From: Daniel Wendell <<u>dwendell@TNC.ORG</u>> Date: October 17, 2013, 7:59:42 PM EDT To: "<u>eric.oppenheimer@waterboards.ca.gov</u>'" <<u>eric.oppenheimer@waterboards.ca.gov</u>>, "<u>gail.linck@waterboards.ca.gov</u>''' <<u>gail.linck@waterboards.ca.gov</u>> Subject: Groundwater Workplan Concept Paper

The Nature Conservancy (TNC) is happy to see that the Water Board is tackling the issue of groundwater management in California. TNC is actively involved with water management issues in the state to ensure adequate water is available to meet nature's needs as well as people's. As part of this effort, TNC is currently conducting a study to more clearly demonstrate the effects of groundwater pumping on surface water systems. This is an important issue since it is still not commonly understood that 100% of pumped groundwater ultimately comes from surface systems, the only question being when and where these systems are impacted. Our ultimate goal is to help bring about more integrated management of surface water and groundwater since unregulated groundwater pumping has led to declining river flows, cessation of perennial flow in some streams, and changes in water quality that impact river ecosystems.

In your Workplan you state that you are interested in meeting with various interests to discuss the proposed framework. TNC would appreciate the opportunity to meet with you to discuss our thoughts regarding these issues. We would be happy to present our findings to date if you wish. Although this work is focused on the Central Valley, its lessons are applicable throughout the state. Our presentation of interim results has been well received by others for its clarity and focus on key issues.

To provide just one comment at this time to provide a better understanding of TNC's perspective, in your Draft Workplan you state:

"The greatest challenge for groundwater quantity is overdraft leading to subsidence and the permanent loss of storage capacity. Managing groundwater levels (quantity) and preventing overdraft largely depends on maintaining a balance between the amount of pumping, natural depletion from a basin, and the amount of recharge."

This would imply that basins should be managed to a classic "safe yield". However, this typically implies that all natural recharge (and therefore discharge) is reserved for human uses with no natural discharge left to feed groundwater dependent ecosystems. In contrast, we prefer to define a "sustainable yield" for a groundwater basin that focuses on the degree of impact the community is willing to accept on its surface water resources and associated ecosystems and established surface water rights. This helps people better focus on the integrated nature of these systems and inherent trade-offs related to water development, either by surface diversion or groundwater pumping. We are hoping that the Water Board would reinforce this perspective in its workplan.

Please let us know the best way to set up a meeting. I will be unavailable to meet between October 23 and November 12, but otherwise have quite a bit of availability. Perhaps you could suggest some dates.