

DRAFT

Environmental/Environmental Justice Workgroup Discussion Summary

Preliminary Economic Analysis Approach

1. Proposed Economic Analysis Approach: there is no reference to the cost to communities of treating nitrate pollution, including increasing costs if the trend of increasing groundwater contamination continues - i.e., the community costs of the "no project" alternative (Alternatives 1 & 2). This is a core reason for our participation in this program, and is one of the program objectives, so we fail to understand its exclusion.
 - To address this we will be collecting information on communities with supply wells above 50% of the MCL. Where DPH has listed the supply as threatened by agriculture or the contamination source is estimated as agriculture, we will quantify the capital and o&m costs of treatment and/or developing another source for the communities with unfit sources (wells at or above the MCL) as a current cost. We will also quantify the capital and o&m cost of the communities with supply wells at or above 50%, but less than 100% as a potential future cost. We will then qualitatively evaluate alternatives on whether they would work towards reducing the discharge to groundwater.
 - Trend analysis could be done for a specific set or subset of these community wells provided adequate information exists. However, there may not be enough information to link the trends to a specific source due to other sources, changes in management, age of the groundwater being tested, etc. Difficulties would include quantifying any potential reduction in treatment costs based on management changes imposed by the ILRP. For example, we know little about current fertilizer applications. Without this information it will be difficult to estimate how program requirements may impact nitrate levels in groundwater. We will consider applicable existing studies on nitrate trends in the development of the long-term program.
 - We will contact CV-SALTS and USGS to discuss whether current groundwater model results would provide insight on groundwater trends and agricultural fertilizer use.
2. Data Sources - we understand that you have to use the data that's available, but we have concerns about many of the sources cited, particularly the groundwater monitoring and administrative cost comparisons. We would like to understand how this data will be used.

Specific concerns include sole consideration of USGS GAMA cost information without looking at costs of other sampling programs (e.g., DPH well sampling). In developing cost information for groundwater monitoring, GAMA cost information

will be considered along with other programs (DPH, DPR) in order to determine a reasonable measure of costs.

There are concerns that USGS GAMA data may not provide enough information to determine vulnerable groundwater areas. In order to ensure that we rely on the best information, we will be considering USGS GAMA, DPR groundwater protection areas, State Water Board vulnerability zones, and other applicable groundwater monitoring data.

When developing costs for program implementation, we will also consider potential efficiencies of electronic information submittal. However, there is a significant cost of setting up a new or existing electronic information submittal system to accept ILRP information. These costs will also be considered.

3. Intensity ranges - Alternative 4 was lumped into a "high intensity" category for every compliance action, with no consideration of the acreage under Tiers 1 & 2 that would be subjected to a lesser amount of regulation.

Part of the project will be to try and estimate the growers in each tier, costs and intensities will be re-evaluated based on the estimation. The "high intensity" category is an initial estimate for illustrative purposes and will not effect the actual cost estimations and intensity evaluations for modeling.

4. It's not clear to us what amount of cost is attributed to the way the Board has chosen to configure the program implementation (coalitions vs. individual farms, for instance) and how much is due to actually complying with the regulations.

The cost for lead entity can be indirectly estimated. Using information gathered in the current ILRP, we have developed an estimate for implementing the third-party structure in Alternative 1. We can estimate the costs of individual implementation from our other programs such as the Stormwater and Dairy programs. Using information from the current third party program, other water board programs, and proposed requirements of the alternatives, we can estimate the effect of the lead entity on program costs.

5. Can you give us examples of similar projects that have used the IMPLAN model?

State Water Board Economic and Fiscal Effects of Proposed Statewide Regulations for Onsite Wastewater Treatment Systems:
http://www.swrcb.ca.gov/water_issues/programs/septic_tanks/docs/draft_eir/appendix_g.pdf

The IMPLAN model was also used to evaluate regional economic effects of changes in agricultural production and recreation activity for the EIR/EIS on the San Joaquin River Restoration Program. DWR and USBR were the lead state and federal

agencies for the study. It does not appear that the Public Draft EIR/EIS has been released yet. Information on the San Joaquin River Restoration Program can be found at:

http://www.restoresjr.net/current_activities.html

Assumptions Matrix

1. It appears that these assumptions all relate to the design of the regulatory programs; is that correct?

Yes

2. On the top of page 2, the assumption that "growers or third-party entities would develop implementation time schedules" sounds a bit like self-regulation. This would not be an appropriate assumption. The next assumption, of a 5% inspection program that only applies to Alternatives 3-5, reinforces that concern.

Where time schedules would be required, they would be subject to Central Valley Water Board review and approval. The inspection program assumption of 5% of growers per year will be used to help determine costs for Alternatives 3-5. Alternatives 1 and 2 do not have associated inspection programs. However, under these alternatives Central Valley Water Board would review monitoring and survey results to determine compliance with program requirements. The costs for this review will be captured by reviewing the costs of the current program.

3. The development of a Nutrient Management Program is required for Tiers 2 & 3 in Alternative 4, not Tier 1

Nutrient management plans would be required for Tier 3 growers under Alternative 4.

4. The last assumption covering the assignment of growers into Tiers, will, we assume be used to develop gross acreage numbers for each alternative?

The information associated with the last assumption will be used to estimate the acreage under Tiers 1, 2, and 3 (Alternative 4). The gross acreage (i.e., total program acres) would not be different across Alternatives 2-4 (surface and groundwater programs). However, Alternative 1 would have a lower gross acreage because it is a surface water program only.

5. Where do the community costs of nitrate treatment figure into this discussion?

See discussion topic Preliminary Economic Analysis Approach, number 1 above.