



Protecting Marin Since 1934

October 27, 2010

Mr. Drew McIntyre, Chief Engineer
North Marin Water District
999 Rush Creek Place
Novato, CA 94945-7716

Re: Scoping for the Aqueduct Energy Efficiency Project DEIR

Dear Mr. McIntyre:

For more than 76 years, the Marin Conservation League has been actively engaged in issues that affect the environment of Marin County. Monitoring proposed development projects and participating in the EIR process have been paramount.

We understand that the impacts of relocating 3.8 miles of the existing North Marin Aqueduct were evaluated and related mitigation measures were identified in the CalTrans Marin-Sonoma Narrows (MSN) EIR. Therefore, this EIR addresses impacts of enlarging the 3.8 miles of pipeline from 30" to 42", and those segments (0.8 mile) where new parallel pipes 36" or 42" in diameter would be installed. Both the proposed and alternate parallel alignments should be evaluated.

Issues that should be addressed include: tree and native grassland removal, waterways and drainage, flora and fauna displacement, geology and soils, archeological resources, energy and related greenhouse gas emissions, air quality, and growth inducing impacts.

Tree and native grasslands removal: It is difficult to tell from the map included with the notice whether trees would be removed or not. If trees are removed, whether native or non-native, they should be replaced at a 3:1 ratio as near the site of loss as possible. Grasslands, whether native or non-native, should be restored with native grasses on site. The DEIR should quantify tree and grassland impacts in terms of number of individuals or acreage.

Waterways and drainage: Both sites for parallel piping may impact sheet flow or drainage swales. Mitigation measures, including best management practices, should be required during and after construction to restore natural flows and to prevent silty runoff. Both sites ultimately discharge into the Petaluma River.

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Flora and fauna habitat: Surveys should be conducted to determine whether rare, threatened or endangered species inhabit the areas to be disturbed by the parallel pipeline or alternative routes. Surveys should also identify whether wildlife common to the area would be subjected to a barrier or fragmentation of habitat. The least damaging route should be selected. As mitigation, the surface covering the pipeline should be restored to be consistent with contiguous habitat, so that the pipeline alignment does not present a barrier to movement of small rodents, reptiles, or other wildlife for whom exposure presents a hazard to predation.

Geology and soils: Both of the sites for parallel piping are on steeply sloped terrain. This area has a variety of types of unstable soils, faults and geologic hazards that mandate careful examination prior to construction. Information documenting the analysis should be available in the DEIR and technical appendices.

Archeological resources: The corridor is rich with evidence of prehistoric occupation. Surveys should be conducted to determine if the specific locations of the parallel pipeline would impact these resources.

Energy and Greenhouse Gas Emissions: Guidelines to CEQA Appendix G (Environmental Checklist) were amended in 2010 to include Greenhouse Gas Emissions as a potentially significant impact. Energy per se was not restored to the Checklist. Appendix F, generally outdated, received some minor additions, but still provides only limited guidance for analysis of energy consumption. This will be an important analysis in the EIR, since the stated objective for increasing the pipe size is to reduce energy use and related greenhouse gas emissions. The analysis should follow the amended Guidelines in section 15064.4 in calculating the energy costs and gains for each stage of the project and the associated greenhouse gas emissions. Short-term construction stages and long-term operation should be considered in the analysis. The model or methodology used should be explained and its limitations defined. The analysis should ask such questions as: How much energy is currently used to pump the water to NMWD (the baseline)? How “significant” will the reductions in energy be, as anticipated by the District, and according to what standard? Would the Kastania pump station be removed entirely or just removed from service? What fuel is currently used to operate the pump? If, as an alternative to increasing pipe size, energy from a “clean” renewable energy source were utilized at the pump station, how would that alter the calculation of both greenhouse gas reduction, as well as reduce cost, at the same time eliminating other impacts?

Growth inducing impacts: It is our assumption that increasing the pipe size would enable more water to flow, whether by gravity or pumping. What is the minimum pipe size

that will allow the currently allocated quantity of water to flow by gravity? At what volume of water would it again be necessary to pump, assuming the pumps remain in place but are merely removed from service? What volume of water would be accommodated by maximum capacity (42") of the expanded pipe, with and without pumping? What population would the maximum capacity serve? If it is greater than the population currently served by the District, what would be the indirect impacts of the growth accommodated by increased water (if it becomes available from SCWA)? Is MMWD contributing to the project? Does MMWD receive a specific volume, or a percentage of the water pumped to NMWD, and could that increase with larger capacity (again assuming water were made available from SCWA)?

The questions above should be addressed in the EIR by providing an operational model and complete description of the project.

Thank you for the opportunity to participate in the scoping of this document. We look forward to receiving the DEIR when it is available – preferably in hard copy.

If you have questions, please contact Susan Stompe at Marin Conservation League, 415-485-6257.

Yours truly,



Nona Dennis
President