

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT (Gayleen Perriera)
MEETING DATE: March 16, 2005

ITEM: 5A

SUBJECT: **Marin Municipal Water District, Desalination Pilot Plant,
San Rafael, Marin County** – Issuance of New NPDES Permit

DISCUSSION: The District is a public water supply agency responsible for providing drinking water to over 170,000 consumers in southern Marin County. As a potential supplemental water supply source, the District is investigating the feasibility of producing drinking water from the Bay using a temporary reverse osmosis desalination plant (Pilot Plant) constructed in San Rafael.

The District plans to operate the Pilot Plant for about nine months, after which it will be decommissioned. The Pilot Plant will evaluate the feasibility of producing drinking water that meets the District's and regulatory standards. The Pilot Plant will intake an average of 180,000 gallons per day of bay water and then produce three streams: drinking water, brine (salty water), and overflows (unused bay water). These three streams will be recombined and discharged back to San Pablo Bay.

The attached Tentative Order (T.O.) issues the federal NPDES permit for the Pilot Plant's discharge of recombined bay water. The T.O. includes pollutant monitoring and toxicity requirements consistent with the State Implementation Policy and Basin Plan. To assist in determining appropriate NPDES permit requirements for any future full-scale desalination plant, the T.O. specifies optional studies to conduct a survey of biological resources, to conduct toxicity screening, to evaluate the feasibility of discharging brine to the Bay (evaluating both the discharge's potential water quality impacts and the mitigation of those impacts), and to evaluate pollutant intake credits.

Save the Bay and the District submitted comments on the T.O. to which we have responded (Appendix C). Save the Bay recommends that the optional studies be mandatory. We believe it is appropriate to keep the studies optional, because this would facilitate the development of well-planned studies and a data collection period that is not constrained to the short-duration of the pilot plant project. It should be noted that results from these studies are required to be part of any permit application for a full-scale desalination plant if the District decides to pursue it. All issues raised have been resolved.

RECOMMEN-
DATION: Adoption of the Tentative Order (Appendix A).

File No: 2159.5006

Appendices:

- A. Tentative Order
- B. Comments
- C. Response to Comments