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Booth comment on Mission Rock Energy Center

Additional submitted attachment is included below.

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January 5, 2018

California Energy Commission
Attn: Mike Monasmith, Senior Project Manager
1516 Ninth Street, MS-15
Sacramento, CA 95814

Reference: Mission Rock Energy Center (Docket Number: l 5-AFC-02)

Dear Mr. Monasmith:

Thank you for the opportunity to comment on this project. I am an Adjunct Professor at the Bren School of Environmental Science & Management and a geologist and hydrologist by training, with a specialty in watershed science and fluvial geomorphology. I have worked on numerous projects along the Santa Clara River since 2006. I believe that the potential impacts to the river from this proposed project are grossly understated by the existing project documents, and that its placement within the 100-year floodplain and active channel-migration zone of the river would result in significant environmental impacts that cannot be mitigated. If any such project is even needed, I urge you to redirect its siting to a location that does not create as many problems as it purports to solve.

I would like to direct you to relatively recent reports on the Santa Clara River, apparently not recognized by the project applicant but readily available on the web:

- Santa Clara River Parkway Floodplain Restoration Feasibility Study: Assessment of Geomorphic Processes (at http://parkway.scrwatershed.org/wkb/scrbiblio/stillwater2005.html)
- Geomorphic Assessment of the Santa Clara River Watershed, Synthesis of the Lower and Upper Watershed Studies (at http://parkway.scrwatershed.org/wkb/scrbiblio/techreportreference.2011-06-03.8969783856.html)

Both include an analysis of the historical channel patterns and behavior of the river throughout the lower Santa Clara River valley, including the project reach. A figure from those reports, with the proposed project site superimposed, demonstrates a key issue that is nowhere addressed in the environmental documents presently available for the project:

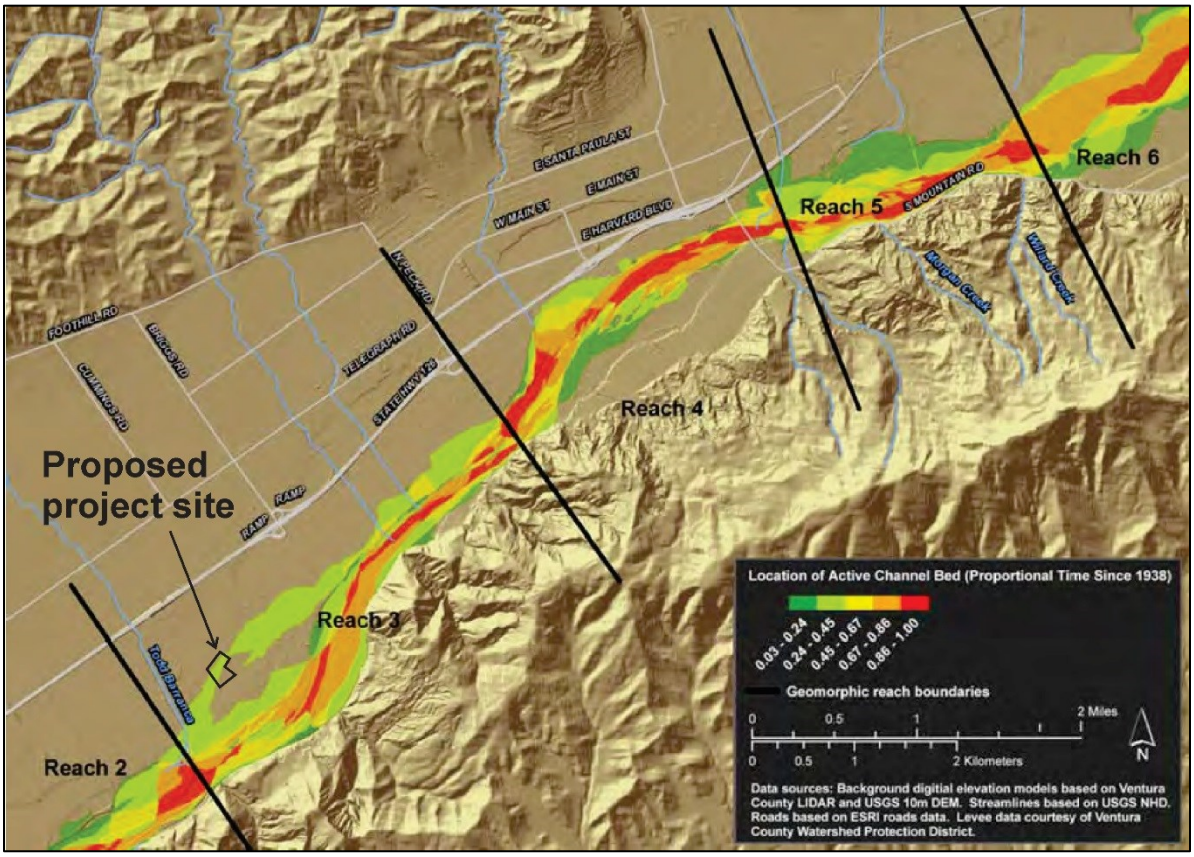

Figure 4-15c of Stillwater Sciences, 2011, *Geomorphic Assessment of the Santa Clara River Watershed*. The map shows the fraction of time over the past ~70 years that the active channel of the river has occupied various locations within the 100-year floodplain (which corresponds to the outer boundary of active channel occupation in this portion of the river).

Not only is the site acknowledgedly within the FEMA 100-year floodplain, but it lies directly athwart a channel of the Santa Clara River that has been active for over a decade in recent time. Thus, the project's proposal to "mitigate" for flood hazard by importing 10 feet of fill will instead represent a major impact to the river's natural dynamics. This also it emphasizes the unsuitability of this site for a major facility—directly across a recently active channel of the primary river of Ventura County.

Although the site itself is presently in a disturbed condition, its present use is non-permanent and would not obstruct floodwaters nor preclude future opportunities to improve floodplain conditions for the protection of downstream communities through improved flood storage and attenuation. The import of fill and the construction of such a facility would obviously eliminate those options; it would also eliminate any future prospects for restoration of a site located in a key resource reach for the Santa Clara River; which, despite existing degradation, remains the among least impacted rivers of southern California.

This project is ill-conceived, poorly located, and clearly uninformed to boot. I encourage its abandonment.

Sincerely,

Derek Booth

Derek B. Booth, PhD, PG