

Quick QA Planning (*and Documentation*) for ~~an~~ Occurrence Modeling Projects

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[https://kestrel.rtpnc.epa.gov/OGWDW_Strategies/index.
php/Mike_Messner](https://kestrel.rtpnc.epa.gov/OGWDW_Strategies/index.php/Mike_Messner)

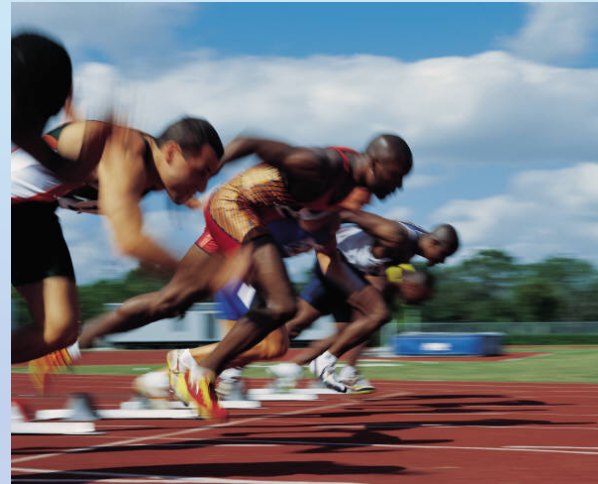
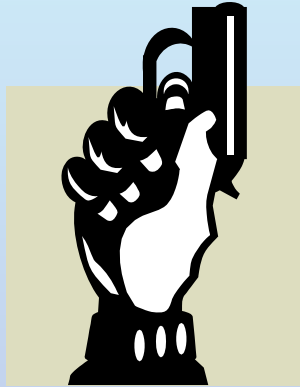
For Conference Purposes Only

Disclaimer

- Views expressed are mine and do not necessarily reflect those of the Environmental Protection Agency or its Office of Ground Water and Drinking Water.

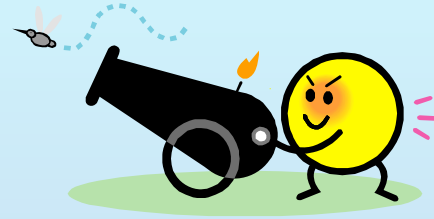
Outline

- Blam!



- Fast start.
- QA and analysis documentation on the wiki.
- What's next?

Blam!



- 1/7/2010 we (myself and a few other analysts in SRMD) got the word: *Formal QA plans are going to be required for all of our analysis tasks.*
 - Panic?
 - Do they have any idea how many plans that will be?
 - How are we ever going to get anything done?
- Let's just do it & see how it goes.
- 1/8/2010
 - AM: A QA plan is taking shape.
 - PM: Not just a QA plan – a system is emerging!
 - Late PM: Writing the abstract for this presentation!

Fast Start Wiki = Fast

- <https://kestrel.rtpnc.epa.gov/OGWDW> Strategies
- Intranet.epa.gov & **The Neighborhood** then scroll down to OGWDW_Strategies

EPA United States Environmental Protection Agency

EPA@Work
The Agency Intranet

EPA@Work Home Contact Us Online Tools Training Mass Mailers Desktop Library Event Calendar Jobs E&P Credit Union **The Neighborhood**

March 9, 2010

Security Threat Level
Code Yellow

ORGANIZATIONAL

- Organization Chart
- Senior Management Biographies

Quick Links

- PeoplePlus
- myPay
- TSP
- EPA Locator
- WebForms
- GovTrip
- Electronic Official Personnel Folders

[EPA Locator](#) Last Name First Name All Sites

For Headquarters Employees

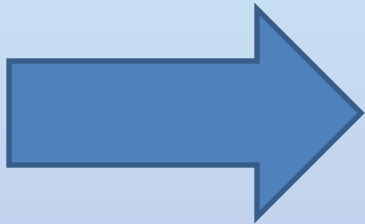
Administrator Jackson's Seven Priorities for EPA's Future Announced January 2010

- Taking action on climate change
- Improving air quality
- Assuring the safety of chemicals
- Cleaning up our communities
- Protecting America's waters
- Expanding the conversation on environmentalism and working for environmental justice
- Building strong state and tribal partnerships

OPEN GOV
WHITEHOUSE.GOV/OPEN

Please join us in identifying ways in which we can better serve the public by making more information available, promoting public participation, and fostering joint efforts with governmental and nongovernmental entities. We are collecting ideas for our Open Government Plan at <http://openepa.ideascale.com/>. For more information, please see our [Open](#)

Scroll Down to 12th Wiki



[National Dialogue](#) - As part of EPA's National Dialogue, we will provide open access.

[OGWDW Monitoring Strategies Team](#) - This team provides information on statistical modeling.

[OPP Kaizen](#) - The Knowledge Exchange will benefit from each other's experience. Methods learned, case studies, and story telling.

[https://kestrel.rtpnc.epa.gov/OGWDW Strategies](https://kestrel.rtpnc.epa.gov/OGWDW_Strategies)

OGWDW STRATEGIES

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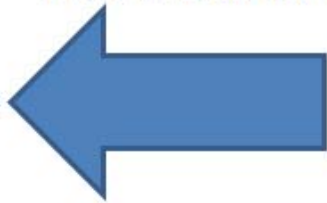
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B
U
M



*This site is
External (non-EPA)
Finally, please be aware*

For New Users

- [Getting Started](#)
- [Wiki Etiquette](#)
- [User's Guide](#)
- [Gardening](#) (periodic attention needed)
- [Suggestions](#) (for improving the wiki)
- [Sandbox](#) (for practice)
- [Tour the Wiki](#)

Team Pages

- [Monitoring Strategies](#)
- [Cumulative Risk](#)
- [Perchlorate](#)
- **NEW!!** [QA for Data Management and Modeling](#)
- [Atrazine Modeling](#)



Click on Quality Assurance on the sidebar

OR

Click on the link under Team Pages

QA For Data Mgmt & Modeling

- Background
- Relevant QAPP Elements
 - Chapter 3 of [G-5](#), “Projects Using Existing Data”
 - Maybe Even Better – “[QAPP Requirements for Secondary Data Research Projects](#)” (NRMRL)
- **SRRB Pilot Plans (next slide)**
- Contractor QA Project Plans (short list with links to the documents on shared drive)

Left Half of the Table as of Earth Day, 2010

"Project" Name	Lead QA Plan Author	Current QA Plan	Links
Atrazine Neural Net Modeling	Mike Messner	Atrazine Artificial Neural Netrowk (ANN) QA Plan	Atrazine Modeling Maumee 1998 Sandusky 1995
NYC Uncovered Reservoir	Mike Messner	NYC Reservoir QA Plan	
Next National Data Set	Jimmy Chen	General QA Plan	
Stat Modeling to support UCMR design for virus and E Coli	Mike Messner	UCMR Virus and EC Modeling QA Plan	Virus and EC Occurrence Modeling
Crypto Occurrence in Raw Sewage (yuck)	Mike Messner	QA Plan for Crypto in Raw Sewage	Crypto in Raw Sewage
Cancer and Cotton in MS	Mike Messner	QA for Cancer and Cotton	Cancer and Cotton
TCR - investigating seasonality	Mike Messner	TCR Seasonality QAPP	TCR Seasonality
Lead Replacement	Mike Messner	QA Plan for Lead	Lead

For Each Activity or “Project”

- “Project” Name
- Lead QA Plan Author or Analyst
- Link to the wiki-based QA Plan
- Other Links (usually to actual analytical work)
- QA Database Record ID
- Comments

Wide Range of Projects

- Crypto Occurrence in Raw Sewage (yuck) – Hours of effort. (Several hours effort down a bad pathway, then an hour of effort with a better, cleaner dataset.)
- Next National Data Set – building on what we learned from analyzing the huge total coliform dataset. Anticipating the next big project of that sort. Many person-months (more than one FTE) of effort.

Project: Neural Net Modeling

- I was in the thick of this one, but recognized that good QA and documentation would be important. Total effort is moderate (100 to 200 hours), but high-profile (presentation to FIFRA SAP on April 26).
- [https://kestrel.rtpnc.epa.gov/OGWDW_Strategies/index.php/Atrazine ANN QA Plan](https://kestrel.rtpnc.epa.gov/OGWDW_Strategies/index.php/Atrazine_ANN_QA_Plan)
- https://kestrel.rtpnc.epa.gov/OGWDW_Strategies/index.php/ModelingMaumee1998
- [https://kestrel.rtpnc.epa.gov/OGWDW_Strategies/index.php/Sandusky 1995](https://kestrel.rtpnc.epa.gov/OGWDW_Strategies/index.php/Sandusky_1995)

Why Wiki?

- Quick & easy to build a set of linked pages.
 - Link QA Plan to and from Work Products
- No special software needed.
- QA Manager, other analysts can contribute
- QA Manager and other interested parties can “watch” pages of interest & receive email notification whenever they’re edited.
- Complete revision history.
 - Easy to rollback, if necessary
- Excellent search/find utilities
- Categories (QA, Lead, Atrazine, Crypto, etc.)

- EPA is moving toward transparency & wikis are expected to be major players in that.

Wikis need QA, too.

- [https://kestrel.rtpnc.epa.gov/OGWDW_Strategies/index.php/Quality Assurance](https://kestrel.rtpnc.epa.gov/OGWDW_Strategies/index.php/Quality_Assurance)
 - Division (SRMD) QA, both external and internal
 - Wiki QA (notice the “Wiki Quality Goals”)
 - [Gardening](#)
- [QA Category](#) (didn't exist before 1/7/2010)
 - 22 pages (called “articles”) and
 - 2 files

Articles in QA Category

Category:QA

From OGWDW Strategies

This category is for QA activities. Currently, this covers statistical analyses and modeling of secondary data (data that were

Articles in category "QA"

There are 22 articles in this category.

A

- [Analyses of NYC Reservoir Data](#)
- [Atrazine ANN Data Management](#)
- [Atrazine ANN QA Plan](#)
- [Atrazine ANN QA Plan Approval Sheet](#)

C

- [Contractor QA](#)

D

- [DS - Sur1 Phase 1 QA Plan](#)

G

- [General QA Plan](#)

G cont.

- [General Title and Approval Sheet](#)

N

- [NYC Crypto QA Plan Approval Sheet](#)
- [NYC Recovery Data](#)
- [NYC Reservoir QA Plan](#)

Q

- [QA Plan for Crypto in Raw Sewage](#)
- [QA Plan for Lead](#)
- [QA for Cancer and Cotton](#)
- [QA for Data Management and Modeling](#)

Q cont.

- [QAPP Elements for Se](#)
- [Quality Assurance](#)
- [Quick QA Abstract](#)

S

- [Summary Data Set YY](#)

T

- [TCR Seasonality QAPP](#)
- [Title and Approval She](#)

U

- [UCMR Virus and EC M](#)

...but we have a ways to go.

- **Biggest Problem:** A few of us contributed 99% of the QA database records. *How to infect others?*
- We hear a QA audit is coming. *How will this system stand up?*
- Other Questions:
 - *How is it possible for something this quick and cheap to also be good? Is it too quick?*
 - *How can we ensure that good plans are being implemented?*

You, too can do this!

Check out our wiki:

- You'll find lots more than just QA!
- [Statistics](#)
 - 1063 pages
 - 30 [categories](#)
 - 451 pages on [environmental statistics](#)
 - 122 pages on the [Total Coliform Rule](#)
 - Nearly 400,000 page views!
- If you see something you would like to use, go ahead and copy it. **Build your own wiki. Ask for one @** <https://wiki.epa.gov/envirocentral/index.php/Process>
- If you see something you can improve, make it better. Edit directly, select “Discuss this page,” or E-mail suggestions to me.

messner.michael@epa.gov

[https://kestrel.rtpnc.epa.gov/OGWDW Strategies](https://kestrel.rtpnc.epa.gov/OGWDW_Strategies)