# **Comments on the CIWQS Draft Quality Assurance Plan**

#### General

Comment No.	Commenting Party	Draft QAP Page	Comment	Response
1	Jeff Barnickol		Nice first draft! As discussed in the Oct. 30 BRT meeting, an effort needs a first draft like this to capture what has been orally discussed by many and begin the process of making sure we are all on the same page. Also, by providing something reviewers can react to, it stimulates focus on evaluating the proposed approach.	Comment noted.
2	William Ray	N/A	I suggest that the document be rewritten or at least have removed any reference to the assessment of quality of the data or in the assertion that the data be of known quality for data transferred from outside sources. Although not a desirable start as the database will still be subject to the GIGO rule (Garbage in – Garbage out) for data from outside sources, it will bring the document into alignment with its intended actions. I also suggest that the document provide more info regarding the process and assessments that will be used to assure quality of data within this scope	For clarity, I've included a table of what is and isn't covered by the CIWQS QAP. We are counting on the QMP to cover the programs' quality assurance. This document covers only the database and should work in conjunction with the QMP. The QMP and its accompanying documentation handle data coming in. Once the QMP is completed, staff working on it will provide us with text to add to our QAP.
3	Val Connor	N/A	Incorporate the Principle Operating Directives.	Agree. See Section 3.
4	Dan Radulescu	N/A	This is a very complex document covering a lot of terminology, concepts and procedures. Without more detail in some of the bulleted items, it is difficult to comment specifically. For example, what is the standard to determine when there is a data entry backlog, sec. 7.2.6?	Noted.
5	Dan Radulescu	N/A	Who is the actual audience intended to review it and provide comments? How will the "average" user contribute to this?	Both external and internal audiences are meant to review and comment. I consider the "average" user a subject matter expert.

6	Dan Radulescu	N/A	The description of CIWQS needs more clarity. It may be an "effort" but is also the "TOOL" for our informational work and beyond. At least, State Water Board members and Executive management made it clear that CIWQS is the "tool" for present and the foreseeable future. See for example section 7.2.3. defining CIWQS as a decision support system. I recommend that a single definition for CIWQS to be used in all CIWQS related documents.	Agree. The Water Quality Data Team is working on a universal definition based on the Principle Operating Directives, which I drew upon for the definition of CIWQS in the QAP.
7	Dan Radulescu	N/A	As a framework of ideas, the QAP is a very good first draft. However, its completion depends on many future actions, e.g. State Water Board QMP, as stated in Introduction, SOPs, etc. It is unclear how the document will be finalized to incorporate those future actions.	SOPs are included as appendices so that they can be revised without changing the QAP. When the QMP comes out, the QAP will have to be reassessed and go out for comment.
8	Dan Radulescu	N/A	It is also important to state in the preamble that, as any other system, CIWQS's adequate operation depends on the adequate operation of each component. That ranges from the acceptable and prompt data entry to properly designed and functioning hardware and software, to correctly designed reports and other tools, to adequate allocation of resources and commitment from the State Water Board to fund those resources. It may seem trivial or unrelated to Quality Assurance but without those commitments, the document will be only a theoretical exercise. That also includes training, audits, respecting PODs, etc. Quality assurance cuts through all those elements and each may have its own unique needs and approaches. I would recommend that the QAP reflect this reality and makes the proper references.	Agree. Subsection 1.4 has been added to discuss resources.
9	Dan Radulescu	N/A	The purpose is vague: the QAP is meant only for accuracy of data entered? I suggest a redrafting of the Purpose section to reflect the true aim and range of issues covered by the document. See also Quality Objectives section proposed additions.	Agree. Instead of stating the purpose of the QAP, I included the purpose of the database. Please note the new language under purpose.

10	Dan Radulescu	N/A	The relationship of this document with the SOPs. It seems that many sections of the QAP must refer specifically to SOPs since many of the detailed issues presented in the sections of the QAP will be outlined in more detail in SOPs. There are 20 SOPs listed so far. Who will review and comment on them?	The BRT approves the SOPs. SOPs with a larger focus (training, auditing) will go out to a larger audience for comment before the BRT approves them.
11	Dan Radulescu	N/A	In some of the flowcharts, a Contractor use is mentioned. I assume the QAP apply to outside contractors too and they must abide by them.	Yes.
12	Dan Radulescu	N/A	I suggest that all CIWQS related documents, including PODs, SOPs, QAP, use the same terminology and wording. It is essential to use the same terms throughout the various documents to avoid confusion.	Agree. This is our intent moving forward and as we revise older documents.
13	Dan Radulescu		I propose the addition of a section and SOP for Information Data Resources Management Plan (IDRMP). I believe that IDRMPs are an essential component of the CIWQS architecture and operation. The IDRMP must answer to the questions on how much data is expected to be entered by period (e.g. day, week, month, etc.) by the dischargers, how much by staff, how much time it takes to perform this, staffing needs per industry standards, future growth, etc. They will identify and outline the data entry needs, resource needs and allocation, time line standards for data entry, quality assurance and should be coordinated with Data Verification SOP, etc	
14	Jarma Bennett		I'm encouraged that we are going to have a QA plan for CIWQS. I think more discussion on how the series of questions developed will be used is necessary.	Agree. Language has been added to what is now Section 6.1.

15	Christine Boschen	I am encouraged to see a move towards more structure in our processes. I appreciate (and it's obvious that) a lot of careful consideration and hard work went into this document. (By the way, Erin—your transmittal e-mail was helpful because it clearly identified the importance of this document as well as a deadline by which you needed comments back. Also helpful for stragglers like me was your reminder e-mail. Good job.)	Comment noted.
16	Christine Boschen	I think we need to give the new procedures a test run, on a specific manageable-sized project, so we can get used to the new manner of communication and documentation. People will need practice and reinforcement for the new system to take hold. We all need to clearly understand where we fit in and what our tasks and responsibilities are.	Agree. This is where communication is critical. The QA Lead and Communication Lead must coordinate to ensure the QA portion of the Communication Plan is implemented.
17	Christine Boschen	changed dramatically since the instructions were provided from SWRCB. I'm going to have to do the same for	This is due to a lack of communication and creativity. We need to ask the various communities how they want information conveyed to them and document it in the Communication Plan.
18	Christine Boschen		Comment noted. This should be addressed by the Water Quality Data Team.

19	Christine Boschen	"Renegade Regions"—why are they renegade? Probably because they don't have trust that CIWQS will not mess up their records. You have to first demonstrate that the interfact is friendly and the data that already is in the system is accurate before you can expect those rogue regions to start participating. Once you (and by you, I mean we—all of us CIWQS participants, but mainly SB staff) can show that the database functions and that reports draw accurate information, you will have the moral ground to stand on, by which to pressure use by all the regions.	Agree. Remove the term "renegade" and also refer to the State Board programs that use CIWQS.
20	Christine Boschen	I have a fundamental concern (and have yet to be explained out of my position) that we need to use Discoverer as our main reporting tool rather than building discrete hard-wired reports. I think that should be captured in here, too.	Comment noted. This should be addressed by the Water Quality Data Team and Reports Team.

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21	Dan Radulescu		the yet to be released CIWQS Governance document.	I discussed what we have been doing and only referenced the future goverance document because it hasn't been written yet. Note: The QA organizational structure looks specifically at QA activities.
22	Jeff Barnickol	7	I would add the following bullets: Storing administrative and performance data about those the water boards regulate (I use the term data rather than information because I think the database generally stores data, and it becomes information when we associate it in various combinations through our reports, etc.)  Storing data about water resource conditions in California	Agree. Add bullet that says, "Storing administrative and performance data about regulated facilities." I'm not sure what will happen with the AMM module and so I think we should hold off on adding the second bullet.

23	Gary Stewart		Not all data that was migrated from other systems should be considered "historic". A significant portion of the data is still being actively used and, as such, should be subject to QAP and verification/validation. Also, the last sentence implies that only the migrated data " was not subject to a QAP and was neither verified nor validated." Most of the data that is currently being entered is also in this condition.	Agree. Change "historic" to "migrated" where appropriate.
24	Mary Randall	7	Suggests first paragraph read: California's Integrated Water Quality System (CIWQS) is an enterprise database that tracks information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities for the State Water Resources Control Board (State Water Board) and its stakeholders. It was developed in 2005 to replace the existing [whatever SWIM stood for] (SWIM) database and it's accompanying Compliance Module.	Change: "California's Integrated Water Quality System (CIWQS) is an enterprise database that tracks information about places of environmental interest, manages permits and other orders, tracks inspections, violations and enforcement activities for the State Water Resources Control Board (State Water Board) and its stakeholders. It was developed in 2005 to replace the existing System for Water Information Management (SWIM) database and its accompanying Compliance Module."
25	Mary Randall	7	Suggest 1.2 paragraph read: This QAP describes the standards, processes, and procedures used to ensure the qualitative and quantitative accuracy of data entered into CIWQS. The aim of the CIWQS database is to provide one central location to store data entered by staff and stakeholders from many sources to enable users (staff, stakeholders and the public) to access this vast array of information by:	Change: "The aim of the CIWQS database is to provide one central location to store data from many sources. It enables users (staff, stakeholders and the public) to access this vast array of information by:"  Note that this language has been moved to Section 1.1.
26	David Leland	8,9	The discussion of data quality indicators is very vague	Agree. See response to comment 14.
27	Jarma Bennett	7	Section 1.2: Consider using the term "migrated" instead of "historical." I think of historical as no longer "active" but not all migrated data is inactive.	Agree. Change "historic" to "migrated" where appropriate.

No Comments

## Section 3

Comment No.	Commenting Party	Draft QAP Page	Comment	Response
28	Mary Randall	10	linese entities are or a solirce that reader to do to –see	Once the Governance Document is written, I will reference it here.
29	David Leland		There should be an org chart too, for Section 4 to make any	Agree. However, the Governance Organizational Chart is in draft and I didn't want to hold up the QAP waiting for its completion. I've added an explanation under sections 3 and 4.

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30	Gary Stewart	10 & 11	is being developed, which may clarify roles and responsibilities. For example, there is no mention of a CIWQS Sponsor, nor a QA Team on the current document. Also, I had understood that the QA Team functioned in a	The Governance Document hasn't been written. Therefore, the QAP documents what we have been doing. Currently, the BRT is acting as the QA Team as well. The QA Team Leader is a member of the BRT and the BRT is the QA-related decision making body. As with Business Rules, when we need help with implementation or decision making, the BRT elevates the issue to the Executive Committee through the QA Team Leader.
31	Gary Stewart	10	Is there a "QA Team", or just a "QA Team Leader"?	Both. See response to previous comment.

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32	Gary Stewart	11	Shouldn't the QA Team be conducting the audits, rather than the BRT?	The BRT is acting as the QA Team and will be overseeing the auditing process. The BRT will not be conducting an audit. This will be done by a third-party.
33	Mary Randall	10	Suggests: need to add "QA Design Team," classification of who CIWQS sponsor is and who they report to; whether CIWQS sponsor guarantees funding for implementing QAP; tell how many people are on the Executive Committee and how they are selected; who the QAP Team Leader is and who they report to; and a definition of the BRT.	Agree. Clarification is needed. The names of people on the various committees is in the Appendix 1, which is now noted in what is now Section 5. Section 5.6 has been added to describe the QA Design Team.
34	David Leland	10	Section 4.1: CIWQS Sponsor. Who is this? Where does this person sit in the SB org? in the CIWQS org?	As noted in Appendix 1 (which I've now noted in section 4), the CIWQS sponsor is Jonathan Bishop. He sits on both the CIWQS Executive Committee and on the MCC.
35	David Leland	10	Section 4.2 Who is on the Exec Committee?	See Appendix 1.
36	David Leland	10	Section 4.3 second bullet. Communication from whom? This section should note that the QA Team Leader approves the QAP.	Agree. Added: "from CIWQS users, the BRT, and CIWQS Coordinators" to the Executive Committee. Added: "• Is the first to sign off on the QAP"
37	David Leland	11	Section 4.4. Does the BRT provide recommendations to the QA Team Leader re approval of the QAP? Don't see that here.	Yes. Add: "• Develops data quality objectives in the QAP• Provides comments on the QAP"
38	David Leland	12	Section 4.5. How will they be utilized? When?	QA consultants have been providing guidiance and assistance in the development of the QAP and several SOPs. They will be conducting a third-party audit early next year (2008). The State Water Board QA Program Manager has provided comments on this QAP and will be the second signature of approval for this document.

39	David Leland	12	Section 4.6 Correct singular to plural in first three bullets. What is the Risk Management Team? What is the CIWQS Maintenance Team?	Correction made. Added the following definitions to the glossary: "Risk management is the systematic process of identifying, analyzing, and responding to project risks. Project risks are factors that jeopardize the successful accomplishment of project goals."  "The CIWQS maintenance team is comprised of members from the Divisions of Water Quality and Information Technology, as well as the contracted development staff. The maintenance team was brought together to solve various maintenance items as prioritized by the Division of Water Quality."
40	Dan Radulescu	12	Section 4.6: It is stated that CIWQS Coordinators have responsibility. It does not specify what kind of authority they may have. Typically, it is not a good practice to assign responsibility without some kind of authority. I suggest inserting language outlining the range of authority CIWQS Coordinators may have.	The CIWQS Coordinators are our main source of input.
41	Jarma 10	10	Section 4.2: What is meant by "obtain support for the BRT?"	Deleted "or obtain support for the BRT."
42	Jarma Bennett	10	Section 4.3: I suggest using "reviews" instead of "oversees." I think of oversees as more of a management/responsibility role, which hasn't been the case of the QA Team Lead with enhancements to the system.	Agree. Made the change.
43	Jarma Bennett	11	Section 4.4.2: Since there are several responsibilities here, this section should be multiple bullets. I think the last thought, "programmatically ensure that quality is built into fixes and related services," should be under general because it doesn't really seem like communication.	Agree. Changed to: "• Provide feedback to the QA Team Leader • Detect system problems • Discuss alternative solutions" and moved "•Programmatically ensure that quality is built into fixes and related services" under the general section.
44	Jarma Bennett	11	Section 4.4.3: The first two bullets don't seem consistent with the auditing SOP.	Agree. Deleted second bullet and changed the first bullet to read, "• Oversees audits, and reviews specified deliverables according to the QAP

45	Jarma Bennett	12	Section 4.6: Please define "system failures."	System refers to a procedure, like those found in the SOPs. Definition added to the glossary.
46	Jarma Bennett	13	Section 4.8.2: The project manager shouldn't be responsible for ensuring all staff understand QA activities. Maybe either make the position responsible for assisting in this duty or make him responsible for all IT staff.	Agree. Changed "all" to "IT."
47	Jarma Bennett	13	Section 4.8.2: Evaluates implementation effectiveness of what? Does this refer to CIWQS, fixes, or QA activities.	Added: "of CIWQS fixes and maintenance" after "evaluates implementation effectiveness."
48	Jarma Bennett	13	Section 4.8.2 and 4.8.3: These sections refer to a workplan, project plan, and project management plan. I am not certain what all of these are or if we have all of them and I don't think the BRT has approved the project plan. If these are all different documents, maybe define them?	These are IT documents. Add to references.
49	Jarma Bennett	13	Section 4.8.2: Both the QA Team Lead and the project manager have the responsibility to ensure that the BRT has access to project information in order to carry out the activities defined in this QAP. I think only one of them should have the ultimate responsibility and the other one can "provide" or assist.	Agree. This is the role of the QA Team Leader. Moved bullet to section 4.3.
50	Jarma Bennett	13	Section 4.8.3: Change the first bullet to "ensures that the CIWQS Data Design document is updated" because that person likely won't do it themselves.	Agree. Made the change.
51	Jarma Bennett	13	Section 4.9: Change first bullet to "perform technical and programmatic project activities including database design and issue resolution testing and implementation."	Agree. Made the change.
52	Jarma Bennett	14	Section 4.9: The second and third bullet seem to be more the project manager's responsibility.	Agree. Moved bullets to section 4.8.1.
53	Jarma Bennett	14	Section 4.9: Making IT resources available seems more like Amy's job?	No change. The CIWQS FSR lists it under the project managers tasks.
54	Christine Boschen	13	Section 4.7: Bullet 5: Where it says that staff shall be adequately trained/experienced/educated, etc., add "and has technical support as needed from on-call contractor/s."	Agree. Made the change.

1 55	Christine Boschen	14	which such updates will be created? I suggest they should be	Ron Robinette is our project manager for CIWQS. This should be much more doable with the new quarterly
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56	Jeff Barnickol		Similar to our discussion at the Oct. 30 BRT, I think is would be helpful to organize the indicators into sub-categories of programmatic and IT.	Agree. I did my best to separate the indicators, though some categories overlap.
57	Gary Stewart		Mailing addresses are tied to parties, not places. So the question should read, "Do addresses match the correct party?"	Agree. Changed to: "organization or person (i.e., party)."
58	Gary Stewart		Does "assessed fees" in the forth bullet really mean "assessed liabilities" (ACLs, MMPs)? If so, I suggest a new question be added, as follows, "Does the database correctly reflect filing fees received?" We should not focus only on liabilities. Also, filing fee checks are received by Regions, not Accounting. So, maybe we need another bullet similar to the final one that applies to Regional Board accounting.	Changed "assessed fees" to "billing codes."
59	Gary Stewart	17	What is a "data environmental sample"?	Delete. This is not covered by the scope of the QAP.
60	Gary Stewart		Delete the word "historical" throughout the section, unless this section is supposed to pertain to data that is in the system that we no longer or very seldom use. However, if this is the case, then do we really care that much about the QA of that data? Shouldn't we focus on the migrated data that is still in use, rather than the "historical" data?	Agree. Deleted the word "historical."

61	Val Connor		Quality Indicators: Add a paragraph discussing how we plan to address the questions.	Agree. Section response to comment 14.
62	Jarma Bennett	14	How will these series of questions lead to us knowing the quality of our data. Will someone go through these questions and get answers? I think the process should be described here.	Agree. See response to comment 14.
63	Jarma Bennett	14	Section 5.2: I think the first bullet should be changed to something like "Does the information in the report match the source data?" to try to get away from the issue of "programmatically correct." For instance, if a permit was adopted on October 5, 2007 and it says it expires October 5, 2012. The report should say October 5, 2012, even though this is incorrect.	Agree. Changed to: "Does the information in the report match the source data?"
64	Jarma Bennett	14	Section 5.2: I think the third bulled should be removed. I don't see what the user wants or expects reflecting on the quality of our data or us following protocols. The user may expect something that contradicts our protocols.	This question is necessary to determine whether the data is meeting its need for decision making. No change.
65	Jarma Bennett	16	Section 5.6: Is the third bullet about data entry or about data entry times. If it is about times, the word "time" should be in there. If it is about data entry, it should be moved.	Agree. Changed to: "data entry time-related."
66	Jarma Bennett	17	Section 5.10: It doesn't seem like this section applicable to CIWQS?	Section deleted. See response to comment 59.
67	Jarma Bennett	17	Section 5.13: I think "collected, analyzed" should be removed because it doesn't seem appropriate here.	Agree. Changed to, "• Was historical migrated entered and reported under an approved quality system document?"
68	Jarma Bennett	19	Section 5.17: I don't think the second and third bullets fit in this section.	Agree. Changed to: "• Are the data entry timelines communicated to and understood by Regional Boards and State Board CIWQS programs? • Are Business Rules for data entry times current and assessible?"

69	Jarma Bennett	19	Section 5.18: I think "all expected functions" should change to "all documented functions" or something. Expectations aren't always realistic.	
70	Christine Boschen	15	Section 5.2: What are the CIWQS protocols for reports? We need protocols for reports! The protocol should start with restructure and comprehensive design of the Disco EUL.	Comment noted. This will be addressed in the Discoverer-related SOPs.
71	Christine Boschen	16	Section 5.7: Second bullet: This would be helpful. I've been in NPDES a short while, and specifically where to enter and what to enter for billing is a mystery to me. Those who understand and know how this works have an institutional memory left over from having participated in SWIM, but I don't know where, if at all, it is documented.	Comment noted.
72	Christine Boschen	17	Section 5.9: The current online help is not adequate, especially because it is outdated for most modules. I like the idea of a bubble pop-up help feature, while you're in CIWQS (instead of having to go back and forth from the intranet home page and the databasenot many of us have two monitors yet.)	Agree. This is noted in Appendix 4.
73	Christine Boschen	17	Section 5.10: I'm not sure what this section refers to, but if it refers to adding functions to the main regulatory purpose of CIWQS, this is my 2 cents: I think CIWQS "powers that be" should resist the urge to bring into CIWQS other databases that are currently independently functional. Why break (or risk breaking) what isn't broken? Let the SWAMP database be SWAMP. Borrow ERS technology from R2 and use it as a model for e-reporting in CIWQSit is OK to not reinvent a wheel when that wheel is functional and has good user buy in from the internal and external community already.	

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74	David Leland	21	Does the manual provide a protocol or methodology for	The Testing Manual is specific to enhancement, software patches, etc. Language will be added to section 5 on how we will use the questions.

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75	Jeff Barnickol	21	Suggest second bullet read: "Gain stakeholder confidence by making accurate, complete information available to all stakeholders in a timely manner	Agree. Change made.
76	Jeff Barnickol		I suggest this would be clearer if organized into the categories "immediate steps" and "ongoing steps and adjustments."	Immediate steps are listed in Section 8. Ongoing steps can be found in appendix 4.
77	Jeff Barnickol	23	In the second and third bullets, I think we either need a higher stated percentage of accuracy (at least 90%) or phasing where our initial target is, say, 80% accuracy by July 2008, and 90% accuracy by January 2009 (or similar appropriate percentage and commitment dates).	Refer to appendix 4.
78	Gary Stewart		The first bullet says, "Assess how regions manage data differently:" Differently from what? Each other? Established business rules? Something else?	Changed to "• Assess how regions and programs manage data differently from each other."

79	Gary Stewart	23	General – It seems that most of the Quality Objectives focus on enforcement and objectives for other major modules (Parties, Places, Inspections, Non-enforcement Regulatory Measures) are identified. Second bullet – Shouldn't we be shooting for percentage of accuracy for all of our reports? Third bullet – MMPs/ACLs do not have status of "violation". Only violation records have that status. Seventh bullet – What is the importance of enforcement actions with fulfilled liabilities and projects having the status of "historical"? What about enforcement actions that don't have associated liabilities and projects that should have the status of "historical", as well?	Refer to narrative added to what is not Section 8.2.6 and to appendix 4.
80	Gary Stewart	24	I'm not sure how these general statements are considered as goals. Nevertheless, I suggest that another statement be added that would be something to the effect that as we provide more useful reports to line staff/project officers, we will start getting more/better feedback regarding erroneous data that needs to be corrected. Although data may meet business rules standards, etc., it may still be erroneous. Many times the easiest way to catch these errors is by staff actually using the data that has been input into the system.	See narrative added to what is now Section 8.2.8.
81	Mary Randall	21	Adds two bullets to 7.1: • Ensure that user interface is setup (not the right word) to improve data quality, and • CIWQS is held up as an example of a database success in the environmental community and California (yes Erin I'm serious – I'd like ot hae CIWQS become an outstanding database that meets the needs of the agency and stakeholders but tha tcon only happen if data quality is there)	Added "• Ensure that fields with a BRT ranking of "5" have built-in data validation and force the user to pick a suitable value." See what is now Section 8.2.6.
82	Mary Randall	22	Adds two bullets to 7.2.1: • Enhance data entry screens to improve quality of data entered, and • Eliminate duplicate records	See response to comment 82. Added "• Address duplicate records."
83	Mary Randall	23	Adds one bullet to 7.2.2: • Provide information on the website as to progress toward goals	Agree that this is needed. However, this is more appropriate for the Communication document.

84	Mary Randall	23	Adds one bullet to 7.2.3: • Meet with State and Regional Water Board management to find out information they need the database to provide	Bullet added to what is now Section 8.2.3.
85	Mary Randall	23	Adds four bullets to 7.2.4: • Ensure that information on website is correct and easy to follow (especially for newcomers), • Provide information on how the data will be used to facilitate correct data entry, • Provide online guidance to enter required data, • Ensure dialog boxes have consistent wording and provide meaningful information to users	The first three suggestions are applicable to and will be covered the Communication document. I am not sure what the last bullet is referring to.
86	Mary Randall	24	Adds one bullet to 7.2.6: • Ensure that data entry people know and follow business rules	Agree. Added "• Ensure that business rules are established and enforced."
87	Mary Randall	24 & 25	Adds two bullets to 7.2.7: • Develop a systematic plan to address data cleanup, • Identify recurring data entry errors and inform users of correct procedures	Agree. Added "• Ensure that a systematic plan is developed and implemented."
88	Mary Randall	24	On 7.2.8: "the phrasing of this section varies from other sections. The other sections have wording like "ensure" this section indicates that the line items are existing (if that makes sense) "	Phrasing is no consistent. Added "• Ensure that every field in CIWQS with a BRT ranking of "5" (5 is highest) is available in the end-user layer."
89	Mary Randall	24	Adds one bullet to 7.2.8: • Provide method to determine source of data in reports (can't tell if the information being reported is really what you want)	Added "• Ensure that reports function as designed."
90	Mary Randall	25	In last paragraph of 7.4: (this is the first reference to the QA Design Team – who are they and what is their function – at least when I did a search this was the first place "design team" was found)	Refer to Section 5.6 for a description of the QA Design Team.
91	David Leland	22	Section 7.2 First flow chart box. What is meant by 'differently'?	Regions and programs manage data differently from each other and have different processes for the same outcome. An example of this would be revising an order. One region may accomplish this through an amendment, while another may use a resolution. We may be able to resolve differences in the Business Rules Team, but for some, we need to go to the roundtables.

92	Dan Radulescu	23	correction or issues/patches application, corrective action, data migration clean up, testing, auditing are timely done • Ensure that training is performed timely • Ensure that hardware resources are adequate to allow a stable and acceptable operation of the system • Ensure that software design is adequate to allow a stable and acceptable operation of the system • Ensure external customer service satisfaction at 90 percent or higher (criteria to determine the level of satisfaction should be defined based on acceptable industry protocols) • Ensure internal user satisfaction with the ease of data entry and use of CIWQS features at 90 percent or higher (criteria to determine the level of satisfaction should be defined based on acceptable industry protocols). • Ensure that canned reports hyperlinks work and that the reports are designed adequately and produce accurate information • Ensure that searches in CIWQS are designed adequately and promptly return accurate results  • Ensure that billing information is complete (e.g., billing name, address, and phone; complexity; design flow; fee code; threat to water quality (TTWQ), major/minor flag) • Ensure that enforcement actions, including MMPs, ACLs, etc. are adequately entered following the business rules, procedures and standards, as prescribed in SOPs • Ensure legislative report accuracy of 90 percent or higher •Ensure that there is no data entry backlog based on the adequate implementation of the IDRMP which defines timelines for data entry and resources allocated for this task	Some suggested bullets have been added to what is now Section 8.3. The customer service-related bullets are good suggestions, but are more appropriate for the Communication Documents, which is currently being drafted. At this point, ensuring the completeness and accuracy of 100 percent our enforcement orders is too grandeose. Therefore, the DQOs focus on our formal enforcements. Branching out to include oral communication, staff letters, and Notices of Violations, will be a future task and, therefore, that suggestion has been added to Appendix 4.
93	Jarma Bennett	21	Narrative should be added to discuss why these goals were chosen and if they are goals of CIWQS or the data or the QAP, and on how goals will be achieved or how we will work towards achieving them.	See language added to what is now Section 8.3.
94	Jarma Bennett	21	Section 7.2: Narrative should be added relating broad goals to specific goals.	See language added to what is now Section 8.2.

95	Jarma Bennett	22	Section 7.2: Why wouldn't the CIWQS metrics reports be additional reports to rank?	No change. This should be seen as a data quality activity rather than a reports activity.
96	Jarma Bennett	22	Section 7.2.3: I don't understand what the third bullet means.	Deleted bullet.
97	Jarma Bennett	24	Section 7.2.4: The second bullet doesn't contain enough specifics to tell me what the purpose is or what type of project success stories or who the other groups might be.	Deleted bullet. Added "• Update steering committee and user groups on QA activities and data cleanup efforts."
98	Jarma Bennett	23	Section 7.2.6: I think narrative about the quality objective bullets would be helpful. The broad goals are listed and then the specific goals and then there are these additional sections and I'm not sure how they fit with the goals.	•
99	Jarma Bennett	24	Section 7.4: Can you add a sentence about the purpose of SOPs and what activities they are drafted for? Or it this assumed to be almost "by definition" of an SOP?	Agree. Discussion added to Section 7.4.
100	Christine Boschen	22	Section 7.2.2: We can't judge ourselves with metrics until we know the data in CIWQS is accurate and that the reports accurately pull data from CIWQS. I suggest a modified approach of tiered metrics, the first tier being accomplishment of data cleanup and report pulling. For example, a tier 1 report metric would be, "Report built was tested with subset of data from each region and in each case, pulled accurately." An intermediate metric could be, for example, "year-end user survey showed 50% increase in user confidence."  We should hold off the metrics such as, "how many inspections performed, how many enforcement actions taken compared to number of priority violations," until we know our data is reliable. That kind of metric should be a final tier metric—the goal we're working towards.	Metrics are a valuable tool. I believe that your suggestions should be a higher priority, but think that we should provide as many reports about our reports and activities as possible.
101	Christine Boschen	23	Section 7.2.3: I like the communication loop with RTS. However, before we can have them recommend a possible Query, we need to set up the possibility within the EUL.	Comment noted.

Comment No.	Commenting Party	Draft QAP Page	Comment	Response
102	Jarma Bennett	25	changed to "system bugs and enhancement requests are	Agree. Changed to: "CIWQS users, coordinators, project managers, software developers, script writers, etc. will report issues using the CIWQS issue tracking tool: Mantis."

Comment No.	Commenting Party	Draft QAP Page	Comment	Response
103	Jeff Barnickol	31 & 32	As we discussed in the Oct. 30 BRT meeting, this section needs a bit more clarification about each regional of office element of the audit and the time frames associated with it, and the overall audit and its time frames. Also, think this through a bit more and include realistic, achievable time frames.	Jarma suggested simplifying this section and including the detail in the SOP. I agreed with her. I will incorporate your comment into the SOP as discussed in the Oct. 30 BRT meeting.
104	Jeff Barnickol	32	corrective actions needed to resolve alight findings will be	implement the auditing and corrective action

10:	Jeff Barnic	kol 3	32	If I recall the Oct. 30 BRT meeting discussions correctly, the words "data entry" in the last two paragraphs should be changed to "data" or "data quality."	Agree. Changes made.
100	Jarma Bennett	3	31	helpful but I don't recall them in the SOP. Can they be	Agree. This section in the QAP should be brief. Detail is available in the SOP. See what is now Section 10 for change.

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Comment No.	Commenting Party	Draft QAP Page	Comment	Response
107	Jarma Bennett		I would add something like "the following list identifies the project development related software currently used" before the bulleted list of software.	Agree. Made change.
108	Jarma Bennett	10.5.1	What is the difference between the 3 <sup>rd</sup> and 5 <sup>th</sup> bullet?	The 3rd bullet address the actual migration. The 5th bullet addresses testing the migrated data to determine if the migration was a success. Changed "• Perform initial data migration to view migrated data in the new environment" to "• Perform data migration into new environment."

## Section

11

Comment No.	Commenting Party	Draft QAP Page	Comment	Response
109	Mary Randall	40	It would be good if hyperlinks to the references could be provided.	Agree. Links added where feasible.

# Appendic

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Comment	Commenting	Draft QAP	Commant	Decrease
No.	Party	Page	Comment	Response

110	Jarma Bennett	43	Appendix 2: I think the Enforcement Unit and data entry staff should be the audience of the 13385 report SOP, and the new module project team should be an additional audience of the migration SOP	Agree. Changes made.
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