April 15, 2011



Mr. Roger Briggs, Executive Officer Central Coast Regional Water Quality Control Board 895 Aerovista Place, Suite 101 San Luis Obispo, CA 934021

RE: San Luis Obispo Creek MUN Use Dedesignation

Dear Mr. Briggs:

This letter serves as a response to the City of San Luis Obispo's (the "City") Summary of San Luis Obispo Creek MUN Use Dedesignation (the "Summary") which it submitted to Central Coast Regional Water Quality Control Board (the "Water Board") staff on March 23, 2011. The stated purpose of the Summary was to provide factual information that would encourage the Water Board to agendize the consideration of dedesignating San Luis Obispo Creek ("SLO Creek") for municipal and domestic water supply ("MUN") uses.

As you are aware, Federal law requires that each State specify appropriate water uses to be achieved and protected. See 40 CFR 131(a). In making its determination, the State "shall take into consideration the water quality standards of downstream water and shall ensure that its water quality standards provide for the attainment and maintenance of the water quality standards of downstream users." See 40 CFR 131(b). A designated use cannot be removed unless it is neither an <u>existing</u> nor a <u>feasible</u> use. See 40 CFR 131(g).

The San Miguelito Mutual Water Company ("San Miguelito") has been pumping water from the SLO Creek Watershed for MUN uses since approximately 1979. The City curiously and improperly fails to include San Miguelito in its analysis of existing MUN uses, choosing instead to prejudicially rely on a letter from the California Department of Public Health ("CDPH"). The CDPH letter alone does not support the broad and erroneous conclusion that SLO Creek is not now and has never been used as a MUN source. The letter states that "[c]urrently, the surface water in the SLO Creek is not being used for domestic purposes" (emphasis added). In order to reach its desired conclusion, the City argues that a use must be categorized as a surface water use in order to constitute an existing use; and "surface water use" must be narrowly defined. This rigid methodology is contrary to public policy considerations which favor the more pragmatic approach of classifying a MUN use as an existing use if there is a direct and unambiguous hydrological connection between the MUN use and the surface water. Any independent analysis by an engineer not hired by the City would find such a connection between the SLO Creek surface water and the water plumbed by San Miguelito. In addition, it should be noted that the definition of "existing use" contained in 40 CFR 131.3(e) is a broad definition—"[e]xisting uses are those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards" (emphasis added).

The City further supports its case for dedesignation by arguing that the MUN use is unattainable. The City again relies on the CDPH letter as well as a letter from the San Luis Obispo County Health Agency ("SLOHA"). The CDPH letter states that "[b]ased on the evaluation contained in the attachment to <u>your</u> letter, the high percentage of wastewater effluent in the surface water source would not be an appropriate source of domestic drinking water supply" (emphasis added).

Thus, the letter makes clear that CDPH's conclusion is based purely on the City's own report. SLOHA's conclusion is similarly limited as the letter provides "[t]he County <u>agrees with this [the City's] statement</u> and would not approve using water withdrawn from SLO Creek as a source of drinking water." Not only does SLOHA fail to draw its own independent conclusion, it does not foreclose the possibility that treatment would make the water acceptable for MUN uses.

The City also appeals to a requirement that it discharge a minimum of 2.5 cfs of effluent into SLO Creek in order to protect the instream habitat of the threatened Steelhead Salmon. According to the City, the MUN use is infeasible, because it would prevent the City from meeting its minimum discharge obligation. The City again fails to include a supported necessary premise—i.e. that effluent cannot be treated to meet MUN standards. Both prior correspondence and the Summary's conclusion suggest that the City has omitted the necessary premise, because it has wrongly equated a high price tag with unattainability. One sentence of the Summary is particularly telling, stating that "the use is not attainable <u>and</u> tens of millions of dollars are necessary to meet nitrate effluent limits." In other words, the City concedes that nitrate effluent limits can be met given a large expenditure of funds and simultaneously denies that the use is attainable. There is nothing in 40 CFR 131.10(g) indicating the price should play any role in the feasibility analysis. Furthermore, unlike the City, we believe the Steelhead Salmon will manage to survive in less polluted water.

We have attached hereto a letter dated April 14, 2011 from San Miguelito's consulting engineer, Jim Garing, setting forth some relevant information and his conclusions regarding the direct hydrological connection between SLO Creek and San Miguelito's wells, which supply water for domestic purposes to approximately 600 homes and businesses in the Avila Valley.

In conclusion, we request that you continue to put aside any political pressure being asserted by the City in this matter and let the facts and the law inform your decision. It is the Water Board's duty to guarantee that water is being put to the highest beneficial use, i.e. drinking and other domestic purposes, and is of the highest quality. That issue has seemingly been ignored in the City's quest to reduce cost.

Thank you for your time and consideration.

San Miguelito Mutual Water Company

Gerri Hall

Gerri Hall President

Enclosure cc: Timothy J. Carmel

Rick Koon / General Manager



Civil Engineering Surveying Project Development

Tim Carmel Carmel & Naccasha 1410 Marsh Street San Luis Obispo, CA 93401

Subject: Recharge to San Miguelito Mutual Water Company Wells 4, 5, & 6

Dear Mr. Carmel,

Under my direction, Garing, Taylor & Associates, Inc has designed or managed the construction of the vast majority of the Municipal wells in the Five Cities area between 1973 and the present, including:

Arroyo Grande	Wells 6, 7, 8, 9, & 10
Grover Beach	Wells 2,3,4
Pismo Beach	Wells 5, 9, 10, 23

Our experience in well design outside the immediate area includes 6 wells for the Nipomo Community Services District and 3 wells for the City of Lompoc. Our latest well in Lompoc has just been tested to 3,000 GPM.

In 1985, in my capacity as District Engineer for the Avila Beach County Water District, I embarked on an in-depth study of water resources available to the Avila Beach County Water District, including wells along San Luis Obispo Creek and See Canyon Creek. In that study I examined the logs of every known well in the San Luis Obispo Creek water shed area from US 101 Westerly to Avila Beach. A result of that study was the issuance of a Water Rights Permit by the State of California Division of Water Rights for underflow from See Canyon Creek as well as acknowledgement from the Division that an adjoining well did not draw from underflow but drew from groundwater.

Between 1992 and 1995, in my capacity as Consulting Engineer for the San Miguelito Mutual Water Company, GTA compiled a wide ranging study of water resources available to the San Miguelito Mutual Water Company, including shallow, deep and very deep wells in the immediate vicinity. These various wells were analyzed for water quality, safe yield and susceptibility to challenges to the right to receive water from them. The results of these studies are published in Separate Appendix No. 2 Section 2 to the San Miguelito Mutual Water Company Water & Wastewater Master Plan, approved April 19, 1995.

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In part, a conclusion reached as part of that study and then published as part of the 1995 Water and Wastewater Master Plan indicates that wells 4, 5 and 6 are in the alluvium of and under the influence of San Luis Obispo Creek.

Wells 4, 5 & 6 are the shallowest San Miguelito Mutual Water Company wells. These three wells range in depth from 28 to 31-1/2 feet and have screened intervals for water intake between 22 and 28 feet of depth. These wells are also sealed to a depth of 20-feet.

These wells are founded in the very shallow alluvium of San Luis Obispo Creek, and they are clearly recharged by San Luis Obispo Creek. Examination of the drawn down curve for any of these wells indicates that, a short time after pumping begins, draw down stops and the draw down curve begins to run essentially flat. It is at this point that the creek has begun direct recharge of the well.

Note that Tim Cleath, in his letter of December 12, 2006, arrived at the same conclusions as above.

If you have any further questions, please contact me.





Attached: Tim Cleath December 12, 2006 Letter

T:SM-11ltrCarmel.doc

## **Cleath & Associates**

Engineering Geologists Hydrogeologists (805) 543-1413 1390 Oceanaire Drive San Luis Obispo California 93405



December 12, 2006

Mr. Tim Carmel Carmel and Naccasha 1410 Marsh Street San Luis Obispo, California 93401

## SUBJECT: Recharge to Avila Valley wells, San Miguelito Mutual Water Company

## Dear Mr. Carmel:

Per your request, Cleath & Associates has reviewed our records regarding the shallow wells on the San Luis Bay Estates property that are operated by San Miguelito Water Company with respect to influence from San Luis Obispo Creek. Based on a review of our records as well as extensive experience and knowledge of the hydrological conditions in the Avila Valley, it is my own opinion that these wells are recharged by San Luis Obispo Creek underflow.

A pumping test was performed on Well no.5 that shows a definite influence from San Luis Obispo Creek. Wells 4, 5, and 6 range in depth from 28 to 31.5 feet with perforations from 22 feet depth to 28 feet depth. The pumping test indicated a recharge boundary (i.e., the creek) when the logarithmic plot of the drawdown flattens. The pumping test graph shows that this occurs at about 5 minutes into the test, with no further drawdown in the pumping well. This graph is attached for your information. A report that includes a summary of the conclusions reached from these pumping test plots was prepared by James M. Montgomery, Consulting Engineers, Inc. in January 1981 (San Luis Bay Estates Phase One Hydrogeologic Study). The summary regarding "Induced Recharge", described in this report on page 23, is presented below:

"In addition to subsurface underflow an deep percolation of precipitation, induced recharge occurs from the San Luis Obispo Creek and Harford Creek when ground water levels decline. The quantity of flow in the creeks as well as hydraulic gradient between the creeks and the adjacent groundwater levels are two controlling factors which are herein considered.

A portion of the groundwaters yielded by the wells in the San Luis Obispo Creek basin has been supplied by the creek. Because the creek is perennial, it has provided a year-round source of recharge to the wells adjacent to the creek. Low flow in the San Luis Obispo Creek has not been estimated in this area but would be important in quantifying the water available for recharge. Current extractions are apparently not exceeding the quantity of water that can be recharged from the creek into the groundwaters because evidence of sea water intrusion have not appeared.

December 12, 2006

Another factor in this evaluation is the quantity of surface and sub-surface outflow required to maintain a seaward hydraulic gradient and to prevent the advancement up the valley of the fresh/salt water interface. Further study is needed before an estimate of a long-term quantity of induced recharge can be determined.

Drawdown due to pumping of wells imposes a hydraulic gradient from the creek to the well. Drawdown stabilizes once the groundwater moving towards the well(s) is equal to the quantity extracted. The pump test results presented in Fiugres 4, 5 and 6, illustrate the influence of the induced recharge on the drawdown in the wells. After only about 4 minutes of pumping in Well no. 5, the pumping water level abruptly levels off, when, under non-recharging conditions, the pumping water level should continue to lower."

If you would like further support of this recharge, please let me know.

Very truly yours,

Chat

Timothy S. Cleath Certified Hydrogeologist #81 State of California

