

Task	No.	Date Received	Comment Source	Deliverable	Comment	Response
4	1	5/16/2013	Thomas Harter	Task 4 Draft Report	Page 2 - explain "BUOS" at least the first time or put into a glossary.	The word "BUOS" has been spelled out on page 1 when it was used the first time.
4	2	5/16/2013	Thomas Harter	Task 4 Draft Report	Page 18 - The dairy well dataset is an important dataset, especially for nitrate. Are the locations of the dairy wells exact (to which level) or they relatively approximate, to the nearest dairy?	Well locations from the dairy dataset are approximate to the nearest dairy. Additional text has been added to describe the issues with well locations in the dairy dataset. In the dairy dataset, several unique well ID's have the exact same GPS coordinates. Some of the dairies provided only a single GPS location, although many wells exist on the particular dairy. Therefore the only location information we had was assigned to all wells within that particular dairy. If no GPS information was provided, the dairies were geo-located based on the address provided. The resulting GPS coordinates were then assigned to all wells on that particular dairy. In other words, the GPS coordinates do not necessarily pin-point the location of a well, however they should place the well within the vicinity of the dairy.
4	3	05/30/13	Jeanne Chilcott	Task 4 Draft Report	The Scope of Work notes that much of the data is likely in WARMF which will be verified (e.g. the POTW discharge points). Nothing in the draft report mentions WARMF verification and particularly with the POTW discharge layer, it appears that LWA relied on searching the Board's web pages rather than requesting a summary of information from Board staff thru the CWQIS master database. I'm not sure why the request was not made or WARMF not utilized.	In response to the comment, the LWA team requested the POTWs from the CVRWQCB in the July 19th email to Jeanne Chilcott. Per the Workplan, the POTWs from three data sources (WARMF, POTWs compiled from the permits, and the CIWQS dataset provided by the CVRWQCB staff) were considered and cross-checked during the process of preparing the final GIS data layer. Additional text have been added in Section 2.2. to explain the methodology used for comparison and decision making process for the final layer.
4	4	05/30/13	Jeanne Chilcott	Task 4 Draft Report	Page 10 of 33: How Central Valley Water Board WDRs were reviewed and utilized is not clear. There are a number of wells listed from WDR data, but only nitrate as a constituent measured. I can't tell if the information is only from the dairy program (which I'm pretty sure has TDS/EC data as well) or really from our WDR program which has a tremendous amount of well data--though most in GAMA. The report needs to clarify the difference.	In response to the comment, the LWA team provided clarifications in the July 19th email to Jeanne Chilcott regarding the WDR Dairy data used under Task 4 and asked for the availability of more recent data. Additional text has been added in Section 2.2.6 to explain the WDR Dairy data. During this process, the LWA Team clarified that the TDS data obtained from the RB with dairies data were used in the ICM project. To be consistent with the ICM project, the TDS data were also incorporated in to the final GIS layer Task 4.8.
4	5	05/30/13	Jeanne Chilcott	Task 4 Draft Report	Why did the review only include dairy data from 2007-2008 which was apparently already provided to LWA in 2009? Is the more recent data included in another data source? Again, clarification needed.	See response to the comment #5 above.

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4	6	05/30/13	Jeanne Chilcott	Task 4 Draft Report	I understand that a letter has been sent to Irrigation Districts as part of Task 5 to get additional information on irrigation supply sources. There is no mention of this effort (or I missed it) or identification whether the additional information will be added as part of another task (e.g. wells utilized and/or additional surface water diversions).	Additional text has been added in Section 4.1.5 to clarify that the irrigation data request is completed thru GIS Task 5 effort. As noted in the text, the data request and the data received are being included in the Task 5.1-5.2 report.
4	7	05/28/13	Roger Reynolds	Task 4 Draft Report	Page 6, Table 2, Note I), states "...nitrate measurements were not used for developing Task 4.7 GIS layer due to the lack of well type information." Yet, it goes on to state "TDS and EC records were used for mapping Task 4.8 GIS layer." In one case you use the data and in another case you don't use the data. Why? Footnote f) states Nitrate mapping in Task 4.7 is based on wells identified as municipal or domestic. If the data provides information on the status of the groundwater quality why would you not want to use it for Nitrate?	The use of a specific dataset depends on the Task 4 scope requirements. Task 4.7 calls for nitrate data from the municipal or domestic wells only. Additional text has been added to clarify this point as part of the discussion in Section 2.2.6 where we described how the WDR Dairy Data were used. Similarly, while the dairy data included nitrate from age wells, we only used data from wells identified as domestic wells. based on the Task 4 scope, well specification was not required for Task 4.8 data layers for TDS and EC; thus, data from wells without well types were used.
4	8	05/28/13	Roger Reynolds	Task 4 Draft Report	Page 11, Section 3.1.2 Methods Used to Identify Where Nitrate-Nitrogen, TDS, and EC Concentrations Exceeded Thresholds in Groundwater – This section describes that the most recent values of data were "considered best representative of the current conditions of groundwater quality and suitable for identifying potential areas of concern with elevated concentrations for nitrate, TDS, and EC." A recent review of the draft TLB MUN technical report and Geo Tracker Gama data indicates there are some older USGS water quality measurements (1989 data) which indicate for some monitoring wells within the Tulare Lake Bed area that EC and TDS exceeded the concentrations of 3,000 mg/L TDS and 5,000 umhos/cm EC. The maps for Figure 8a and 8b, however, only show a couple of red dots in this area. The red dots represent wells where the concentrations exceeded these amounts. If historic data shows exceedances and there is no more current data, shouldn't the earlier data be used?	Additional text has been added to clarify the main purpose of Task 4 especially for data layers associated with nitrate, TDS, and EC concentrations. As described in Section 1.1, the main purpose of the GIS Task 4 is a data gathering effort, and does not include data analysis and interpretation. The production of these layers was based on the Task 4 Workplan that calls for showing well locations with exceeding concentrations without regards to variability imposed by other issues inherent in the data (i.e., data period, maximum of data, average of data). The attribute data that were used to produce these layers are available in the database provided to the CV-SALTS for future consideration by interested parties such that the data layers could be re-defined as part of future efforts. The dataset includes time series data including historical records.

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4	9	05/28/13	Roger Reynolds	Task 4 Draft Report	Page 13, Section 4.1.1 Task 4.1 – Municipal Water Supply Intakes from Surface Streams – This section mentions that Figure 1 shows the locations of “All types of municipal diversions (active, canceled, revoked, or inactive) ...”. Whether the diversion is canceled, revoked or inactive versus active is an important factor. It is suggested active diversions be indicated with a different color to differentiate them from the canceled or inactive diversions.	The figure representation remains the same; however, the status of the discharges is included in the attribute table and available in the KML file and geodatabase for other parties who are interested in analyzing the data and re-defining the layer presentation.
4	10	05/28/13	Roger Reynolds	Task 4 Draft Report	Page 17, Section 4.1.2 – Spacial Locations – The comment is made regarding spacial accuracy of well locations regarding the public water supply wells tracked by the CDPH. Recently we were checking the location of some irrigation and monitoring wells where we had the DWR State Well Number and the Geo Tracker Gama locations based on coordinates. Several of the well locations matched up as being the same location but a few were off by approximately ½ to ¾ of a mile. Since conversion of the DWR State Well Number to GIS coordinates is not simple, it is assumed errors have been made in the calculation resulting in spatial accuracy issues for all wells originally located in accordance with the DWR State Well Number.	The spatial coordinates obtained from the (No Suggestions) for the municipal supply wells (CDPH) were used as reported in the original data source. The well locations are reported within 1/2 mile of the actual locations due to the confidentiality and no changes were made to the reported well locations under Task 4 efforts. In addition, the well locations provided by the DWR were used as is and did not involve data processing by this effort.
4	11	05/28/13	Roger Reynolds	Task 4 Draft Report	Figure 8a and 8b – Why are there black dots on the maps? This color is not listed in the legend. Also, in the Data Sources Legend the NWQMC heading needs to be shifted to the right.	Comments noted. Black dots indicate values below the threshold, as noted in the legend for Figures 8a and 8b. The legend has been updated with the inclusion of the WDR Dairy Data to this layer.