California
WATER COMMISSION

Water Storage Investment Program Concept Paper Form

Please complete the questions below and return your completed concept paper by email to cwc@water.ca.gov by 5:00 p.m. on March 31, 2016. Completed concept papers should not exceed four pages.

Contact Information

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Agency/Organization Name:	**River Recycler Systems, LLC**
Agency Type (select one):	☐ Public Agency ☐ Nonprofit Organization ☐ Public Utility ☐ Tribe ☐ Mutual Water Company ☐ Local Joint Powers Authority x Other:

Project Information

Project Name:	**New Freshwater for San Luis Reservoir**
Project Type:	☐ CALFED Surface Storage☐ Groundwater Storage ☐ Groundwater Contamination Prevention or Remediation ☐ Conjunctive Use☐ Reservoir Reoperation ☐ Local Surface Storage☐ Regional Surface Storage xOther: Off Shore Freshwater Reservoir
Estimated Project Cost:	**$2 billion**
Estimated WSIP Funding Request:	**$2 billion**

Please describe your project, including location, water source, facilities, and operations:

This project would capture storm water from the Gualala and Russian Rivers utilizing our patented Off Shore Freshwater Reservoir # US 8,322,294 B2

This system is designed to replace some Dams on rivers, as the off shore reservoir would be disposed a distance from the mouth of a river. The reservoir includes a flotation portion in a salt sea that supports a downwardly extending tubular skirt which defines a barrier between the freshwater on the inside and the saltwater on the outside. A transverse intermediate-density having a bulk density greater than freshwater and less than salt water is provided. This system includes a method of salvaging freshwater after it has finished its duties as a river and has left the mouth of the river, but before it mixes with and becomes saltwater. It is a portable system that is designed to capture storm water from in the Ocean and pump it to the Reservoir where it can be cleaned and stored until it is needed.

Once cleaned the freshwater will be sent to the San Luis Reservoir with our patent pending PUMPING SYSTEM FOR TRANSPORTING FRESHWATER IN A SALTWATER ENVIRONMENT. This system is designed to move trillions of gallons of freshwater over vast distances under the sea.

Anyone who has ever pushed an inflated ball under the water and then let it go has witnessed the same forces of nature that make our system work, GRAVITY and FLOTATION. Our pumping system uses a ridged pipe to insert freshwater into a collapsible type pipe (similar

to a fire hose). The ridged pipe holds back the weight of the ocean so GRAVITY can pull the freshwater down to a desired depth, the ridged portion only has to be long enough to raise the head pressure to the point where it will force open the collapsible type waterline which then extends down to the desired depth where it is attached to the ridged elbow that redirects the freshwater back toward the surface. Right there it switches to a collapsible pipe, then the weight of the ocean takes over squeezing the freshwater towards the surface through the pipeline.

This system is most efficient where the ocean is deep and the distance between points are great. The Ocean is 2 miles deep in Monterrey Bay this is the perfect depth for our system. The best location to come back to shore is Moss Landing. There is an abandoned Railroad all the way to the pass and it is a lightly populated area. The elevation at the pass is less than 600 feet and it is a straight line across the valley to the hills surrounding the reservoir. Electricity generated on the way could be used to lift the water to the reservoir. This reservoir is attached to 500 miles of canals and the agriculture industry in the Central Valley.

This connection could be large enough to replace the Delta Pumps and end the divisive nature of trying to divide up not enough water in the Delta.

It would be the goal of this project to provide enough freshwater through this avenue for recharge of Aquifers in the Valley.

Per Water Code section 79753, the Commission may only fund the public benefits of water storage projects. Further, ecosystem improvements must make up 50% of the funded public benefits (Water Code section 79756(b)). What public benefits does your project provide? (select all that apply):

X Ecosystem Improvements X Water Quality Improvements ☐ Flood Control
X Emergency Response ☐ Recreation

Please describe the magnitude of the public benefits and how the project will be operated to provide the public benefits:

The description of activities actually explains them very well, the Central Valley is subsiding 2 inches per month and 2500 wells are dry. Legislation is before congress right now to provide water to dry communities until the Aquifers refill themselves. NASA just released a study saying the aquifers will never refill themselves. So it is up to all of us to work together to help nature recover.

Water Code section 79752 requires that funded projects provide measurable improvements to the Delta ecosystem or to the tributaries of the Delta. Please describe how your project provides ecosystem improvements in the Delta or tributaries to the Delta:

For years the Delta has been the center of the debate and look at it.

The only real answer is NEW freshwater from somewhere else the Delta needs a break. Even with the EL Nino the Delta pumps only run a fraction of the time necessary to fill San Luis Reservoir. With the wettest year in a very long time an only 45% of request for water can be met.

This isn't sustainable for anyone least of all the Delta.

Water Code sections 79755 and 79757 require the Commission to make a finding that a project will advance the long-term objectives of restoring ecological health and improving water management for beneficial uses in the Delta prior to allocating funding for a project. Please describe how your project could help advance the long-term objectives of restoring ecological health and improving water management for beneficial uses in the Delta:

This is the only project anyone has put forth that offers innovation in water management, it is painfully obvious if there was an easy answer for the Delta it would have been found years ago.

The only answer is new water from a new source that is not over allocated.

Please describe any other benefits provided by your project, such as water supply reliability benefits, and the potential beneficiaries: The world will benefit from this project as we demonstrate that we can lessen the impacts of climate change by providing a reliable source of water to fight wildfires, grow crops that consume CO2, and recharge aquifers, slowing Sea level rise.