

### 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](mailto:cwc@water.ca.gov) by 5:00 p.m. on March 31, 2016. Completed concept papers should not exceed four pages.

#### Contact Information

<b>Contact Name:</b> Joseph Rizzi
<b>Email:</b> Joseph_Rizzi@sbcglobal.net
<b>Phone Number:</b> 707-208-4508
<b>Agency/Organization Name:</b> Natural Desalination
<b>Agency Type (select one):</b> <input type="checkbox"/> Public Agency <input checked="" type="checkbox"/> Nonprofit Organization <input type="checkbox"/> Public Utility <input type="checkbox"/> Tribe <input type="checkbox"/> Mutual Water Company <input type="checkbox"/> Local Joint Powers Authority <input type="checkbox"/> Other:

#### Project Information

<b>Project Name:</b> Benicia Salinity Managed Delta Restore
<b>Project Type:</b> <input checked="" type="checkbox"/> CALFED Surface Storage <input type="checkbox"/> Groundwater Storage <input type="checkbox"/> Groundwater Contamination Prevention or Remediation <input checked="" type="checkbox"/> Conjunctive Use <input type="checkbox"/> Reservoir Reoperation <input checked="" type="checkbox"/> Local Surface Storage <input checked="" type="checkbox"/> Regional Surface Storage <input checked="" type="checkbox"/> Other: <b>Add 6 – 46 Million Acre Feet of Fresh Water for Export.</b>
<b>Estimated Project Cost:</b> 400 Million
<b>Estimated WSIP Funding Request:</b> 400 Million
<b>Please describe your project, including location, water source, facilities, and operations:</b> <b>Manage Salinity intrusion into the Sacramento Delta to Restore the Delta back to more fresh water while using less of our fresh water to hold back the salty sea water. The project has 3 components:</b> <b>1) Add a simple shipping lock system in the shipping channel to protect all 3 bridges from accidents (like the Cosco Busan oil spill of 2007) and to control the salinity incursion at it's deepest point; which since salt water is heavier that is the greatest point of incursion.</b> <b>2) Keep one section between the Eastern Benicia Bridge supports unobstructed and unmanaged for free passage of Fish and small water craft. Like narrowing of the water way.</b> <b>3) Add 6 foot independently controlled Horizontal Louvers between the remaining Eastern Benicia Bridge supports. Lower level louvers can rotated to a vertical position to stop sea water intrusions during high tide and rotated vertical position at low tide to allow Delta water to flow to the sea.</b> <b>4) Optional – If Delta becomes too much Fresh water a pipeline from the sea side of Benicia would need to draw in sea water to a water storage tank for pressure and pipeline to all areas in the Delta that needs more salt water added back to support species that need the extra salt water.</b> <b>This is <i>NOT</i> a DAM or Barrier as previously studied.</b> <b>Operation: would be automated with Manual override controls for ship passage and Louver controls. For Shipping Lock – Tug boats would have remote to open and close gates for passage.</b>

**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):**

- Ecosystem Improvements  Water Quality Improvements  Flood Control  
 Emergency Response  Recreation

**Please describe the magnitude of the public benefits and how the project will be operated to provide the public benefits:** Delta would be returned to more of a FRESH water delta which supports more plant and aquatic life than salt water marshes. More and fresher water for Export from Delta. Flood control of Delta lands because water does not have to flow as fast by levees to maintain Fresh water. Levee breaks would not bring in salty water to water sources. Fishing and boating recreation would be improved with a healthier Delta environment and all the added life.

**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:** Salt is currently monitored throughout the Delta and will be a quick and easy measurement of the effectiveness of the Salinity Management processes. It is well documented that the Fresher the water the more aquatic and plant life can grow and thrive in the Delta. Current fish and other monitoring will also support and indicate Delta's improving health.

**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:** Delta would be restored to the healthy fresh water region like it was prior to CPV as documented by CCWD in 2007 with a copy viewable at the following link: <http://www.ccwater.com/DocumentCenter/Home/View/383>  
*This can add 6 – 46 Million Acre Feet(MAF) of Fresh Water available for Export to help farmers, CA Economy, air quality, people's health, cities and much, much more.*

**Please describe any other benefits provided by your project, such as water supply reliability benefits, and the potential beneficiaries:** This can add 6 – 46 Million Acre Feet (MAF) of Fresh Water available for Export. Governor in 2015 was asking for 1.5 MAF or 25% reduction; which is on ¼ the amount this project would have provided in that same drought year. Exports in Aqueducts can be maxed 10 MAF in all years including Drought years and the 46 MAF minus the 10 MAF for export would simply go out to sea as it does today. This is a **BIG WIN** for all of California (people and the environment). The rest of USA and the world would also benefit from the farming products, cleaner air, reduced sea level rise, reduced CO2 emissions, reduced global warming effects; which would be results from more farming and a greener planet.