

QA Table – WAR Appendix B -- Lessons Learned Memo – Draft B

**Note: This table includes all comments pertaining directly to the Lessons Learned Memo, which is now Appendix B of the WAR. Listed comments on Draft A of the Lessons Learned Memo were presented and discussed at the first WAR workshop. The numbering of these comments is retained from the comment tables developed for this TM for easy cross-referencing. Comments with RPT/WAS in the “response” column could not be directly addressed by the WAC and are being referred to RPT for and WAS for elaboration. These comments generally pertain to the sections of the memo that were to be written by RPT and WAS.**

Order Number	Subgroup or Group providing comment	Page(s) / Paragraph(s).	Text Suggested or General Comment	Response to Comment
1	City of Sunnyvale	pp. 3-4	Who is the “they” referred to in the last sentence starting on page 3 and on the top of page 4? Is this the WMI or the RPT members?	RPT, including the WAC. But probably realistically includes all WMI participants! Text revised.
2	Trish Mulvey	p.4; Section 1.2, last sentence	I totally agree with the suggestion. However, stakeholder requests for “a pilot of the pilot” to give the logic diagrams a trial run were rejected as not being consistent with “the contract”. Need more discussion from RPT.	RPT/WAS
3	Lucy Buchan, SCVURPPP	p. 4, section 1.2	Agree w/ their “hindsight” comment; for our assessment of Coyote Crk, we are assessing stream reaches for which we have sufficient data to test our approach.	Comment noted.
4	Trish Mulvey	p.5; Section 2.1 and p.6; 2.4 #2	<p>Stakeholders are interested in having a repository of all the data sets – whether or not they are directly applicable to the first assessment framework. Accordingly, getting the data sets and having them in the MDDB was valuable in and of itself. Please expand to incorporate that benefit. WAC comments on filtering the data sets for useable data before actually using them for the assessment are also certainly appropriate.</p> <p>Alice explains that all data that was screened in the assessment is included in the MDDB. This includes the data that was not used in the assessment.</p> <p>However, it must be noted that the MDDB does not include all the data used in the assessment- it will, but as of now- it is not completed.</p> <p>Rob will revise the Lessons Learned memo to reflect this.</p>	Text has been revised to capture this idea.
5	Lucy Buchan, SCVURPPP	p. 5, section 2.1, last sentence; p. 6, section 2.4 last bullet	The statement that many of the data sets compiled did not contain any data useful for the assessment assumes that the WMI assmt methodology will never change. Is that a valid assumption for the WMI stakeholders? OK, I see follow up bullet statement that addresses this. However, if the assmt methodology changes after data sets have been	Data sets that were not useful for the pilot assessments remain in both the MDDB and data repository, with information attached to them stating that they were not used in the pilot assessments (in the MDDB). Thus, this data may still be used in future assessments that might use a different methodological approach for which they are better suited. The recommendations have

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			rejected during prior data compilation efforts, would the folks compiling the data sets know that they might need to review data sets that were previously rejected?	hopefully been revised to clarify this idea.
6	Trish Mulvey	p.5; Section 2.2	<p>Need more description of the barriers to getting the last 10% of the data sets. Was WAC “just ignored”? Or did data holders actually provide reasons for not providing the information? Could the Captains have helped? Are there more lessons to be gleaned here?</p> <p>Agreed that Lessons learned memo will attempt to capture some of the reasons why these data sets didn’t work out. Some sort of follow-up address to be provided by Rob.</p> <p>It was discussed that in projects where such large amounts of data is being requested for, there is likely to be a normal statistic for not receiving a percentage of data.</p>	In some cases, data custodians simply did not respond to repeated letters and phone calls. In others, the data initially identified in the MDDDB turned out to be unavailable from the sources listed. This information has been added to the text.
7	Paul Randall SCVURPPP	p. 6, section 2.4 1st bullet, 1 <sup>st</sup> sentence	It would be useful to know how the MDDDB could be improved for long-term data management needs, e.g., which fields were useful or not for identifying relevant data sets. What additional fields were needed? Are there recommendations to improve the completeness of MDDDB, e.g., how should information be entered. Also, how can data be obtained more efficiently?	Some discussion of this has been added.
8	Lucy Buchan, SCVURPPP	p. 6, section 2.4 2nd bullet, 1 <sup>st</sup> sentence	This process of selective data entry into MDDDB may not serve all the needs of SCVURPPP. We are currently examining how we may adapt the MDDDB to better serve SCVURPPP needs and will be distributing a memo in early June.	Comment noted.
9	Paul Randall SCVURPPP	p. 6, section 2.4 2nd bullet, 1 <sup>st</sup> sentence	Further comments on selective data entry into MDDDB. SCVURPPP future watershed assessments may require a broader range of data types than used for the WMI assmt methodology, thus requiring a larger range of data sets. Since there are several assmt methods being used in the Basin, it is better to include more data in MDDDB for future assmts.	Agree that new data sets pertaining to basin watersheds should be entered into the MDDDB regardless of whether or not they contain data applicable to the WMI Assessment Framework. Other assessments may be conducted in the future using other approaches for which these data types may be useful.
10	Luisa Valiela EPA, Region 9	p. 6, Section 2.4, Regarding 2nd bulleted recommendation	Regarding 2nd bulleted recommendation " For future assessments, it is suggested that the content of potential data sets be reviewed and verified as pertinent to the data types and parameters to be used in the assessment before metadata is entered into the MDDDB. Only data sets that are confirmed to contain relevant data should be used by the assessment teams." I believe there are two thoughts here. The first I believe warrants discussion, because it could be argued that the purpose	Agree that new data sets pertaining to basin watersheds should be entered into the MDDDB regardless of whether or not they contain data applicable to the WMI Assessment Framework. Other assessments may be conducted in the future using other approaches for which these data types may be useful. Recommendation in text has been revised to state that information about the data types contained in data sets should be accurate and keyed to the type(s) of data required by the assessment methodologies to be used (or considered for

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			of the metadata database is to include all possible sources of data. The fact that some of the data sets were not useful in this assessment, do not preclude them from being identified later as useful for an assessment and thus should be included in the MDDB. The second part of the rec., that ones not relevant shouldn't be used, should be compatible with this concept if the metadata database is structured in a way that it can sort out only the data sets that would be relevant.	use) in the Basin.
11	Lucy Buchan, SCVURPPP	p. 7, section 3.1, last paragraph	Agree that future data collection under auspices of WMI should record spatial coordinates. As for dealing w/ how to describe locations of past research: we are currently examining how we may adapt the MDDB to better serve SCVURPPP needs and will be distributing a memo in early June, which we shall address the issue of identifying locations of past and present research.	Comment noted.
12	Paul Randall SCVURPPP	p. 7, section 3.2	It would be useful for future assmt if the WAC could characterize the data sets and data types that were considered useful or not useful for this assmt. I'm not sure if this information is presented somewhere else in the WAR.	Information on the data sets that proved useful for the assessment has been added to Chs. 4-6 in Appendix C to each chapter. By cross-referencing the data set ID number in the reach summary tables (in Appendix B to each chapter) with the list in Appendix C, one will have information concerning all of the data sets judged to be of use in developing the assessment results. The data types are outlined in detail in the Assessment Framework document. If this is to be added to the WAR it should be in Chapter 3. The data gaps TM (Appendix C) also contains complete lists of the data types required by the assessment methodology.
13	Lucy Buchan, SCVURPPP	p. 8, 3 <sup>rd</sup> paragraph	Agree that data quality decisions would be most fruitful when conducted in context of data analysis.	Comment noted.
14	Trish Mulvey	p.9; Section 3.5 #4 and p.11; Section 4.2.1	Comment: See separate notes from me on this general topic (OI#5). The WAC recommendation is just fine. Where is the "for a whole lot less time, money, and effort we could have just collected the field data" quote?	<p>This comment, made during one of the WIMs, referred only to the expense needed to collect indicator macroinvertebrate data for the COLD use assessment. The amount of time and money required to collect all of the data needed to fill the most important data gaps (as identified in Sections 4.4, 5.4, and 6.4) would have greatly exceeded the amount spent on reviewing existing data in the pilot assessments.</p> <p>Acquisition of the insect data for the COLD use would allow for more complete support statements to be made in a handful of reaches. However, without additional data on fish assemblages to go with the insect data, the number of additional reaches for which support statements could be made is minimal. With some QA/QC documentation and review, the Stoecker fish data for SFC,</p>

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				FAHCE data for UP and Guadalupe, and Larry Johmann’s photo documentation data for Guadalupe could represent a component of this fish assemblage data.
15	Trish Mulvey	p.9/10; Section 4.1.1	<p>The “reality check” worked fine. Probably my suggestion is that the Assessment by Reach tables should have an expanded set of use support categories. Then we could acknowledge “Mother Nature at work” where appropriate based on WAC expertise instead of “non-support”. I would rather see “non-support” statements limited to findings where management actions can make a difference.</p> <p>The lesson here: not every BU can be supported in each reach.</p> <p>The group agreed that this should be addressed in the respective watershed chapter, instead of in LsLed memo. A suggestion was made to address this issue in future assessments by first researching WHAT uses should be assessed for each stream. (Instead of first setting out to determine support for ALL BUs.) Trish gave an example of a stream segment immediately downstream from a waterfall as an obvious reach-type that wouldn’t require COLD ben. use assmt. Fish can’t jump these, therefore they would be an example of a special circumstance-supporting the utility of Trish’s suggestion.</p> <p>Geoff suggested that screening initially for applicable uses for ALL streams may be a waste of time/\$ because it will be a rare exception that pre-screening for applicable uses would be useful.</p> <p>Rob said that prescreening for BU applicability could streamline the process some- but that this part of the process was not a huge ‘time sink’. Rob definitely agrees that Watershed Captains being present in the initial data review process would be very useful in guiding the assessment.</p>	Where local knowledge comments indicated that a use could not be supported in a given reach based on the natural characteristics of the reach, this information is noted in the text of Chapters 4-6 as well as the reach summary tables (under local knowledge comments). There may, however, be other reaches where this is true as well but no stakeholder input was received. This would need to be assessed during field reconnaissance or future “ground-truthing”.
16	Trish Mulvey	p.10; Section 4.1.2	<ul style="list-style-type: none"> <li>• Timing of completion of the Segmentation memo was problematic. It should have been completed and approved before the data box was opened. Need RPT commentary on why stakeholder requests for this could not be satisfied and what might be done differently next time.</li> <li>• Getting the creek list right/complete has other value for stakeholders beyond whether there are assessment data</li> </ul>	First point: It is acknowledged that many of the concerns over the stream segmentation approach might have been better addressed in the pilot assessments had the memorandum outlining the segmentation approach been finalized prior to the start of data review. At the same time, many of the comments from stakeholders on the proposed segmentation were not raised until the third draft of the memorandum was being circulated, by which time it was thought that most of the major issues had been settled. A recommendation

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			<ul style="list-style-type: none"> <li>Still need to address the two comments in the Quality Memo cover that were considered “out of scope” – LUS and Libby Lucas second email re natural constraints</li> </ul>	<p>that data review not begin until the foundation work is approved has been added.</p> <p>Second point: text revised to indicate little value for the pilot assessments.</p> <p>Third point: The comments from LUS and Libby Lucas did not specifically address the proposed segmentation approach and so were not addressed in that memo. They instead advocated a different approach to the entire issue of segmentation – that streams should be characterized based on their natural constraints and the beneficial uses that should be retained/designated based on those constraints. While this proposal is fundamentally valid, it would have required a major data collection effort in order to be implemented.</p>
17	Lucy Buchan, SCVURPPP	p. 10, last sentence before section 4.1.2	<p>This relates to our assessment work in Coyote Wshd. We identify future and potential stream functions based on our understanding of in-the-pipe projects and a pragmatic evaluation of what additional, unplanned efforts could improve stream ecosystem functions in stream reaches.</p> <p>It’s a good idea to consider for future data collection, There will be additional primary drivers for data collection, such as data gaps that prevented assessors from determining BU support.</p>	Comment noted.
18	Lucy Buchan, SCVURPPP	p. 11, 3 <sup>rd</sup> paragraph	<p>Agree that WMI stream classification should be further developed to address stream processes before WMI implements projects. For our assmt of Coyote Wshd, we developed a stream classification that includes more parameters than WMI’s and may be useful for WMI.</p> <p>Regarding issue of unclassified unnamed tributaries: we classified lower urban reaches as well as upper rural reaches in Coyote wshd.</p>	<p>Again, distinction between stream “classification” and “segmentation” should be highlighted. Streams were not classified for the WMI pilot assessments. They were broken into segments to facilitate data review and analysis. While an attempt was made to segment streams by using common criteria, this should not be considered a classification system. Extensive field reconnaissance would have been needed to do this consistently through the three watersheds.</p> <p>Rural upper tributaries were included in the segmentation; only unnamed tributaries that do not show on maps and whose location is only rumoured were excluded. Reference to their potential existence was retained in the stream segmentation memo.</p>
19	Luisa Valiela EPA, Region 9	p. 11 Section 4.1.3- recommendations on species	<p>Recommendations on species that should be removed from consideration for future assessments: this may need a longer group discussion, but just because a species isn't water or riparian "dependent", doesn't mean that it is in some way dependent (critical life stage or otherwise) on a waterbody and may have particular habitat needs in that waterbody, and so I am not ready to agree that those species listed should be tossed out. And as for all the species listed that are baylands dependent, (dare I insert a caustic remark??)-- Baylands are part of the</p>	Text has been revised to address these concerns.

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			<p>watershed and have BU's tied to them, and for millions more reasons, WILL stay on the list for species to be assessed.</p> <p>There is a strong disagreeance (EPA, Sunnysvale, and WAS) to remove these species. It needs a larger discussion before any removal decision.</p> <p>Sara suggests that Rob state his perspective including a caveat to describe and make the distinction between Baylands not being included in assessment – yet being part of the watershed.</p>	
20	Luisa Valiela EPA, Region 9	p. 11 Section 4.2 Beneficial Use/Int. logic diagrams	I think the recommendations made for adjustments to the MUN, COLD and RARE logic diagrams are well thought out and should be used for revising the assessment process, if this same process is to be used for the next round.	Comment noted.
21	Trish Mulvey	p.11; Section 4.1.3 and p.13; section 4.2.2 and p. 19; section 4.4	I thought the RARE list was developed for the WCR for special status species in the watersheds. This problem should have been addressed as soon as WAC saw it. Also, vernal pool tadpole shrimp are water dependent.	<p>The special status species list was developed for both the WCR and the pilot assessments. For the WCR, the list may be more appropriate (though several of the species still do not appear to be dependent on waterbodies or riparian areas for habitat) but for the pilot assessments, which excluded the Baylands portions of the watersheds, it was clear that several species should not have been included. This was pointed out during the process of developing the list but stakeholders wanted a broader list. At the start of data review, the assessment team noted that certain species are not dependent on streams or reservoirs in the watersheds; these are highlighted in the recommendations in the memo. This wasn't a major issue as data was so limited for the RARE assessment. However, the recommendation is important for consideration as the WMI evaluates future species surveys in Basin watersheds.</p> <p>Acknowledge that vernal pool tadpole shrimp are water dependent. However, the pilot assessments did not address vernal pools as they are not designated in the Basin Plan as waterbodies with assigned beneficial uses. Therefore, this species did not apply to the pilot assessment for RARE. It is entirely appropriate for other future assessments addressing vernal pools in the Basin.</p>
22	Trish Mulvey	p.14; section 4.2.3	WAC certainly has the right comment about working with the drinking water supply managers in designing the assessment framework and identifying applicable stream segments. As a stakeholder, I thought this was considered in the logic diagrams, so I would like more explanation of how we got off track and why we stayed off track. Additionally, I would add THMs to the list of factors.	This concern was raised during the discussion over the implications of assessing MUN support in the pilot watersheds. Nonetheless, the decision was made to go ahead with MUN in place of GWR. The Basin Plan definition of the MUN use does not address the assumption of treatment as part and parcel of support for the use. However, the text of the Assessment Framework clearly outlined support as being measured in streams and reservoirs (or "raw" water quality). Discussions with the Regional Board on the assessment of this use should be

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				<p>held prior to any future MUN assessment work. The intent of the assessment team was to strictly adhere to the approach outlined in the Assessment Framework as much as possible so as to test its validity as a methodology for beneficial use assessments. Thus, no adjustments to the MUN assessment methodology were made. If it were to be concluded, based on conversations with the Regional Board, that MUN could be considered supported if raw water from a stream/reservoir were being treated prior to being used for drinking water, new data types/data sets would need to be added/requested and entered into the MDDDB for use in such an assessment. Data on treated water was never requested and is not included in the MDDDB.</p>
23	Trish Mulvey	p.16; section 4.2.4	<p>Since WAC clearly understands the expectation about “recreation season”, why was it then assumed to be all year?</p> <p>Also, need discussion about the RB2 staff understanding that REC1 has anything to do with fish consumption as opposed to reasonably possible ingestion of water associated with fishing.</p>	<p>The term “recreation season” was never defined in the Assessment Framework. Given the varying types of recreation captured by the REC-1 use, a reasonable argument can be made (and has been by some WMI stakeholders) that recreation season for Santa Clara Basin streams and reservoirs is essentially all year long, with different activities being better suited to different seasons (swimming in summer, canoeing in winter/spring). Thus, no distinction was made in the pilot assessments with regard to the calendar.</p> <p>Additionally, the resolution of the available data would not (in most cases) have allowed for such a seasonal distinction to be made. Water quality data could have been reviewed in this manner, but the access and aesthetics data did not generally support this evaluation. This recommendation is more for future REC-1 assessments and data collection work. If WMI stakeholders can agree on what constitutes “recreation season” for Basin waterbodies (it may differ from stream to stream and reservoir to reservoir), data can be collected and reviewed accordingly.</p> <p>The fish consumption/REC-1 issue has been addressed by the Regional Board, with an agreement reached to exclude it from the pilot assessment results as not being part of the REC-1 use. However, it should be noted that the issue of recreational sport fishing and the related consumption of caught fish is not covered under any of the other beneficial uses as they are defined in the Basin Plan and, if not considered under either REC-1 or REC-2, would not appear to be captured at all under the California system of designated uses. Given that the Clean Water Act is designed to provide for “fishable” waters, this would seem to be an oversight.</p>

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24	Luisa Valiela EPA, Region 9	p. 16, section 4.2.5	Discussion of PFF assessment: the sentence that reads, " The experience of the pilot assessments turned up some inconsistencies between two of these agencies? Inconsistencies which may be symptomatic of other problems with current modeling methods used in Basin watersheds."-- Should clarify what inconsistencies are being referred to (one can only assume it is FEMA and SCVWD)-- wording is too coy and open to interpretation.	Clarification added to text.
25	Luisa Valiela EPA, Region 9	p. 16, section 4.2.5	Discussion of PFF assessment: Need clarification on sentence that reads, "A reach may still experience localized flooding and consequent property damage even though it has adequate capacity to convey an even greater flow than that which caused the flooding. "-- Because of temporary constrictions from debris or other? Otherwise sentence doesn't make sense to me.	Yes – clarification added to text.
26	Trish Mulvey	p.17; section 4.2.5	Need more complete explanation of the inconsistencies between agencies and recommendations for resolution. Also, re localized flooding associated with debris and sediment caused over-banking, the assessment should be able to describe remedial management actions that don't require constructing more flood control structures. (See management action text on p.10.)	Clarification added to text. It is premature to list recommendations for resolving these differences in flood modeling methods as this was not the intent of the PFF assessment. It is apparent that some differences in modeling 100-year flooding exist between SCVWD and FEMA but the pilot assessments did not delve into the reasons for this. It should be remembered that nobody truly knows what a 100-year flood event looks like – historic flood records generally are not that long. Defining these flows is an exercise in statistical estimation and approximation. Different agencies have different methods of arriving at these figures. A detailed review of the assumptions inherent in the SCVWD's WMM and FEMA's modeling would be needed to ferret this out.  The larger issue is what should the PFF assessment address? The adequacy of flood control within Basin streams or the ability of flood management agencies to implement flood channel maintenance?
27	Ann Coombs and Vivian Blomenkamp, League of Women Voters	p. 16-17, section 4.2.5 Protection From Flooding (PFF) second paragraph	Re: Paragraph beginning; <i>"Furthermore, another data set indicated that 100% buildout of all remaining undeveloped (and developable) land in the San Francisquito Creek watershed would not result in any significant change to the 100-year flood flow."</i> This statement should be supported by a reference to that data set; specifically, who did that study and when and where anyone (like myself) can find it and read it.	A reference for this has been added to the reference list in Section 5.5 of the Chapter 5 text. The document is "Reconnaissance Investigation of Flooding in San Francisquito Creek", published by the San Francisquito CRMP in 1998. This data set is contained in the temporary WMI data repository in Palo Alto; the data ID number is listed in Appendix 5-C.

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28	Ann Coombs and Vivian Blomenkamp, League of Women Voters	p. 16-17, section 4.2.5 Protection From Flooding (PFF) second paragraph	<p>Paragraph beginning with, <i>" Other literature reviewed by the team supported this statement. Generally speaking, as flood return intervals increase the corresponding importance of the amount of impervious area in a watershed on surface runoff decreases. Eventually, at high return interval floods (such as the 100-year), it makes little difference whether a watershed is fully or partially developed with urban uses (impervious surfaces). In either case, virtually all of the precipitation is going to generate surface runoff due to ground saturation."</i></p> <p>Where did this information come from? Is the emphasis on the 1% or 100-year flood only because of the logic diagram developed early in the study? Who has decided (and when) which lands are 'developable'? How can developable lands be kept pervious for storms less than the 1% flood if only the 100-year flood is considered as the limiting factor and then that is disregarded? <u>It is our understanding that large amounts of impervious surface increase the amount of runoff and cause it to occur earlier in the storm. Can this cause flash flooding? We do not want to lose measures of impervious surface as measures of the health of riparian systems. Perhaps there is some criterion other than the 100-year storm that should be considered.</u></p> <p>Vivian suggested changing the logic diagram for future assessments, so as to enable better, more precise flood management activities. I.e. Better to look at a shorter flood range interval. Group agrees that this issue should be addressed</p>	<p>The commentator's understanding is correct for storms of a smaller return interval (more frequent, or "average" storms). The Assessment Framework, however, bases the PFF evaluation on the 100-year event, which is the regulatory basis for flood management conducted by FEMA and the SCVWD. At this return interval, as noted in the text, the amount of imperviousness or development in a watershed will not have much influence over the amount of runoff. These are saturation-level storms during which virtually all rainfall will runoff, whether it falls on open pasture or a parking lot. Depending on antecedent moisture levels, imperviousness may still play a role in the amount of time it takes for the rainfall to reach the stream, but given the overall context of this sort of extreme storm event, is not likely to significantly diminish the overall amount of runoff generated within a watershed. A reference for this is cited in Chs. 4-6 of the text.</p> <p>Since the 1% return interval storm is so infrequent, it may be better to use the PFF assessment to focus on more frequent events and routing channel maintenance activities conducted by the SCVWD and equivalent agencies in San Mateo and Alameda County portions of the Basin.</p>
29	Ann Coombs and Vivian Blomenkamp, League of Women Voters	p. 16-17, section 4.2.5 Protection From Flooding (PFF) second paragraph	<p>Paragraph beginning with, <i>"Therefore, the distinction between current and future development in Santa Clara Basin watersheds, at least for the purpose of evaluating 100-year flooding, may be moot and not worth making in the assessment. Given these findings, the team decided to simply use the SCVWD's designed channel capacity data as the benchmark for determining the adequacy of the reach to convey the 100-year flow."</i></p> <p>These findings seem to indicate a need for review of the logic diagram and the use of the 1% flood occurrence as the limiting factor as you indicate in section 4.4 Recommendations (Support Statement Development under the 11th and 12th bullets. As a member of the FMS subgroup, I participated in developing that logic diagram without much knowledge of stream dynamics.</p>	<p>For storms of greater frequency, the issue of development/imperviousness is more critical. If the logic diagram/PFF assessment is changed to focus on shorter-return interval storm events, then the current/future development aspect of the existing logic diagram for PFF should be retained.</p>

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30	Luisa Valiela EPA, Region 9	General comment	Thank you for recognizing the importance of the role of the watershed captains, and highlighting new ways to use their expertise.	Comment noted.
31	Trish Mulvey	p.18; section 4.3	<p>This is our report not an EPA document. Let’s adopt the recommended A to D certainty ranking and make the changes in the Assessment chapters and reach tables needed to make this as user friendly as we can.</p> <p>It was agreed that the current 1-4 ranking system is a bit counterintuitive and that A-D will be used instead with A being assigned to the “most certain”. Also, when describing support statements as “Low degree of uncertainty” they should instead be referred to as “High Certainty” to avoid confusion.</p>	The uncertainty scales have been changed; explanation of the scales will need to be included in Ch. 3. The term “uncertainty” has been retained for referring to the overall analysis step but, in general, “high certainty” is now used in the text in place of “low level of uncertainty”.
32	City of Sunnyvale	p. 19. recommendations for removal of special status species	<p>The removal of species that may be essential to the Baylands assessment by the WMI is not a good idea. Perhaps the bulleted item #3 can be reworded to clearly indicate that these species are essential to the Baylands assessments that the WMI is supporting.</p> <p>We need to make sure that the point is clearly defined in future assessments where these species will not be considered as a part of a creek or river assessment and where they will be picked up as a part of a Baylands assessment.</p>	Agree – intent was not to eliminate these species from consideration by WMI, only from detailed species assessments of the non-Bayland portions of Basin watersheds. Text has been added to memo that will hopefully clarify this intent.
33	Trish Mulvey	p.21; section 4.2	<p>Meeting scheduling needs to also allow for advance circulation of documents and review time. Might it be helpful to have some “lessons” about the challenges of staying “on time” and how long to continue the extra efforts to try to accommodate stakeholder calendars?</p> <p>Sara suggests this could come from the WAS Lessons Learned. Rob can provide some suggestions on recommended time frames for issue review/discussion.</p>	Discussion on this added to memo.
34	Trish Mulvey	p.22; section 5.4 and section 5.6 #5	<p>For the documents used in the assessment, the WAR needs to include the bibliographic metadata and data set numbers suggested. I would still like to see titles instead of document numbers on the reach assessment pages, but if that is too much, at least provide the references in an appendix.</p> <p>Rob will look at it and see if it is possible/feasible. If it is to be done, should it be done by Letter or document title? Rob will think about the feasibility of this suggestion and somehow, he</p>	A “bibliography” of sorts, in the form of a list of the data sets used in the assessment (eliminating those reviewed but rejected as not being useful) is now included in Appendix C to each of the watershed chapters (4, 5, 6). This list is sorted by data ID number in ascending order and can be cross-referenced to the reach summary tables in Appendix B of the watershed chapters. The list of data sets used for each reach/use is now part of the reach summary tables.

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			will arrange a Bibliography with clear references to it in the body of the report.	
35	Trish Mulvey	p.24; section 6.2	We still need to work on the bar charts. I liked the WIM suggestion of just having the support status bar and include the certainty code at the end of the bar. If we keep the current coding of partially filling the bars to denote certainty, I would like to see what just plain black and white looks like without the various shading symbols.	The bar charts have been revised and the partial filling of bars to denote level of uncertainty has been removed. The uncertainty level is now indicated solely by the type of shading for the bar. Shades are now solid rather than line patterns.
36	Trish Mulvey	p.24; section 7.1 and p.25, section 7.2	The first italicized paragraph in each text section is basically “code” without sufficient description of the functional problems. (See OI#1)	RPT/WAS
37	City of Sunnyvale	General comments on Section 4.2, pp. 11-18	While reading the narrative is interesting, it would be helpful to have some of these ideas captured in an easy-to-read table, so that it could easily be referred to in future assessments.	The recommendations contained in these sections of the memo are reiterated in a bulleted list at the end of the section (Section 1.4.4). It is hoped that this will provide an easy reference point for the recommendations in the memo.
38	City of Sunnyvale	General Comments, Section 4.4, pp. 19-20	This section would also benefit by adding a table organized by beneficial use to highlight the suggested changes.	The requested table has been created as Table 1.
39	WMI- Land Use Subcommittee	Sections re: "Protection From Flooding Assessment."	<p>On Page 19 of the Lesson's Learned document, the consultant makes a recommendation at the very bottom of the page (and continuing onto page 20) to: <i>"Reevaluate the appropriateness of using the 100-year flood as the criterion for PFF interest support. If the 100-year flood is retained as a criterion, revise the logic diagram to eliminate the distinction between current and future development. Consider using actual property damage occurrence as criterion."</i></p> <p>The discussion behind this recommendation occurs on page 16-17 of the Lesson's Learned document as well as in each of the three individual chapters. However, the recommendation is only made in the Lesson's Learned document. LUS feels this recommendation should be made in the other three chapters as the discussion in each of the three chapters by itself tends to be misleading. One LUS member was confused by the discussion of the use of the 100 yr flood into thinking they were saying that impervious surface area is not a major concern (with regard to the</p>	Text has been revised to hopefully clarify this issue. Revisions have also been made to the similar text in Chs. 4-6.

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			San Francisquito Creek watershed). Please reword in each of the three chapters, or include the recommendation to clarify.	
40	Geoff Brosseau-San Francisquito Watershed Captain	General Comments	<p>Overall, I found the TM thoughtful, constructive, and reflective of many of the comments expressed verbally in various meetings or in writing.</p> <p>Geoff had prepared a preliminary “Watershed Captain’s perspective of Lessons Learned from the Assessment Process”, previous to the workshop. WAS had decided, prior to this workshop, that these comments from Geoff were more appropriately discussed after a review of the perspectives from all the other Watershed Captains. WAS and the Watershed Captains will be working together to develop Section 8 of the final Lessons Learned memo.</p> <p>Geoff expressed that his comments would be better fit for integration into the rest of the TM, instead of separation from it in Section 8. WAS plans to develop their own Lessons Learned perspective and coordinate with the other Watershed Captains before any decisions would be made as to whether or not Geoff’s comments should be incorporated into the 7 sections of the TM, or separately addressed in Section 8 of the TM.</p> <p>WAS is planning on preparing their Lessons learned perspective after the review period of the draft WAR documents, so that they will be able to appropriately address this part of the WMI process.</p>	RPT/WAS
41	Trish Mulvey (OI #1) Note: OI=“other issue”		We need to figure out the target audience and distribution of our Lessons Learned. My hope is that just like our “internal use only” annual Core Group MIG survey, we can be candid with ourselves, but not necessarily publish everything we learn in the WAR. Perhaps we may only choose to publish the WAC comments. For now, let’s see what comments we get, and consider the concept.	RPT/WAS
42	Trish Mulvey (OI#2)		Concern has been expressed about the cost of the WAR and the length of time it has taken to get this far. So we really need clarity on who will use it and how, before we spend a ton more resources and time polishing it. Probably this will be clearer after we see Chapter 2 and the remaining tech memos on data gaps and limiting factors/causes.	RPT/WAS

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43	Trish Mulvey (OI#3)		Need to get comments from the perspective of the funders/ managers (perhaps from COS). Are they getting what they need from the WAR for their decision-makers to continue to support the SCBWMI?	RPT/WAS
44	Trish Mulvey (OI#5)		What lessons are there to be learned from the initial expectation that the focus of the WAR would be “programmatic Basin-wide recommendations” to the current expectation that Chapter 2 may be much more constrained in what it can suggest? Probably need to see the draft Chapter before deciding.	RPT/WAS
45	Trish Mulvey (OI#6)	LL p.9; section 3.5 #4 & P.11; 4.2.1	Maybe it would be helpful to revisit our initial guidance that said, “before you do a bunch of field work, look at the data you already have.” How did we translate that to “Do an assessment with existing data?” What might we suggest for “next time” in less data rich watersheds?	RPT/WAS
46	Trish Mulvey (OI#7)		The lessons learned document needs a timeline and chronology. Clearly there are some early lessons about our loss of any “time driver” so anybody who wanted to slow things down could. Suggest we start with development of the “priority uses”, the CAP and the assessment framework.	RPT/WAS
47	Trish Mulvey (OI#8)		The “original” RPT had some of our best and brightest resources for watershed management planning and contract management. Can we invite them to offer some lessons learned on what worked well and what didn’t from an earlier perspective?	RPT/WAS
48	Trish Mulvey (OI#9)		Who can offer a helpful perspective about what happened in the 18 to 24 month gap from the fall of 1999 to starting work on the WAR in September 2001? It seems like there was a lot of confusion and secrecy about the budget and contracts that had (and still have) ripple effects to the WAR.	RPT/WAS
49	Trish Mulvey (OI#10)		How did we get into contracts that didn’t allow for adaptive management? Like a beta test of the logic diagrams? Did we need some external accountability and oversight function beyond leaving everything to RPT? What about for WAPTAG?	RPT/WAS
50	Larry Johmann, Guadalupe Watershed Captain	General comment	It seems a little premature to be seeking lessons learned comments prior to completing the assessment process.	Comment noted.

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51	Larry Johmann, Guadalupe Watershed Captain	Section 1, General comment	I feel it is absolutely essential to come up with a concise and highly visible statement on exactly what the Watershed Assessment is supposed to accomplish. What is the output product and what are the expectations on how this product will be used?	RPT/WAS
52	Larry Johmann, Guadalupe Watershed Captain	Section 1, General comment re: reach assessment methodology/framework	In order to be able to make any decisions about the watershed or to plan or undertake any actions to improve or protect beneficial uses/interests it is absolutely essential to have a very clear picture of the current conditions of the watershed and its various water bodies. Since conditions along a water body are going to be markedly different in different reaches the assessment and associated data must be reach specific. It is also essential to review historic information for each unique reach so that changes and trends can be assessed.	Agree with statement. The pilot assessments were designed to determine what could be gleaned from existing data about the condition of these waterbodies for the identified uses/interests. Future data collection should be designed to fill in the missing pieces necessary to develop the “clear picture” referenced in the comment.
53	Larry Johmann, Guadalupe Watershed Captain	Sections 2 & 3, General comment re: reach assessment methodology/framework	In future assessment work, efforts should include time “spent in the field monitoring or assessing current conditions or field validating the data on file. Most of the assessment effort must be spent in the field and people performing the assessment should have a good knowledge of the watershed.”	It would have been very useful to have had the guidance of the Watershed Captains in the very beginning of the Assessment process- so that data review efforts could have consistently identified errors in the data. Agree that field work is needed to validate the assessment results, though validating each and every data set would not be efficient. Now that existing data has been reviewed, field work is the logical next step.
54	Larry Johmann, Guadalupe Watershed Captain	Sections 2 & 3, General comment re: reach assessment methodology/framework	<p>It was stated that one of the purposes of the pilot assessments was to gauge the effectiveness of the Assessment Framework developed by the WMI so that it can be improved for assessment activities in other watersheds. While this is an appropriate goal, any deficiencies uncovered during the assessments of the pilot watersheds need to be corrected and re-evaluated prior to moving on to new watersheds.</p> <p>It was discussed at length that opening up the databox for new data would hugely delay the assessment process. This data that Larry is aware of could have been brought to the WAC two years ago, and it is simply inappropriate to expect for it to be accomodated for now. It was agreed that the WMI process needs to move forward- this data that potentially could bring more detail to the assessment for Guadalupe will be documented- but it will not be included in this pilot assessment.</p>	Comment noted. Recommendations for improving the assessment process are outlined in the memo.
55	Larry Johmann, Guadalupe Watershed Captain	Section 4.1, General comment re: support statement determination	The Lessons Learned memo indicates that it was difficult coming up with support statements in the assessment process. This is likely due to the complexity of the decision flowcharts and the unfamiliarity of the people performing the assessment with the water bodies. It is known that many of the support statements provided for the Guadalupe River and its three major tributaries are wrong and I have already formally identified them. The majority of the segments in the four watercourses	The support statements for the Guadalupe River are correct insofar as they are based on the data that was available to the assessment teams. There is additional data that has since become available (FAHCE) as well as other data that Larry Johmann has. A thorough review of this data may result in changes to the support statements for Guadalupe reaches. For the time being, however, Larry’s detailed comments have been included under the “local knowledge” heading in Chapter 4 as no data to support his comments was reviewed by the

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			without question provide limited support for Rec-1, Cold and Rare. The critical issues that must be identified are the factors, which are limiting or have the potential for limiting and/or degrading the uses. The degree of limitation for each of the uses also needs to be identified and it will be different for each markedly different segment of the watercourse.	assessment team, nor has any field-checking or ground-truthing of the assessment results been performed.
56	Larry Johmann, Guadalupe Watershed Captain	Section 4.1, General comment re: the importance of BU support assessment	It is recognized that the Basin Plan only assigns a beneficial use to each major water body but it is inconsistent in doing so and in many cases not only are the beneficial uses incorrect, the water body is even listed in the wrong watershed. The WMI assessment effort needs to correct these problems so the Basin Plan can be updated in the future with accurate information. It will remain the option of the Regional Water Quality Control Board whether to list the identified uses by watercourse segment or list only the most comprehensive set for the entire watercourse. In order to establish beneficial use protection and or restoration plans/actions detailed information about each of the uses in each unique segment needs to be available.	Table 4-1 (and 5-1 and 6-1) outline the current Basin Plan designations for watershed waterbodies (vis a vis the four beneficial uses evaluated in the pilot assessments). Also included in these tables is input from WMI stakeholders concerning suggested revisions to these designations. In addition, revisions based on results of the pilot assessments are suggested and shown in these tables.
57	Larry Johmann, Guadalupe Watershed Captain	Section 4.2, General comment re: the importance of accurate COLD and RARE BU support assessment	In the case of the Cold and Rare use, it is known that most of the segments of the Guadalupe system provide limited support for these uses because cold water fish are rare species are using and are actually reproducing in the system. What needs to be determined is what degree of support is provided in each segment and what needs to be done to protect and improve this use in each segment.	Larry Johmann’s specific comments concerning use support status in each reach of the Guadalupe watershed are presented both in the text of Chapter 4 and Appendix 4-B (reach summary tables). As additional data becomes available to future WMI assessors, the support statements developed by the pilot assessment team can be revised.
58	Larry Johmann, Guadalupe Watershed Captain	Section 4.2, comment re: MUN use assessment	In the case of Municipal the Lessons Learned memo states that flawed assumptions were possibly made when this use was chosen for the assessment process. It should be pointed out that Municipal was not the original beneficial uses selected for the pilot assessment effort. It is believed that Ground Water Recharge was initially selected but this was changed to Municipal after some of the agency stakeholders argued that it was important to assess for attributes not covered by Ground Water Recharge.	Comment noted.
59	Larry Johmann, Guadalupe Watershed Captain	Section 4.2, General comment re: REC1 use assessment	The Basin Plan defines REC1 as "Water Contact Recreation." It states "Uses of water for recreation activities involving body contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing and uses of natural hot springs." The consumption of fish is in no way related to water use, which is what	Based upon input from Richard McMurtry of the Regional Board, the fish consumption component of the REC-1 evaluation has been removed from the report. The analysis is available if future interest warrants its use, but the assessment results no longer appear in the text or tables.

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			<p>the Basin Plan is evaluating.</p> <p>I feel it is unacceptable to use fish consumption as criteria for this use. I have no objections if the WMI wants to evaluate "Fish Consumption" as another stakeholder interest; however, it must be evaluated in the proper context. It is unacceptable to lump this interest with the Rec-1 beneficial use and then attempt to define support/non-support for Rec-1 using non-relevant criteria.</p>	
<b>60</b>	Larry Johmann, Guadalupe Watershed Captain	Section 4.2, General Comment re: PFF use assessment	In the case of PFF, correct terminology needs to be used in performing the assessment. No natural or quasi-natural channel will convey the 100 year or 1% flood flow. Any attempt to modify a watercourse channel to convey more than its normal bankfull flow, as defined by natural processes, will result in the degradation or destruction of most, if not all, designated beneficial uses. While it may be possible to design a river corridor, which includes the river channel and a floodway, to handle a 100 year event, it is impossible to design the channel itself to do so without destroying its natural functions and associated beneficial uses.	Some text has been added to the memo to address this; this issue is also dealt with in Chapters 4-6 and the Limiting Factors memo (Appendix D).
<b>61</b>	District Staff Debra Caldon	P. 5 2.1 Development of Metadata Data Base	This looks like a recommendation to me.	Revised text incorporates this as a recommendation for future MDDDB data entry.
<b>62</b>	District Staff Debra Caldon	P. 7 3.1 Data Completeness Review	This looks like a recommendation to me.	GPS issue added to list of recommendations.
<b>63</b>	District Staff Debra Caldon	P. 10 4.1.1 Global Application of Beneficial Use Designations	This looks like a recommendation to me.	Added to list of recommendations.
<b>64</b>	District Staff Debra Caldon	P. 11 4.2.1 Cold Freshwater Habitat (COLD) Assessment	[This needs to be brought out more into the discussion that was a key purpose of the logic diagrams.]	The logic diagrams did perform as was intended in that they pointed out the true scarcity of good quality data useful for assessing beneficial use support in streams and reservoirs. Text revised to incorporate this idea.

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65	District Staff Debra Caldon	P. 13 4.2.2 Preservation of Rare and Endangered Species (RARE) Assessment	[This looks like a recommendation.]	Recommendation on field surveys for RARE assessment added to list.
66	District Staff Debra Caldon	P. 14 4.2.3 Municipal and Domestic Supply (MUN) Assessment	[Suggest that you look at your notes – this was driven by certain stakeholders which I will not name, over the recommendations of technical support staff.]	Comment noted. Text revise to note that MUN was substituted for GWR late in the process of developing the Assessment Framework.
67	District Staff Debra Caldon	P. 14 4.2.3 Municipal and Domestic Supply (MUN) Assessment	It is listed as existing use in the Basin Plan as are all the surface waters in the state – to avoid that discussion with the Regional Board suggest that you use the word I’ve proposed]	Text revised.
68	District Staff Debra Caldon	P. 15 4.2.3 Municipal and Domestic Supply (MUN) Assessment	I suggest that this is a function of trying to use not ambient data for ambient purposes. I would stress the above point and not belabor the point.	Comment noted.
69	District Staff Debra Caldon	P. 18 4.3 Uncertainty Analysis	Good recommendation to be brought out more.	Text added to recommendation list.
70	District Staff Debra Caldon	P. 18 4.4 Recommendations – Support Statement Development	[We’ve been there and done that for several months already (I refer you to Greg Gearhart’s memo from February 1999) – better recommendation is to define the assessment assumptions from the outset of the process and not worry about the Regional Board’s acceptance of the approach. The reality is that there is no agreed upon protocol for watershed assessment or for beneficial use support, nor is this likely to change in the foreseeable future.	Comment noted and recommendation revised.

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71	District Staff Debra Caldon	P. 18 4.4 Recommendations – Support Statement Development	<ul style="list-style-type: none"> <li>[I don't agree, the memorandum is useful for other purposes beyond the Watershed Assessment; as it characterizes the community's interests in R&amp;E species. I don't think we want to lose that important stakeholder input. I suggest that a better approach would be to have clear assumptions as the beginning of any assessment that identify those species that would be included in a RARE analysis e.g. only aquatic or aquatic habitat dependent species as subject to the assessment approach.]</li> </ul>	The text has been revised to hopefully clarify that recommendation pertains only to use of the list for the RARE assessment.
72	District Staff Debra Caldon	P. 19 4.4 Recommendations – Support Statement Development	I don't agree, the numbering allows a way to integrate or weight this information to get a overall picture of uncertainty	The uncertainty scale was revised to alphanumeric (A-D) based on comments received from many stakeholders. However, it is easy to convert back to a numeric (4-1) scale if at any point it becomes desirable to do so.