

Peer Review Record

for the

Third Draft

Submitted December 20, 2006

COMMENT ID	SWP REGION	MEETING DATE	COMMENT DATE	SOURCE	MEETING MINUTES	COMMENT	CATEGORY	APPLIES TO	PRIORITY	ACTION	ACTION DATE	ACTION DESCRIPTION
1	Catawaqui	15-Dec-06	15-Dec-07	PR Team	Meeting Minutes	Correlation and auto-correlation work is not needed for this report.	Other	Catawaqui	High	Completed	19-Dec-07	Removed work on correlation and autocorrelation.
2	Catawaqui	16-Jan-07	16-Jan-07	PR Team	Meeting Minutes	Rain events that did not result in changes to well levels may not have occurred at the well location, as the closest gauge is still a reasonable distance away. This means that they can not be used on their own to look at precip/well level interaction	Hydrogeology	All	High	Completed	20-Dec-07	Added text to reflect possible discrepancy between rain at gauge and wells
3	Catawaqui	16-Jan-07	16-Jan-07	PR Team	Meeting Minutes	Improve discussion on uncertainty of the data	Other	Catawaqui	High	Completed	15-Mar-07	Revised Section
8	Catawaqui	16-Jan-07	12-Jan-07	Ed Watt	E Watt	minimum sample size to get accurate mean? Perhaps 10? Check and revise. Perhaps any less than 10 should be left blank, as not enough data. Also need to denote which ones are continued to be used in Table 2.4	Climate/Hydrology	Catawaqui	High	Completed	14-Feb-07	Made reference to less than 15 years of data for all tables, and with weighted averaging, those stations with less than 10 years of data had the bearing.
9	Catawaqui	16-Jan-07	3-Jan-07	Sean Watt	Other	Table of Contents, page 1, Appendix G title, MOEE 995; changes to MOEE 1995	Other	Catawaqui	Low	Completed	23-Jan-07	fix typo
10	Catawaqui	16-Jan-07	3-Jan-07	Sean Watt	Other	rework columns of acknowledgements	Other	Catawaqui	Low	Completed	23-Jan-07	rework columns
11	Catawaqui	16-Jan-07	16-Jan-07	PR Team	Meeting Minutes	Move 1.1, 1.7 maps to an back of report	Other	Catawaqui	Medium	Completed	23-Jan-07	make new appendix
12	Catawaqui	16-Jan-07	16-Jan-07	Bill Hogg/Ed Watt	B Hogg	Table 2.3 and 2.4 - denote less than 10 years of data	Climate	Catawaqui	High	Completed	18-Jan-07	added denotation
13	Catawaqui	16-Jan-07	16-Jan-07	Bill Hogg	B Hogg	Kuskat-Wallis test, and text around it. Need to make sure its properly explained, with respect to null hypothesis, and proof.	Other	Catawaqui	High	Completed	5-Feb-07	revised text to reflect null hypothesis and rejection
14	Catawaqui	16-Jan-07	3-Jan-07	Sean Watt	Other	page 35: lake evaporation numbers need to be updated to reflect conversion from pan data	Climate	Catawaqui	High	Completed	14-Feb-07	revised text
15	Catawaqui	16-Jan-07	3-Jan-07	Sean Watt	Other	pan data - add 1 for regulated flows	Hydrology	Catawaqui	High	Completed	5-Feb-07	revised table
16	Catawaqui	16-Jan-07	16-Jan-07	Ed Watt	E Watt	Add sentence that reg does not matter at this scale, but rather at Tier 1 work	Hydrology	Catawaqui	High	Completed	3-Jan-07	revised
17	Catawaqui	16-Jan-07	3-Jan-07	Sean Watt	Other	Section 2.3 - track changes marks left in text - remove	Hydrology	Catawaqui	High	Completed	3-Jan-07	revised
18	Catawaqui	16-Jan-07	3-Jan-07	Sean Watt	Other	Red text in section 2.3.2 - change to black	Other	Catawaqui	Medium	Completed	3-Jan-07	changed
19	Catawaqui	16-Jan-07	15-Jan-07	Titia Praamsma	Other	Shadow Lake formation does not dominate Wolfe and Howe Islands, in fact it is Gull River formation instead - once better mapping was seen.	Hydrogeology	Catawaqui	High	Completed	12-Mar-07	Text and map revised accordingly
20	Catawaqui	16-Jan-07	3-Jan-07	Sean Watt	Other	Figure 2.37 - public water supply source pie chart has no units	Water Use	Catawaqui	High	Completed	25-Jan-07	add units
21	Catawaqui	16-Jan-07	3-Jan-07	Titia Praamsma	Other	Table 2.31 - does not agree with other well breakdowns - clarify	Water Use	Catawaqui	Medium	Completed	25-Jan-07	revised numbers based on updated well record data set, in table and in text, and further references
22	Catawaqui	16-Jan-07	16-Jan-07	Sean Watt	Other	Table 4.14, 2 - revise numbers to reflect updated data	Other	Catawaqui	High	Completed	15-Feb-07	revised numbers
23	Catawaqui	16-Jan-07	3-Jan-07	Sean Watt	Other	Page 113 - replace eq X with 2.1	Other	Catawaqui	Medium	Completed	3-Jan-07	revised
24	Catawaqui	16-Jan-07	16-Jan-07	PR Team	Meeting Minutes	add schematic from Draft 1 and 2 back into Section 4	Other	Catawaqui	High	Completed	15-Feb-07	Older schematic added back to report, with updated numbers.
25	Catawaqui	29-Jan-07	29-Jan-07	Daim Burr	D Burr	Add Road network to maps such as Fig 2.6	Other	Catawaqui	Low	Declined		
26	Catawaqui	16-Jan-07	29-Jan-07	Daim Burr	D Burr	1.0 third paragraph from bottom: Not too sure if the word "political" is appropriate. Perhaps replaced with "to match municipal boundaries"	Other	Catawaqui	Low	No Action Required		
27	Catawaqui	16-Jan-07	29-Jan-07	Daim Burr	D Burr	1.0 second paragraph from bottom, last line: Remove the word "presumably"	Other	Catawaqui	Medium	Completed	23-Jan-07	"Political" refers to the politics of the grouping as opposed to specific political boundaries.
28	Catawaqui	16-Jan-07	29-Jan-07	Daim Burr	D Burr	2.1.3.1: A few introductory sentences on what Pan evaporation is would be useful at the beginning of this section	Climate	Catawaqui	Medium	Completed	14-Feb-07	revised text
29	Catawaqui	16-Jan-07	29-Jan-07	Daim Burr	D Burr	Pg 40, 2nd paragraph: It would be useful to explain why the average infiltration value does not change if you consider thin soil or not.	Hydrogeology	Catawaqui	Medium	Completed	16-Mar-07	Added text to identify why the change is minimal.
30	Catawaqui	16-Jan-07	29-Jan-07	Daim Burr	D Burr	Pg 40, table 2.16: I am concerned from the meaning that the ET _h threshold is 533 and that the ET _h is 453. I think that the ET _h value should be 453, which would be a derived surplus of 453 (difference of about 8%, which is probably pretty good considering all the assumptions made. The paragraph in the text below this table would then need to be revised.	Climate	Catawaqui	Medium	Completed	16-Mar-07	Further examination showed that the ET values are estimated closer to 550 with the new methods. Text revised slightly to account for differences in values.
31	Catawaqui	16-Jan-07	29-Jan-07	Daim Burr	D Burr	Pg 40, top paragraph: This paragraph could use clarification. When calculating the median value not considering thin soils over bedrock, does this mean that you are assuming no infiltration in these areas (which makes up 37% of the watershed)?	Climate	Catawaqui	High	Completed	16-Mar-07	Revised text
32	Catawaqui	16-Jan-07	29-Jan-07	Daim Burr	D Burr	In general, I still think that the infiltration rates of 0.02 for Precambrian rock and 0.05 for Paleozoic are low, especially when higher values are given for clay, however, I realize that this is a difficult value to predict. For Tier 1, it would be useful to confirm these values (by field data, as well as by modeling) as they are currently by 25% in some of the subwatersheds that are predominantly shallow bedrock areas.	Hydrogeology	All	Medium	No Action Required		Hopefully this will be considered in the Tier 1 work.
33	Catawaqui	16-Jan-07	29-Jan-07	Daim Burr	D Burr	Figure 2-16: in the areas that are predominantly shallow bedrock, the figure shows large contrasts in the infiltration coefficient. I expect that this is because of the use of soils mapping (Figure 2-14) that shows open sandy loam (which would get a high infiltration value) right next to areas of bare rock (which would get a low value). I expect in reality it is much more gradational; however, I realize that there is not much one can do to improve this characterization, other than to know of the potential problem when doing waterbudgets at the smaller Tier 1 scales.	Hydrogeology	All	Medium	Completed	16-Mar-07	Text revised to include discussion on this issue.

COMMENT ID	SWP REGION	MEETING DATE	COMMENT DATE	SOURCE	RESPONDER	COMMENT	CATEGORY	APPLIES TO	PRIORITY	ACTION	ACTION DATE	ACTION DESCRIPTION
34	Cataraqui	16-Jan-07	29-Jan-07	Dain Burr	D Burr	Pg 66: Would this be total porosity or effective porosity (interconnected porosity)?	Hydrogeology	Cataraqui	None	Undecided		It is unclear exactly what this comment refers to, even after contacting the commenter.
35	Cataraqui	16-Jan-07	29-Jan-07	Dain Burr	D Burr	Pg 98, 1st paragraph: I suggest that this paragraph be rephrased. I suggest you state something to the effect that 4% of the estimated recharge water is used, and therefore the effects on aquifer storage are considered minimal at the regional level. The current wording suggests that you can remove a years worth of infiltration before you affect the water table.	Hydrogeology	Cataraqui	Medium	Completed	14-Feb-07	text removed
36	Cataraqui	16-Jan-07	29-Jan-07	Dain Burr	D Burr	Pg 98, 4th paragraph: I suggest that you highlight consumptive takings, as this is what the 2.75 is interested in.	Water Use	All	Low	No Action R	14-Feb-07	not needed at Conceptual stage, done for Tier 1
37	Cataraqui	16-Jan-07	29-Jan-07	Dain Burr	D Burr	Section 2.7.5, 1st paragraph: Should state that a considerable portion of the domestic well water is returned to the aquifers.	Water Use	Cataraqui	Low	Completed	14-Feb-07	clarified text
38	Cataraqui	16-Jan-07	29-Jan-07	Dain Burr	D Burr	Figure 2-39: Are these only georeferenced wells, or do they include lot-centroid wells also? Should state this in legend.	Other	Cataraqui	Low	Completed		
39	Cataraqui	16-Jan-07	29-Jan-07	Dain Burr	D Burr	Section 2.7.5, 1st paragraph: Third line, should be quaternary not tertiary.	Water Use	Cataraqui	High	Completed	14-Feb-07	revised
40	Cataraqui	16-Jan-07	29-Jan-07	Dain Burr	D Burr	Section 4: For Tier 1, can use measured gradient and assumed permeability to estimate cross boundary flow. I realize for the conceptual water budget you have assumed that it is a dosed system, and there is not cross-boundary flow.	Hydrogeology	All	Low	No Action Required		For Tier 1, this may be something we can do.
41	Cataraqui	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 1: Revise paragraph above equation as previously discussed.	Other	Cataraqui	High	Completed	15-Feb-07	Revised text
42	Cataraqui	16-Jan-07	12-Jan-07	Ed Watt	E Watt	page 1, sentence after 2nd set of bullets (4 questions) - says water in and out of watershed, but infiltration and GW recharge are within watershed, rework sentence.	Other	Cataraqui	High	Completed	24-Jan-07	revise sentence
43	Cataraqui	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 2: Delete figures 1a and 1b.	Other	Cataraqui	High	Completed		
44	Cataraqui	16-Jan-07	12-Jan-07	Ed Watt	E Watt	Figure 1, 1a - not relevant, were not dealing with global water budgets	Other	Cataraqui	High	Completed	30-Jan-07	replace all three figures of 1.1 with better figure from another source
45	Cataraqui	16-Jan-07	12-Jan-07	Ed Watt	E Watt	Figure 1, 1b - misleading, evaporation does not necessarily move to clouds in the watershed and then fall back in the same watershed	Other	Cataraqui	High	Completed	30-Jan-07	replace all three figures of 1.1 with better figure from another source
46	Cataraqui	16-Jan-07	12-Jan-07	Ed Watt	E Watt	Figure 1, 1c - needs qualification of schematic - footnote on GW that SW read GW divide is the same, and that there are no diversions, as well, that no ET is shown leaving snowpack.	Other	Cataraqui	High	Completed	30-Jan-07	replace all three figures of 1.1 with better figure from another source
47	Cataraqui	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 3: Replace figure 1c with figure showing control volume. I suggest figure 1, 4 replace figure 1c with figure showing control volume. I suggest figure 1, 4 replace figure 1c with figure showing control volume. I suggest figure 1, 4 replace figure 1c with figure showing control volume. I suggest figure 1, 4	Other	Cataraqui	High	Completed	30-Jan-07	figure replaced
48	Cataraqui	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 8: For consistency with the equation from Dingman, P-Q-ET=0	Other	Cataraqui	Medium	Completed	30-Jan-07	revised
49	Cataraqui	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 11: Instead of listing the 10 active stations, could you not put "after the names of the stations that are active (with an explanatory footnote). It would help the reader and save space.	Other	Cataraqui	Medium	Completed	30-Jan-07	revised
50	Cataraqui	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 14: Add "to MAP values calculated with N less than 15. In addition, I think that the null hypothesis of the Kruskal test is that all 6 groups (i.e. stations) have identical distributions. I think that the Kruskal test is not the best test to use for this purpose. I think that there is only one ell in Kruskal.	Climate	Cataraqui	High	Completed	30-Jan-07	added " and footnote
51	Cataraqui	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 18: Add "to MAP values calculated with N less than 15. In addition, I think that the null hypothesis of the Kruskal test is that all 6 groups (i.e. stations) have identical distributions. I think that the Kruskal test is not the best test to use for this purpose. I think that there is only one ell in Kruskal.	Climate	Cataraqui	High	Completed	24-Jan-07	added " and footnote, revised text to clarify the hypotheses
52	Cataraqui	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 19: To what regions of the country do the values of 15 mm and 18 mm apply?	Climate	Cataraqui	High	Completed	24-Jan-07	added " and footnote
53	Cataraqui	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 22: I have problems with figure 2.5: first, the use of z rather than 1 as we discussed; second, the use of the variance for each station in spite of the fact that some of the samples are very small. You could make these problems go away by showing only those stations with say 20 or more complete years of data in the figure and not 1 instead of z.	Climate	Cataraqui	High	Completed	30-Jan-07	revised table title to reflect annual precipitation records
54	Cataraqui	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 23: The same comments as above apply to table 2.5.	Climate	Cataraqui	Medium	Completed	31-Jan-07	added area of Canada that is considered
55	Cataraqui	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 23: In addition, I do not know how you calculated the minimum and maximum estimated actual precipitation. I think that the 10 % applies to an individual event, and it is unclear, why do you apply +10% and -10 %?	Climate	Cataraqui	High	Completed	15-Mar-07	Modified to use " instead of "z", and put note on figure and table to denote those stations with less than 15 years of data.
56	Cataraqui	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 23: Finally, I do not know how you calculated the minimum and maximum estimated actual precipitation. I think that the 10 % applies to an individual event, and it is unclear, why do you apply +10% and -10 %?	Climate	Cataraqui	High	Completed	15-Mar-07	Modified to use " instead of "z", and put note on figure and table to denote those stations with less than 15 years of data.
57	Cataraqui	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 23: As suggested above, make it easier for the reader by using an asterisk in table 2.5 to denote stations used for ET estimation and delete the list following the table.	Climate	Cataraqui	High	Completed	15-Mar-07	Modified to use " instead of "z", and put note on figure and table to denote those stations with less than 15 years of data.
58	Cataraqui	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 23: Finally, I do not know how you calculated the minimum and maximum estimated actual precipitation. I think that the 10 % applies to an individual event, and it is unclear, why do you apply +10% and -10 %?	Climate	Cataraqui	High	Completed	15-Mar-07	Only looked at +10% to consider the undercatch.
59	Cataraqui	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 23: As suggested above, make it easier for the reader by using an asterisk in table 2.5 to denote stations used for ET estimation and delete the list following the table.	Climate	Cataraqui	Medium	Completed	30-Jan-07	revised text

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60	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 32: In the summary below figure 2.8, I think that a slightly expanded discussion is in order, which would go as follows. First, the derived ET is closest to the "true" if the P and Q values are reasonably accurate, which you believe to be the case based on the facts that the adjacent regions have very similar values for P and there is no reason to suspect a bias in the Q values. Second, you should clarify that the "estimated ET values" are Turc and Thornthwaite and both methods overestimate ET (by 10% and 20% respectively). Finally, I think that the main reason is the inadequacy of the model.	Climate	Catarequi	High	Completed	16-Mar-07	Revised text
61	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 46: Footnote should stand alone and not be part of the table caption.	Hydrology	Catarequi	Medium	Completed	6-Feb-07	revised
62	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 48: In table 2.18, I suggest that you add either record length or period of record.	Hydrology	Catarequi	High	Completed	6-Feb-07	added
63	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 49: In table 2.18, Four significant figures for MAE are a bit much.	Hydrology	Catarequi	Medium	Completed	6-Feb-07	revised
64	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 49: In table 2.18, the footnote should stand alone and not be part of the table caption.	Hydrology	Catarequi	Medium	Completed	6-Feb-07	revised
65	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 50: You should be more specific regarding stations where differences in drainage area large, and explain why.	Hydrology	Catarequi	High	Completed	14-Feb-07	Added text
66	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 54: In the first sentence of section 2.2.1, I suggest that you replace "measured with 'estimated'"	Hydrology	Catarequi	Medium	Completed	6-Feb-07	replaced
67	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 54: Also, the footnote should stand alone and not be part of the table caption.	Hydrology	Catarequi	Medium	Completed	6-Feb-07	revised
68	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 66: Too many significant figures!	Hydrology	Catarequi	High	Completed	6-Feb-07	revised
69	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 67: Too many significant figures!	Hydrology	Catarequi	High	Completed	14-Feb-07	revised
70	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 75: Combination of tables 2.25 and 2.26 would make the document easier to read and comprehend.	Other	Catarequi	Medium	Completed	6-Feb-07	revised
71	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 97: Based on the discussion at the meeting, suggest deletion of any reference to water availability in this section.	Other	Catarequi	High	Completed	14-Feb-07	revised text
72	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 101: Five significant figures in table! Also, the footnote should stand alone and not be part of the table caption.	Other	Catarequi	High	Completed	14-Feb-07	revised table
73	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 112: In Table 4.2, it would be more meaningful to the reader (and clean up the table) if you expressed both volume and uncertainty in 10 ⁻⁹ m ³ /year (Gm ³ /year ⁷).	Other	Catarequi	High	Completed	14-Feb-07	revised table
74	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 112: The footnote should stand alone and not be part of the table caption.	Other	Catarequi	Medium	Completed	14-Feb-07	revised table
75	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 112: What is your justification for using the average of derived and estimated ET? I suggest that you use the derived value.	Other	Catarequi	High	Completed	14-Feb-07	removed averaging
76	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 112: I don't think that much of the discrepancy is related to the withdrawals. When you express all volumes in consistent units, you will see that the withdrawals are "round-off" error.	Other	Catarequi	Medium	Completed	16-Mar-07	Text revised.
77	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 113: Delete figure 4.1a.	Other	Catarequi	High	Completed	15-Feb-07	removed
78	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 114: Delete figure 4.1b.	Other	Catarequi	High	Completed	15-Feb-07	removed
79	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 115: Reverse section 4, so as to delete any numerical values referring to stress.	Other	Catarequi	High	Completed	15-Mar-07	revised section
80	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page 116: Delete first paragraph of section 5.0.	Other	Catarequi	Medium	Completed	15-Feb-07	revised first paragraph to change focus
81	Catarequi	16-Jan-07	18-Jan-07	Ed Watt	E Watt	page many: Use a consistent spelling for streamflow.	Other	Catarequi	High	Completed	15-Feb-07	revised spellings
82	Catarequi	16-Jan-07	18-Jan-07	PR Team	Meeting Minutes	use period of record weighted averages for the data	Other	Catarequi	High	Completed	3-Feb-07	modified numbers to reflect period of record weighted averages
83	Catarequi	16-Jan-07	16-Jan-07	Bill Hogg	B Hogg	page 14: because you can't deprive the null hypothesis does not mean that you've proven the opposite	Climate	Catarequi	High	Completed	1-Feb-07	reverse text to reflect the hypothesis not being rejected, and an assumption of same distributions
84	Catarequi	16-Jan-07	16-Jan-07	Bill Hogg	B Hogg	page 24: the scale of the spatial variation is larger than the area	Climate	Catarequi	High	Completed	2-Feb-07	reverse text
85	Catarequi	16-Jan-07	16-Jan-07	Bill Hogg	B Hogg	page 29: EC program also contains modifications to account for water retention in the form of snow, and made available for evaporation when the snow melts	Climate	Catarequi	High	Completed	6-Feb-07	revised text
		16-Jan-07	16-Jan-07	Bill Hogg	B Hogg	page 32: as fig 2.8 shows, much of the variability is due to variability in the SWHC. Additionally, the stations with cooler T during the summer due to the Lake breeze	Climate	Catarequi	High	Completed	21-Feb-07	Modified text to reflect comment
86	Catarequi	16-Jan-07	16-Jan-07	Bill Hogg	B Hogg	page 35: EC evaporation is an estimate of potential evaporation, which is calculated in Thornthwaite	Climate	Catarequi	Medium	Completed	14-Feb-07	revised text
87	Catarequi	16-Jan-07	16-Jan-07	Bill Hogg	B Hogg	page 35: lake evaporation is reduced to account for the differen in water temperature of a pan vs even small lakes	Climate	Catarequi	High	Completed	14-Feb-07	revised text
88	Catarequi	16-Jan-07	16-Jan-07	Bill Hogg	B Hogg	page 35: the pans were only operated during the warm seasons, so average daily lake evaporation is misleading	Climate	Catarequi	High	Completed	14-Feb-07	revised text
		16-Jan-07	16-Jan-07	Bill Hogg	B Hogg	page 110: much of the uncertainty is actually due to bias common to all the measurement sites	Other	Catarequi	High	Completed	21-Feb-07	Modified text to reflect comment
		16-Jan-07	16-Jan-07	Bill Hogg	B Hogg	page 110: how is 10% of 95 = 96 ?	Other	Catarequi	High	Completed	15-Feb-07	typo, corrected to 95
89	Catarequi	16-Jan-07	16-Jan-07	Bill Hogg	B Hogg	page 110: Uncity ET also has uncertainty due to inadequacy of the empirical relationship	Other	Catarequi	High	Completed	15-Feb-07	added text

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90	Catawaqui	16-Jan-07	16-Jan-07	PR Team	16-Jan-07	16-Jan-07	moves figures to the back of report, perhaps in an appendix	Other	Catawaqui	Medium	Completed	23-Jan-07	moved figures to Appendix A
91	Catawaqui	16-Jan-07	16-Jan-07	Bill Hogg	16-Jan-07	16-Jan-07	page 22: we aren't 95% certain that the means are different	Climate	Catawaqui	High	Completed	21-Feb-07	Modified text
92	Catawaqui	16-Jan-07	16-Jan-07	Bill Hogg	16-Jan-07	16-Jan-07	page 22: most of the error/uncertainty is due to the measurement of snow and the assumption of a density of snow of 0.1 to convert to water equivalent	Climate	Catawaqui	High	Completed	15-Feb-07	added to uncertainty section
93	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	There are a number of what look like track changes 'margin lines' throughout the text (e.g. on pages 57, 55, 60, 61, 66)	Other	Catawaqui	Medium	Completed	3-Jan-07	removed
94	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	On Pg70 there is red text.	Other	Catawaqui	Medium	Completed	3-Jan-07	fixed
95	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	On Pg 113 Section X has to be updated with the actual section number.	Other	Catawaqui	Medium	Completed	3-Jan-07	added
96	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	Include Map 27 from the guidance document (Stress Assessment (Waterbeds)) which shows the watersheds to be studied in Tier 1 and the location and type (surface water/groundwater) of municipal water supplies.	Other	Catawaqui	Medium	Completed	16-Mar-07	added
97	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	On Pg 1 in the first paragraph the last sentence is a misreading. The reference to 'detailed numerical modelling' conflicts with the proposed spreadsheet model for Tier 1 on Pg124. Also, Tier 1 should, for the most part, use existing data. It is appropriate to note that through the conceptual understanding you have identified gaps in the data.	Other	Catawaqui	Medium	Completed	5-Feb-07	revised text
98	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	On Pg 1 (2nd paragraph) the 5th bullet should read "Divide the Catawaqui Source Protection Region into logical study areas to be fully further evaluated in Tier 1, and As this is a Tiered process, the word 'fully' is misleading in the context of Tier 1."	Other	Catawaqui	Medium	Completed	5-Feb-07	revised with word further, no reference to Tier 1 as this is identifying plans for the future phases, not only Tier 1
99	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	On Pg 1 (2nd paragraph) the 6th bullet should read "Determine the most appropriate model or models to be used for the Tier 1 Water Budget".	Other	Catawaqui	None	Declined	5-Feb-07	purposefully left out. Tier reference as this will help to guide all future tiers, not only Tier 1
100	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	On Pg 4 (2nd paragraph) the words "as required" or similar wording should be added to the end of the last sentence.	Other	Catawaqui	None	Declined	28-Feb-07	Wording as it implies adequate work to cover requirements.
101	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	On Pg 4 the 3rd paragraph has to be clarified. There is a reference to climate change. The impact of climate change is not being evaluated through the Water Budget process. However, a drought scenario is evaluated in Tier 2.	Other	Catawaqui	None	Declined	28-Feb-07	The sentence identifies what is needed to properly evaluate the water budget, regardless of whether the guidance specifies it should be done.
102	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	On Pg 4 (4th paragraph) the reference to the guidance document is inaccurate and should be edited or removed. The conceptual understanding was never intended to imply stress. We are showing the significance of stream water supply. In Tier 1, the specific areas are being investigated. The areas that have been identified as screen out areas that are unaddressed from a water quantity perspective. The focus remains on municipal water supplies.	Other	Catawaqui	None	No Action R	5-Feb-07	there is no reference to the guidance, however, the mention that the annual average condition temporal scale is not appropriate for stressors identification is an important point that needs to be made to ensure that future readers of the report do not try to take the data and do just that.
103	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	On Pg 6 the paragraph beginning "while five areas..." should be clarified. In particular, the Tier 1 water budget will be studied on a watershed basis. The word presumably should be removed from the last sentence of that paragraph.	Other	Catawaqui	Low	Completed	5-Feb-07	revised text
104	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	On Pg 6 (last paragraph) the last 2 sentences are premature and should be edited or removed. The decision to undertake detailed numerical modeling will be undertaken at the end of Tier 1.	Other	Catawaqui	Low	Completed	28-Feb-07	revised text
105	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	On Pg 7 (Section 3.1, 1st paragraph) the words "at a later date" at the end of the first sentence should be changed to "in Tier 1". The words "(Tier 1)" should be deleted.	Other	Catawaqui	Low	Completed	5-Feb-07	revised text
106	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	The data for Figure 2-10 is not available.	Other	Catawaqui	None	No Action R	16-Jan-07	passed out at Jan 16 meeting
107	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	On Pg 57 (Section 2.3, 2nd paragraph) has a methodology for investigating the groundwater flux to neighbouring source protection areas in Tier 1 been proposed?	Other	Catawaqui	None	No Action R	14-Feb-07	The methodology is being explored in the GW Vulnerability Assessment Report process.
108	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	For Figure 2-38, have you indicated in the text what the difference between public water supply and municipal water supplies are? Also, it would be helpful to have one symbol for those municipal systems that are surface water intakes and/or one symbol for those municipal systems that are groundwater intakes.	Other	Catawaqui	Low	Completed	14-Feb-07	Revised text wrt public and municipal supplies. There are already 2 different symbols for SW and GW municipal intakes on the map, red and green dots.
109	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	On Pg 104 (Section 2.7.2.1, 2nd paragraph) what is the source for 0.2 m3/person/day?	Other	Catawaqui	High	Completed	14-Feb-07	revised text, calculations, and reference
110	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	On Pg 112 (Section 4, table 4.2), why have the 3 municipal systems using inland water and/or groundwater and similar public systems not been included in Table 4.2?	Other	Catawaqui	None	No Action R	14-Feb-07	They are included in the SW and GW withdrawal numbers.
111	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	Do the figures on Pg 113 and 114 need to be included in the document twice? Could you refer back to the original figure numbers (i.e. Figure 1.1a and 1.1c) instead?	Other	Catawaqui	High	Completed	15-Feb-07	removed
112	Catawaqui	16-Jan-07	2-Feb-07	Laura Landrault	16-Jan-07	2-Feb-07	On Pg 116 (2nd paragraph), should the first sentence read "However, it is known that streams and private wells go dry in periods of dry weather"?	Other	Catawaqui	None	No Action R	15-Feb-07	No, there is no evidence to suggest only private wells go dry.

COMMENT ID	SWP REGION	MEETING DATE	COMMENT DATE	SOURCE	OTHER	COMMENT	CATEGORY	APPLIES TO	PRIORITY	ACTION	ACTION DATE	ACTION DESCRIPTION
113	Catawaqui	16-Jan-07	2-Feb-07	Laura Landriault	Other	On Pg 116 (2nd paragraph) it states that "Local areas will be evaluated in greater detail in Tier 1". You may want to specify subwatersheds or refer the reader to Map 27 (Stress Assessment Watersheds).	Other	Catawaqui	Medium	Completed	16-Mar-07	Referenced figure
114	Catawaqui	16-Jan-07	2-Feb-07	Laura Landriault	Other	On Pg 116 (3rd paragraph), you could indicate that the temporal scale (i.e. monthly) and the spatial scale (i.e. subwatershed) will be examined in Tier 1.	Other	Catawaqui	None	No Action Required		This is essentially what the paragraph says.
115	Catawaqui	16-Jan-07	2-Feb-07	Laura Landriault	Other	On Pg 117 (Section 6.0) it should be clear whether you are proposing to do the work in Tier 1 or highlighting areas that may require future study (i.e. not necessarily through this Water Budget module). If you are proposing to do the work in Tier 1, the work should be led to the level of effort required at Tier 1.	Other	Catawaqui	None	No Action Required		The report is not meant to guide just Tier 1 work, but all future work, and a specific reference to Tier 1 is not seen to be needed here.
116	Catawaqui	16-Jan-07	2-Feb-07	Laura Landriault	Other	On Pg 117 (Section 6.0) it should be clear whether you are proposing to do the work in Tier 1 or highlighting areas that may require future study (i.e. not necessarily through this Water Budget module). If you are proposing to do the work in Tier 1, the work should be led to the level of effort required at Tier 1.	Other	Catawaqui	None	No Action Required		They are in most cases a combination of the two, one creates/influences the other.
117	Catawaqui	16-Jan-07	2-Feb-07	Laura Landriault	Other	On Pg 123 (Section 9.0) the fifth bullet beginning "the most appropriate model or models to be used..." is not accurate. On Pg 124, the bullet beginning "The required level of ..." indicates that a spreadsheet model is planned.	Other	Catawaqui	Medium	Completed	15-Feb-07	text revised to maintain consistency across report
118	Catawaqui	16-Jan-07	2-Feb-07	Laura Landriault	Other	A similar comment applies to the paragraph beginning "And given the temporal and spatial conditions" on Pg 23. On Pg 24, the bullet beginning "The required level of ..." indicates that a spreadsheet model is planned.	Other	Catawaqui	Medium	Completed	16-Mar-07	Revised text
119	Catawaqui	16-Jan-07	2-Feb-07	Laura Landriault	Other	On Pg 23 (paragraph beginning "The Conceptual Water Budget...", 2nd sentence), the reference to local stress should be clarified. In Tier 1 the spatial scale is the reference to local stress should be clarified. In Tier 1 the spatial scale is the reference to local stress should be clarified. In Tier 1 the spatial scale is the reference to local stress should be clarified.	Other	Catawaqui	Medium	Completed	15-Feb-07	text revised
120	Catawaqui	16-Jan-07	2-Feb-07	Laura Landriault	Other	On Pg 23 (bullet beginning "Groundwater storage...") the reference to groundwater storage is misleading. Groundwater storage will not be examined in Tier 1.	Other	Catawaqui	None	Declined		GW storage needs to be considered in some fashion.
121	Catawaqui	16-Jan-07	2-Feb-07	Laura Landriault	Other	On Pg 124 (1st paragraph) clarification is required. If a municipality is switching from private wells to municipal water supply system, why would the water supply demand increase? Wouldn't the number of private wells decrease as people switched to the municipal system?	Other	Catawaqui	None	No Action Required		There is no reference to increased water usage, but it would be expected to increase as people will assume they have more water available, and therefore usage will increase.
122	Catawaqui	16-Jan-07	2-Feb-07	Laura Landriault	Other	On Pg 24 (the bullet beginning "The required level of municipal modeling") the words "for Tier 2" should be added to the last sentence (i.e. "However, specific systems/areas may require more detailed modeling, with numerical models, and the Tier One Water Budget work should identify these areas for Tier 2	Other	Catawaqui	None	Declined		This report is guiding all future work, and specific phase references are not necessarily required, needed, or wanted.
123	Catawaqui	16-Jan-07	16-Jan-07	PR Team	Meeting Minutes	check into whether water evaporation is considered twice in ET calc and lake evap calc.	Climate	Catawaqui	High	Completed	7-Feb-07	added text to confirm, as well as comparison of numbers
124	Catawaqui	16-Jan-07	16-Jan-07	PR Team	Meeting Minutes	page 48: add sentence with respect to need to identify regulated rivers at annual scale	Hydrology	Catawaqui	High	Completed	22-Feb-07	added text to confirm need for future phases, not annual scale

Peer Review Record

for the

Fourth Draft

Submitted March 30, 2007

COMMENT ID	SWP REGION	MEETING DATE	COMMENT DATE	SOURCE	COMMENT	CATEGORY	APPLIES TO	PRIORITY	ACTION	ACTION DATE	ACTION DESCRIPTION
1	Catarraqui	2-Apr-07	2-Apr-07	E, Watt	page 2, Fig. 1.1, Caption does not describe figure, Use Veissman's caption?	Other	Catarraqui	High	Completed	18-Apr-07	Revised with Veissman's caption.
2	Catarraqui	2-Apr-07	2-Apr-07	E, Watt	page 2, Below figure, Need to identify symbols since you used a different convention.	Other	Catarraqui	High	Completed	18-Apr-07	Added Veissman symbols.
3	Catarraqui	2-Apr-07	2-Apr-07	E, Watt	page 7, Last lines, You mention that only 20 meet VMO standards, but fail to mention the relevance of this fact. Why mention it?	Climate	Catarraqui	Medium	Completed	18-Apr-07	Added relevance to the text.
4	Catarraqui	2-Apr-07	2-Apr-07	E, Watt	page 7, Last lines, How can you calculate, with any confidence, a standard error with only 20 values?	Climate	Catarraqui	High	Completed	23-Apr-07	Removed estimates for less than 15 years of data
5	Catarraqui	2-Apr-07	2-Apr-07	E, Watt	page 16; Table 2.5, I think that showing confidence limits is a bit of a stretch. It would be safer to just tabulate the standard error (where N exceeds 20).	Climate	Catarraqui	High	Completed	23-Apr-07	Removed estimates for less than 15 years of data
6	Catarraqui	2-Apr-07	2-Apr-07	E, Watt	page 28; Figure 2.6, Ridiculous value of R-squared!	Climate	Catarraqui	High	Completed	23-Apr-07	Removed R squared value, as well as equation.
7	Catarraqui	2-Apr-07	2-Apr-07	E, Watt	page 31; Below Table 2.16, The text in the eight lines below the figure is incomprehensible to me and there is a dangling equal sign.	Hydrogeology	Catarraqui	High	Completed	23-Apr-07	Reorganized text.
8	Catarraqui	2-Apr-07	2-Apr-07	E, Watt	page 32; First paragraph, This is a key point and needs further comment (you have the assumption that the immediate subsurface layer, which receives the infiltrated water, is linked by a pathway to the aquifer. This assumption may be true for a small field suitable for a septic tank and tile bed or for small watershed with a metre of clay over fractured limestone and not tile-drained, but it is certainly not generally the case for all watersheds in eastern Ontario. You can make the comment and say that this will be an important part of Tier 1 work.	Hydrogeology	Catarraqui	High	Completed	23-Apr-07	Added text to capture this comment.
9	Catarraqui	2-Apr-07	2-Apr-07	E, Watt	page 36; Table 2.18, You should add a footnote for Bulls Creek so as not to leave the impression that a topographic map or a digital model could be that far out.	Hydrology	Catarraqui	High	Completed	23-Apr-07	Added additional text to satisfy this comment, rather than a footnote.
10	Catarraqui	2-Apr-07	2-Apr-07	E, Watt	page 36; Second last sentence, The Little Catarraqui Creek record is too short to identify a significant trend. Also, the basin has changed due to urbanization. You should mention these qualifiers.	Hydrology	Catarraqui	High	Completed	18-Apr-07	Added sentence to the text.
11	Catarraqui	2-Apr-07	2-Apr-07	E, Watt	page 36; Last paragraph, Fair enough, but would it not be safe to say that you have found no evidence to refute the usual assumption that GW _W = GW _{WT} (for the entire watershed)?	Other	Catarraqui	High	Completed	23-Apr-07	Added text to include urbanization concerns.
12	Catarraqui	2-Apr-07	2-Apr-07	E, Watt	Page 12; For trend calculation it is important to note that the Zhang and Meeks references adjusted the precipitation data to account for known inconsistencies in measurements over time which should result in more accurate assessments of precipitation.	Other	Catarraqui	High	Completed	18-Apr-07	Added additional text to paragraph.
13	Catarraqui	11-Apr-07	11-Apr-07	B, Hogg	Page 27; 3rd paragraph, There is nothing incorrect here but you may want to note for future reference that, as you already noted, precipitation may well be underestimated by 10% which would increase the derived evapotranspiration and make the Thornthwaite estimate of evapotranspiration closer to the derived value than appears from these calculations.	Climate	Catarraqui	High	Completed	18-Apr-07	Added sentence to reflect additional information.
14	Catarraqui	11-Apr-07	11-Apr-07	B, Hogg	Page 31; See my comment about the effect of probable precipitation objective, or was this something identified by others. If it was an added objective, then you may wish to identify it as such.	Climate	Catarraqui	High	Completed	18-Apr-07	Added sentence to reflect additional information.
15	Catarraqui	11-Apr-07	11-Apr-07	B, Hogg	Page 31; See my comment about the effect of probable precipitation objective, or was this something identified by others. If it was an added objective, then you may wish to identify it as such.	Climate	Catarraqui	High	Completed	18-Apr-07	Added sentence to reflect additional information.
16	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	Low	No Action Required	23-Apr-07	Climate change is identified in the Guidance, thought not to be considered in great detail.
17	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "You may want to add in a few words, that these values are for the entire study area just to add clarity"	Other	Catarraqui	Medium	Completed	18-Apr-07	Added text to clarify
18	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	Medium	Completed	18-Apr-07	Added text.
19	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
20	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
21	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
22	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
23	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
24	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
25	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
26	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
27	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
28	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
29	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
30	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
31	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
32	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
33	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
34	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
35	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
36	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
37	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
38	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
39	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
40	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
41	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
42	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
43	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
44	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
45	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
46	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
47	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
48	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
49	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
50	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
51	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
52	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
53	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
54	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
55	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
56	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
57	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
58	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
59	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
60	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
61	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
62	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
63	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
64	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
65	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
66	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
67	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
68	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
69	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
70	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
71	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
72	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
73	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
74	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
75	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
76	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
77	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
78	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
79	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
80	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
81	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
82	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
83	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
84	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
85	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace" for municipal purposes is 3.333....."	Other	Catarraqui	High	Completed	18-Apr-07	Softened text.
86	Catarraqui	16-Apr-07	16-Apr-07	D, Burr	Page 18, 3rd paragraph, "Better to replace"						

COMMENT ID	SWP REGION	MEETING DATE	COMMENT DATE	SOURCE	COMMENT	CATEGORY	APPLIES TO	PRIORITY	ACTION	ACTION DATE	ACTION DESCRIPTION	
22	Cataaqui		16-Apr-07	D Burr D Burr	<p>Page 75, 2nd paragraph: The approach was taken that the annual withdrawal is calculated by assuming that the average daily withdrawal is half the maximum permitted withdrawal. For the systems you mentioned, there should be annual use info, especially the larger intakes so no need to make the approximation. For comparison for future use, then the volumes should be increased to reflect increase in use (this could be left to Tier 1). The municipalities would have projected increase usage info.</p>	Water Use	Cataaqui	Medium	No Action Required	18-Apr-07	<p>Approach is not exactly as described, the PTTW gives Max Daily Use estimates, as well as Max Days of the Year use takes place, and Max hours per day that the use could take place. The information was used to estimate an Annual Withdrawal, assuming that water would not be withdrawn at the Maximum Rate for the Maximum Hours and Maximum Days of the Year. The Maximum Rate would be 60% of the Maximum Rate and the Maximum Days would be 60% of the Maximum Rate and Hour are probably estimated using mid-summer not weather values, and other times of the year, water use is around 1/2 of this time. The specific WTP data does work out to 50% of daily maximum, but the other water use categories do not necessarily work out the same way. Actual use information has been requested from the municipalities, but has not yet been received, so the PTTW estimations were used instead.</p>	
23	Cataaqui		7-May-07	L Landraut Other	<p>Dec 06 Draft comment 118: A similar comment applies to the paragraph beginning "And given the temporal and spatial conditions..." on Pg123. On Pg124, the bullet beginning "The required level of ..." indicates that a spreadsheet model is planned. New Comment: (p83 Mar30 draft) The revised text does not address the comment. Suggested alternate wording: Given the temporal (i.e. annual) and spatial (i.e. watershed) conditions, the CSWA watersheds can not yet be identified. This will again be better explored further in Tier 1 (and further) work. However, it is expected that the criteria set in the guidelines for modelling will not be met due to lack of useful data. Specifically, it is unlikely that any full watershed complex models will be needed at this time, as there are minimal inland municipal drinking water systems. Perhaps, on a subwatershed basis, more detailed modeling will be required. Through Tier 1, further modeling requirements will be assessed.</p>	Other	Cataaqui				<p>Some of the text was changed as follows. Given the temporal and spatial conditions specified in this report, the ultimate modeling which best suits the CSWA watersheds can not yet be identified." was changed to "Given the temporal (average annual) and spatial (full CSWA) scales specified in this report, the ultimate modeling which best suits the CSWA watersheds can not yet be identified." Any full watershed models was changed to "any complex models". I feel that any more changes remove the information that is specifically included to act as a base document for all future work, not just Tier 1 work within SWP.</p>	
24	Cataaqui		7-May-07	L Landraut Other	<p>Dec 06 Draft comment 96: include Map 27 from the guidance document (Stress Assessment Watersheds) which shows the watersheds to be studied in Tier 1 and the location and type (surface water/groundwater) of municipal water supplies. New Comment: Only current municipal supplies, and not future municipal supplies, should be identified on Map 27.</p>	Other	Cataaqui				<p>This map is already included as map A9.1 Tier 1 Spatial Scale Considerations. As stated above, the future municipal supply locations are important to future water budget work, and need to be included here.</p>	
25	Cataaqui		7-May-07	L Landraut Other	<p>Dec 06 comment 113: On Pg 16 (2nd paragraph) It states that "Local areas will be identified in the future." This is not clear. New Comment: (p88 Mar30 draft) The original comment was addressed. However, the heading was from "Areas of Stress" to "Areas of Concern". This should be changed back to "Areas of Stress" for consistency with the guidance.</p>	Other	Cataaqui				<p>The phrase "Local areas" was hesitant to use the word stress as they feel it is not clear. The heading was changed to "Areas of Stress" or "Areas of Concern" in the document that reflect the guidance term to "stress" or another wording which alludes to the overall consideration of stress without using the word. If the terminology does not specifically allude to the guidance version of "stress", I have left just stress.</p>	
26	Cataaqui		7-May-07	L Landraut Other	<p>Dec 06 Draft comment 97: On Pg 11 in the first paragraph, the last sentence is a misreading. The reference to "detailed numerical modelling" conflicts with the proposed spreadsheet model for Tier 1 on pg124. Also, Tier 1 should, for the most part, use existing data. It is appropriate to note that through the conceptual understanding you have identified gaps in the data. New comment: (p1 Mar30 draft) The reference to "detailed numerical modelling" was clarified with the word "anywhere". However, the sentence still implies that the data gaps have to be filled in order to do the water budget work. Suggested alternate wording: "It will also identify the areas where more detailed modeling will be required."</p>	Other	Cataaqui	Medium	Completed	16-May-07	<p>Revised text with Laura's input. The last sentence was changed from "refine the future phase Water Budget Models and any more" to "refine future phases of water budget modeling and any more". This was agreed to reflect my feeling that it needed to be said to account for possible future work, but also reflect Laura's thought that it implied the work was being done as part of this phase of SWP, which was not the intent.</p>	
27	Cataaqui		7-May-07	L Landraut Other	<p>Dec 06 comment 119: On Pg123 (paragraph beginning "The Conceptual Water Budget..." 2nd sentence), the reference to local stress should be clarified. In Tier 1 the spatial scale is the subwatershed. New comment: (p83 Mar30 draft) This comment was not addressed. Subwatershed and not local stress will be addressed in Tier 1. Also, the first sentence of this paragraph was changed and requires clarification. The conceptual water budget was not designed to show stress. The water demand equation is introduced at Tier 1.</p>	Other	Cataaqui				<p>The text was changed from "local stresses" to "local (watershed/subwatershed) stresses". This would appear to alleviate Laura's concern for having the sites too small, and my consideration that they are really local sites.</p>	
28	Cataaqui		7-May-07	L Landraut Other	<p>Dec 06 Draft comment 108: For Figure 2-38, have you indicated in the text what the difference between public water supply and municipal water supplies are? Also, it would be helpful to have one symbol for those municipal systems that are surface water intakes and/or one symbol for those municipal systems that are groundwater intakes. New comment: The symbols for municipal surface water and groundwater intakes are difficult to find in the guidance. I request that they be highlighted. Perhaps these symbols can be increased in size so they stand out from the others.</p>	Other	Cataaqui	Low				<p>The municipal intake symbols were changed to triangles instead of circles to better show them, and the difference between the other public water supplies.</p>

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23	Cataaqui		7-May-07	L. Landraut	Other	Other	Cataaqui	Low	Completed	16-May-07	Revised text with Laura L's input. The text was changed from "The specific model selection will be more critical when detailed numerical modelling is required," to "The specific model selection will be more critical if and when detailed numerical modelling is required." I slightly my concern that at some point in the future (or necessarily within SWP) numerical modeling may be needed, and Laura's concern that it implied that it was going to be done under SWP.
30	Cataaqui		7-May-07	L. Landraut	Other	Other	Cataaqui	Low	Completed	16-May-07	Revised text with Laura L's input. The text was changed from "Completed with later phases (Tier 1 and beyond) as required," to "Completed with later phases (Tier 1 and beyond) as required." This was agreed to continue to satisfy my point that the "guidance" was restrictive in the work that could be done.
31	Cataaqui		7-May-07	L. Landraut	Other	Other	Cataaqui				This section is stating what should be considered at the Tier 1 stage. I feel that given the conditions of the watershed, it is negligent not to consider the costs associated with later phases (where Laura was in attendance, and agreed to a peer review meeting) (where Laura was in attendance, and agreed to a peer review meeting) (where Laura was in attendance, and agreed to a peer review meeting) that if the costs associated would not add to the overall budget. It was acceptable.
32	Cataaqui		7-May-07	L. Landraut	Other	Other	Cataaqui	High	Completed	16-May-07	Revised text with Laura L's input. The text was changed from "And, some estimation of climate change is required to evaluate the impact of climate change on the supply of demand" to "And, some estimation of climate change (such as comparison to a low water year or years) is needed to evaluate even current conditions, and future change in water supply or demand." This was agreed to reflect my insistence that climate change must be considered in order to properly complete a water budget, as well as the method I was going to use, looking at existing (low water) data and comparing it to a low water year (or years) to evaluate the impact of some climate change models, and the guidance's statement that climate change models are not to be used. It should be noted that on page 6 of the March 30, 2007 guidance module, climate change is listed as something to be considered, and on page 11 states that it can be done through drought scenarios (which is what I plan to do, again on page 19, saying climate change scenarios are not to be used, but that drought conditions should be considered, and the same on page 137.
33	Cataaqui		7-May-07	L. Landraut	Other	Other	Cataaqui	Medium	Completed	15-May-07	Added "private" to specify the specific wells. The text was changed to add the word "private" in front of wells, as there is no evidence at this time that any wells other than privately owned wells have ever gone dry. This was agreed to satisfy both sides' concerns.
34	Cataaqui		7-May-07	L. Landraut	Other	Other	Cataaqui				One of the requirements of the document is to detail future work. This section accomplishes that task, though it does not completely cover all the work that could/should be done in the future. It is not intended to be a specific list of Tier 1 work, but rather work for the future. Being that this is a first stage document for water budget work in the watershed, it is not intended to be a final document. There is no mention of how to estimate consumptive use in this section.

