result of historic water rights arrangements and may be attenuated through the water rights phase.

- Benefits of ecosystem protection, which could not be estimated in the analysis, are expected to substantially exceed the use benefits to commercial and recreational fisheries. These nonuse or intrinsic values, which include benefits to the public for improved ecosystem health and for avoiding the extinction of species and closures of fisheries, are difficult to estimate accurately because they are nonmarginal.
- Substantial reductions in economic costs—for the same level of benefits—resulted from the sharing scenario analysis, particularly when transfers are limited. For urban areas, the economic benefits of dry year transfers are large, even when compared to the benefits of sharing.
- Although a fully developed water market is not likely, it could theoretically reduce economic costs to very low levels. Innovative implementation plans (purchase funds, fees, tradeable responsibility) that take advantage of these potential efficiencies may be the most cost-effective solution.

Given both the monetary estimates and the information on ecological benefits that is not calculated in monetary terms, EPA believes that the benefits are commensurate with the costs. Cost-effective implementation of the criteria will result in a healthy ecosystem and fisheries resources coexisting with a strong agricultural sector

F. Regulatory Flexibility Act

Under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.) (RFA) EPA generally is required to conduct a final regulatory flexibility analysis (FRFA) describing the impact of the regulatory action on small entities as part of a final rulemaking. However, under section 605(b) of the RFA, if EPA certifies that the rule will not have a significant economic impact on a substantial number of small entities, EPA is not required to prepare a FRFA. Although EPA is providing the certification here, it is nevertheless including a discussion for public information of possible effects to small entities that could result from State Board implementation of today's rule.

Today's rule establishes ambient water quality criteria that are unique in that implementation of these criteria is solely dependent upon actions by agencies other than EPA. Until actions are taken to implement today's criteria (or equally protective state criteria meeting the requirements of the CWA),

there will be no economic effect of this rule on any entities—large or small. For that reason, and pursuant to section 605(b) of the Regulatory Flexibility Act, 5 U.S.C. 605(b), I hereby certify that this rule itself will not have a significant economic impact on a substantial number of small entities.

Discussion

Although EPA is certifying that this rule will not have a significant economic impact on a substantial number of small entities, and therefore is not required to prepare a FRFA, it is nevertheless presenting this discussion to inform the public of possible economic effects of state implementation of the criteria promulgated today on small entities. By so doing, EPA intends to inform the public about how such entities might be affected by the State's implementation. The focus of the discussion is on small farms, and our analysis shows that there will be no significant economic effect on a substantial number of them. Additionally, as described elsewhere in the RIA, impacts on the urban sector, while speculative, are expected to be limited. Accordingly, EPA believes there will be no significant economic impact on a substantial number of small entities as a result of the State's implementation of these criteria.

This discussion first provides a profile of small entities—in this case small farms—to determine whether or not they will be affected by State Board actions designed to attain the criteria set forth in this rulemaking. EPA investigated information by geographic area using the U.S. Small Business Administration's definition. Information used includes acreage and gross value per acre.

Small entities that may be primarily affected by the State's implementation of EPA's rule are small farms (as discussed in the RIA, the primary economic impacts of implementation of these criteria are expected to fall on the agricultural sector; impacts on the urban sector are expected to be limited). Small farms are defined by the U.S. Small Business Administration as farms with annual sales of less than \$500,000. Small farms account for 93% of all farms and 53% of all cropland (including unharvested pastureland) in California. The remaining 7% of California farms, which have annual sales of more than \$500,000, account for 74% of the value of farm products sold (Jolly 1993). Unfortunately, no survey information is available by subgeographic area and value per operator to assist in determining whether or not State Board action

implementing this rulemaking could affect small farms. As discussed in the RIA, impacts may be concentrated in the subgeographic areas of the San Joaquin Valley—particularly the westside of Fresno County, including Westlands Water District and Kern County. This analysis uses the worst case scenarios from the RIA in assuming concentrated and, possibly, not insignificant impacts in these areas. These assumptions include: no increase in water transfers and the most status-quo implementation plan selected by the State of California. As discussed in the RIA, innovative implementation plans could reduce all agricultural impacts.

Due to the lack of survey information, two commonly reported measures—gross value per acre and acreage per farm—were used to develop an indication of whether or not these subgeographic areas contain small farms, by the SBA definition. The first commonly reported indicator of farm

size is acreage.

EPA used two measures of farm size by acreage in the San Joaquin Valley, derived from the 1987 Census of Agriculture. The first measure, average farmland per operator, includes the average amounts of cropland; rangeland; wooded lands; and lands in buildings, roads, and ponds managed by each farm operator in the San Joaquin Valley. The average amount of farmland per operator in the San Joaquin Valley is 341 acres, varying from 266 acres in non-westside areas to 1,834 acres in the Westlands Water District. The second measure of farm size, irrigated land per operator, includes the average amount of cropland, excluding rangelands and wooded lands, managed by each farm operator. The average amount of irrigated land per operator in the San Joaquin Valley is 165 acres, ranging from 114 acres in non-westside areas to 1,113 acres in the Westlands Water District. These data suggest that some agricultural districts contain very few small farms, while others are largely composed of smaller farms.

These measures of farm size may be distorted by characteristics of the data compiled in the 1987 Census of Agriculture. Because of the way farm operators are defined and counted within the census, the number of truly separate farm operations within the San Joaquin Valley may be lower than the census reports. Thus, the amount of farmland and irrigated land per separate farm operation is probably higher than reported. Additionally, farming is not the principal occupation for many farm operators. In the San Joaquin Valley, 44% of the operators included in the census reported that farming was not