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**Sent:** Monday, February 06, 2017 5:12 PM

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**Subject:** San Juan Watershed Project Comments

Hello project proponents and stakeholders,

This letter contains comments on the San Juan Creek Watershed project.

The recent “tour” of the project did not provide details as to where the actual rubber dams would be located but generally they would be placed in the trapezoidal channel in the San Juan Creek and the Trabuco Creek.

Significant concerns exist regarding the hydrology of the creek following the placement of the dams. The toe of the concrete channel was visible on the east side of the San Juan Creek near the confluence with the Trabuco Creek. It would seem that panels of concrete could break loose (as they have in the past) and damage the inflatable dams.

The invert elevation of the Creek has varied by + or – 5 feet from time to time. The dams may affect the sand transport of the creek. In considering the possible design for installing the dams, it was assumed the structure would be securely fastened to the steel sheet piles on either side of the Creek. This could leave the channel wider at the location of the dams that would allow vegetation to be installed perhaps with gabions up and downstream of the dam without negatively affecting the maximum flow of the Creek. These design details are very important since they could allow spillways or fish passage paths that could accommodate natural vegetation. On the other hand, attaching the dams to the steel sheet piles could cause them to bend or separate under pressure.

Previous ACOE studies concluded that that the San Juan Creek may need modifications to prevent flooding. I believe the study suggested that an additional on or offstream retention of about 14,000 acft would be necessary to preclude other structural modifications. Raising the levees was not well received by the downstream stakeholders. The design of upstream retention on San Juan Creek and Trabuco Creek could be less costly and provide large wetland areas similar to behind the Prado Dam. Have these alternatives been adequately considered?

During periods of drought, when additional water may be needed, the creeks have been bone dry. It may be much more cost effective to build treatment plants at waste treatment facilities to augment potable water and supplement our reservoirs which have many stakeholders with ownership and financial commitments. Reverse Osmosis will be used to lower the salt content no matter how the water reaches our final users.

Thanks for considering these comments,

Sincerely,

Richard Gardner

P.S. Please provide a link where comments will be placed so that all stakeholders can review and contribute.