and SASb and ask for their concurrence. They should also commit to working with the GSAs to ensure that individual well owners, other beneficial users of water and the GSA monitoring systems are not negatively impacted by the project.

As outlined above, the City's Well Replacement Project has the potential to impact critical environmental resources, other well owners, and the tools relied upon to manage both basins – especially SASb. We suggest that the Draft include more field analysis and consultation with the GSAs to augment the current reliance on computer modeling. ECOS looks forward to continuing to work with the City on its efforts to modernize and improve its water system. We also appreciate and join with the City in efforts to support and move the development of the Water Forum 2.0 agreement forward to a successful conclusion.

Sincerely,

Ted Rauh, Chair
ECOS Water Committee