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Date: July 25, 2013

To: Chino Basin Recharge Master Plan Update Steering Committee

From: Inland Empire Utilities Agency

Subject: 2013 Recharge Master Plan Update – IEUA Recommendations

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The purpose of this memo is to inform the Chino Basin Recharge Master Plan Update Steering Committee that Inland Empire Utilities Agency (IEUA) fully supports the effort made to identify all the potential stormwater recharge projects identified in the Recharge Master Plan Update (Update); and has further evaluated the projects that provide mutual benefit. IEUA is willing to commit to cost-share in the projects listed in the table below. It should be noted that IEUA recognizes that other potential cost-sharing projects have been identified and is willing to consider those projects after the required investigational proof-of-concept work is completed.

**Recharge Master Plan Update – IEUA Recommended Cost-Sharing Projects**

Project ID	Project Name	Included in IEUA FY 13/14 TYCIP	Management Zone	Estimated Yield (AF)	Estimated IEUA Cost
7	San Sevaine Basin	Yes	2	1,911	\$1,775,000
11	Victoria Basin	No	2	120	\$75,000
22	RP3 Basin Improvements	No	3	2,905	\$2,645,000
<b>TOTAL</b>				<b>4,936</b>	<b>\$4,495,000</b>

*Background*

Inland Empire Utilities Agency (IEUA), Chino Basin Watermaster (CBWM), Chino Basin Water Conservation District (CBWCD) and their respective stakeholders have actively participated in preparing a Recharge Master Plan Update (Update) to the 2010 Recharge Master Plan through the Chino Basin Recharge Master Plan Update Steering Committee (Steering Committee), per the direction of the Court.

The Steering Committee participants have developed rough cost/yield estimates for 27 potential capital projects. These projects and respective estimates have been reviewed and considered by the Steering Committee. All of the projects are currently being ranked, based on criteria approved by the CBWM Board of Directors and some of these projects are currently under an investigation of some type. The goal of this Update is to achieve the goals of the

Optimum Basin Management Plan and specific direction from the court. Further, the Update will also include an implementation and financing plan and is scheduled to be developed and completed by the October 2013 Court deadline.

In general, IEUA supports the development of projects to maximize recharge (any source of water) within the Chino Basin. The focus of this Update, as directed by the Court, has been primarily on stormwater recharge projects. If or when the addition of supplemental water can potentially provide benefit to the project, those cost/yield estimates were included as well.

However, for some of those projects that could provide supplemental water recharge benefit, there may be additional related project development and costs (e.g. pipeline conveyance, pump stations, turnouts and/or basin improvements) that are not necessarily included in the recharge basin project cost estimates included in the Update. The project development and cost estimations to enhance supplemental water recharge will be more closely examined as IEUA completes an Integrated Resources Plan, revision to its Recycled Water Program Strategy and annual update to its Ten-Year Capital Improvement Plan (TYCIP). Therefore, IEUA cannot commit its financial support to projects without mutual benefit, requiring further definition, are cost-prohibitive or may still be under investigation.

#### *Evaluation of the Cost-Sharing Projects*

Out of the 27 capital projects identified in the Update, 7 have the potential to be cost shared between IEUA and CBWM (per the Peace II Agreement, IEUA and CBWM cost-share 50/50 on capital recharge projects that include a recycled water component).

IEUA evaluated the 7 potential cost sharing projects using the following criteria: capital cost, O&M cost, unit cost, recycled water yield, available recycled water supply, operational constraints, available budget (current and forecasted) and project readiness (e.g. are there other factors that need to be defined prior to committing to the project – proof of concepts, investigations, additional costs, project viability, permitting etc...) (see attached Draft Evaluation Matrix). Table 1 summarizes the 7 projects that were evaluated.

**Table 1. Recharge Master Plan Update – All Potential Cost Sharing Projects**

Project ID	Project Name	Included in IEUA FY 13/14 TYCIP	Management Zone	Estimated Yield (AF)	Estimated IEUA Cost
7	San Sevaine Basin	Yes	2	1,911	\$1,775,000
11	Victoria Basin	No	2	120	\$75,000
17	Lower San Sevaine Basin	No	2	500	\$16,645,000
19	Wineville Basin	No	3	630	\$3,140,000
22	RP3 Basin Improvements	No	3	2,905	\$2,645,000
23*	Wineville to Jurupa to RP-3	No	3	3,535	\$8,720,000
24	Vulcan Pit	No	3	840	\$15,790,000
<b>TOTAL</b>				<b>6,906</b>	<b>\$40,007,000</b>

\*Note: The total estimated costs don't include project ID 23, as it consists of project ID's 19, 20 and 22. The total recycled water yield is the same for project ID's 19, 20 and 22 compared to project ID 23.

Below are comments, budgets status, potential additional costs and recommended implementation schedule for each of the potential cost-sharing projects identified in the Update.

- Project 7 – San Sevaine Improvements
  - Budget – This project is currently budgeted in IEUA's FY 2013/14 TYCIP.
  - Additional Costs – This project will not require any additional costs other than what has been included in the Update.
  - Schedule – As this project is already budgeted, IEUA is prepared to begin implementing this project in FY 2013/14.
- Project 11 – Victoria Basin
  - Budget – This project is not included in IEUA's FY 2013/14 TYCIP, but can be financially supported by the approved FY 2013/14 TYCIP.
  - Additional Costs – This project will not require any additional cost other than what has been included in the Update.
  - Schedule – As this project can be financially supported by the FY 2013/14 budget, IEUA is prepared to begin implementing this project in FY 2013/14.

- Project 17 – Lower San Sevaine (new basin)
  - Comment – Currently San Bernardino County (County) has listed for sale the property where this new basin would be located. Cucamonga Valley Water District (CVWD) has submitted an application to purchase the property. However, the County has told CVWD that a school district has also submitted an application to purchase the property; and that the school district would have priority. Besides land acquisition, additional investigations are needed to determine estimated percolation rates.
  - Budget – This project is not included in IEUA's FY 2013/14 TYCIP.
  - Additional Costs – There would be additional recycled water distribution costs, estimated to be ~\$1M for this project to be mutually beneficial.
  
- Project 19 – Wineville Basin
  - Comment – Currently IEUA and CBWM are performing a Proof-of-Concept (POC) project at Wineville Basin to determine percolation rates. When the POC project is complete, a decision to further consider the project can then be made.
  - Budget – This project is not included in IEUA's FY 2013/14 TYCIP, only a limited proof of concept project budget is included.
  - Additional Costs – There would be minimal additional recycled water infrastructure costs.
  
- Project 22 – RP-3 Basin Improvement
  - Comment – The Wineville Pipeline Extension Project is currently under construction and will allow recycled water to be delivered to the RP-3 Basin. This Project is scheduled to be completed in FY 2015/16.
  - Budget – This project is not included in the FY 2013/14 TYCIP but would be added to the subsequent FY 2014/15 TYCIP.
  - Additional Costs – The total project costs include the components for the RW, and no additional costs are anticipated.
  - Schedule – IEUA will be prepared to implement this project in FY 2015/16, because that's when the existing Wineville Pipeline Extension Project will be completed, allowing for delivery of recycled water to RP-3.
  
- Project 23 – 2013 RMPU Wineville PS to Jurupa to RP-3
  - Comment – The existing Wineville Extension Pipeline Project will deliver recycled water to RP-3 and Declez Basins without this project.

- Budget – This project is not included in IEUA’s FY 2013/14 TYCIP.
- Project 24 – Vulcan Pit
  - Comment – While IEUA conceptually supports identifying the Vulcan Pit as a potential project for supplemental water recharge purposes, there will need to be additional project refinement and further environmental investigations in order for IEUA to seriously consider this project.
  - Budget – There is budget for preliminary investigations for this project included IEUA’s FY 2013/14 TYCIP.

*Recommendations on IEUA Cost-Sharing Projects*

IEUA has evaluated the 7 potential cost-sharing projects in detail and is currently willing to provide its share of financial support for 3 of those projects (see table below). IEUA encourages the Steering Committee or stakeholders to continue evaluation and refinement of the other potential cost-sharing projects that have been identified after the required proof-of-concept/investigative work is completed, for further consideration in the future.

**Table 2. Recharge Master Plan Update – IEUA Recommended Cost-Sharing Projects**

Project ID	Project Name	Included in IEUA FY 13/14 TYCIP	Management Zone	Estimated Yield (AF)	Estimated IEUA Cost
7	San Sevaine Basin	Yes	2	1,911	\$1,775,000
11	Victoria Basin	No	2	120	\$75,000
22	RP3 Basin Improvements	No	3	2,905	\$2,645,000
<b>TOTAL</b>				<b>4,936</b>	<b>\$4,495,000</b>

The potential cost-sharing projects identified in the Update, inevitably may be altered or revised after the Proof of Concept or investigative work and specific project design development has been completed for some of these projects. The completion of the revision to the Integrated Resources Plan and Recycled Water Program Strategy (under development) will also provide further detail on these projects, allowing for refined cost/yield estimates to be developed. IEUA will then be able to better determine the cost effectiveness and mutual benefit of the project. Consequently, ranking of some of these projects may change, as more information is obtained. Those projects with improved rankings can then be considered in future iterations of the capital improvement plan budget and/or recharge O&M budget.

It should be noted that IEUA also has additional projects in the TYCIP for the development of recycled water recharge which is not included in the Update since they are considered to be solely for recycled water recharge purposes at this time.

**DRAFT IEUA 2013 RMPU Cost-Sharing Project Evaluation Criteria Matrix**

<u>Project ID</u>	<u>Project Name</u>	<u>Capital Cost</u>	<u>O&amp;M Cost</u>	<u>Unit Cost</u>	<u>Estimated Yield (AF)</u>	<u>RW Available</u>	<u>Budget Available in FY 13/14 TYCIP</u>	<u>Additional Costs</u>	<u>Additional Investigation/ Study/POC</u>
7	San Sevaine Basin	\$1,775,000	\$ 45,311	\$ 279	1,911	Yes	Yes	No	Yes
11	Victoria Basin	\$75,000	\$ 2,845	\$ 260	120	Yes	Yes	No	No
17	Lower San Sevaine Basin	\$16,645,000	\$ 11,855	\$ 2,384	500	Yes	No	Yes	Yes
19	Wineville Basin	\$3,140,000	\$ 14,938	\$ 543	630	Yes	No	No	Yes
22	RP3 Basin Improvements	\$2,645,000	\$ 68,879	\$ 278	2,905	Yes	No	No	No
23	Wineville to Jurupa to RP-3	\$8,720,000	\$ 83,817	\$ 379	3,535	Yes	No	N/A	No
24	Vulcan Pit	\$15,790,000	\$ 19,917	\$ 1,442	840	Yes	No	Yes	Yes