5- 26

From:

Nancy Richard Gene Davis

To: Date:

1/13/05 8:56:09 AM

Subject:

Draft Reg 5 2004 list-- requested corrections

Hi Gene, I have summarized the email messages we worked off of in December (12/01/04 and 12/02/04), when we were checking all the corrections you requested. Can you check the remaining issues in blue type? I think we are close to done on these.

Black comments = NJR
Red comments=Gene's last comments
Blue=NJR latest comments

GIS FILE CORRECTIONS:

1. Putah Creek split (GIS coverage) I haven't seen the revised version yet (with Putah Creek ending at Putah Creek Sinks).

My reply: Putah Creek map--Maybe this shapefile (see attached email) didn't get through to you when I sent it earlier because it is large. This was the shapefile for the latest rivers changes. Just so I know this email got through, please let me know that you have received this email and the one attached. I received both emails, and probably didn't look at the correct version of the rivers shapefile. Putah Creek GIS coverage looks good.

- 2. Delta portions (GIS coverage) OK.
- 3. Panoche Creek Headwaters (GIS coverage) OK.
- 4. Ag drainages-(GIS coverage) I don't know what this means.

no pollutant data added ??

My reply: Ag drains-- are the ones that Pattie asked me to map. I used the shapefiles you sent me for them, to map with in GeoWBS. They should be in the shapefile attached.

Here are the ones she asked me to map: All four look OK.

Wadsworth Canal (drains into Sutter Bypass); Cherokee Canal (at Gridley Road); Lindo Creek (Chico); Main Drainage Canal (at Gridley Road).

5. Here is the latest version of the shapefile. Please check the changes I have made. For the SJR change around the confluence with the Tuolumne, I followed the reach file 3 lines that seemed to match fairly well with your lines, but not exactly. It is better if I follow the Rf3 lines, but if you want me to, I can make them more exact. I checked the San Joaquin River sections and they are OK. Did you make any other changes to any of the rivers, that I should check? If not, it looks good. I didn't make any other changes.

PDF of DRAFT REG 5 2004 LIST:

- 1. Putah Creek water body names (pdf draft list) Names are OK.
- 2. Putah Creek pollutants (pdf draft list) Please add "Unknown Toxicity" to Putah Creek (Solano Lake to Putah Creek Sinks). Sorry I think I made a mistake...Unknown toxicity was on the "Monitoring list" in 2002.

Only mercury was on the 2002 303d list for Putah. I realized this later and that is why I left unknown toxicity off the pdf draft.

- 3. Delta portions pollutants (pdf draft list) Please add "DDT", "Group A Pesticides", "Mercury", and "Unknown Toxicity" to the "Delta Waterways (northwestern portion)". They have been added-please check.
- 4. Panoche Creek pollutants (pdf draft list) OK.
- 5. Marsh Creek- just pollutant changes (pdf draft list) OK.
- 6. Final question is on the Stockton Deep Water Channel. Sorry but I am not totally clear on what to do.
- a. Do you want me to add the pollutants from the line coverage to the polygon coverage, with a comment on the list describing the area (using the document you have mailed) and drop the line coverage? Yes. Done, please check the Delta Waterways (Stockton Ship Channel) listing.
- **b.** If so, do the non EPA listed pollutants (2 of them I think) cover the entire Waterways-Stockton DWC polygon or just the turning basing? Pathogens and furans can be associated with the entire Stockton Deep Water Channel. Done, please check the Delta Waterways (Stockton Ship Channel) listing (please check the comments- I used the Health Services warning you sent me and added some other language).

The shapefiles that you have now are most current and according to this email, they are okay in terms of your requested corrections.

I will be sending the shapefiles again when Craig sends the factsheets to your Region for review (approx March). The issue then will be new water bodies that have not been assessed in the past. Any newly assessed water bodies will have been mapped in the GIS files I send you in March.

Nancy

PLEASE NOTE MY NEW EMAIL ADDRESS: nrichard@waterboards.ca.gov

Nancy Richard
Environmental Specialist
State Water Resources Control Board
Division of Water Quality
1001 | Street
Sacramento, CA 95814-2828
Office:916-341-5546
Fax :916-341-5550

>>> Gene Davis 12/02/04 12:36PM >>> Nancy, -Gene

Gene Davis Richard, Nancy

To: Date:

12/6/04 10:31:48 AM

Subject:

Re: Latest rivers shapefile 04

Nancy,

Please find my review comments for each item you directed me to review in red text following each comment.

-Gene

>>> Nancy Richard 12/02/04 01:15PM >>> Hi Gene.

Here is what I need to know from you....

Tell me if the following are okay:

Putah Creek split (GIS coverage) I haven't seen the revised version yet (with Putah Creek ending at Putah Creek Sinks).

Putah Creek water body names (pdf draft list) Names are OK.

Putah Creek pollutants (pdf draft list) Please add "Unknown Toxicity" to Putah Creek (Solano Lake to Putah Creek Sinks).

Delta portions (GIS coverage) OK.

Delta portions pollutants (pdf draft list) Please add "DDT", "Group A Pesticides", "Mercury", and "Unknown Toxicity" to the "Delta Waterways (northwestern portion)".

Panoche Creek Headwaters (GIS coverage) OK. Panoche Creek pollutants (pdf draft list) OK.

Ag drainages-(GIS coverage) I don't know what this means. no pollutant data added ??

Marsh Creek- just pollutant changes (pdf draft list) OK.

Final question is on the Stockton Deep Water Channel. Sorry but I am not totally clear on what to do.

- 1. Do you want me to add the pollutants from the line coverage to the polygon coverage, with a comment on the list describing the area (using the document you have mailed) and drop the line coverage? Yes.
- 2. If so, do the non EPA listed pollutants (2 of them I think) cover the entire Waterways-Stockton DWC polygon or just the turning basing? Pathogens and furans can be associated with the entire Stockton Deep Water Channel.

Nancy

Please cc answers to Pattie too ...thanks

>>> Gene Davis 12/02/04 12:36PM >>>

Nancy,

I checked the San Joaquin River sections and they are OK. Did you make any other changes to any of the rivers, that I should check? If not, it looks good.

-Gene

>>> Nancy Richard 12/01/04 07:50PM >>> Gene,

Here is the latest version of the shapefile. Please check the changes I have made. For the SJR change around the confluence with the Tuolumne, I followed the reach file 3 lines that seemed to match fairly well with your lines, but not exactly. It is better if I follow the Rf3 lines, but if you want me to, I can make them more exact.

Thanks

Nancy

CC:

Davis, Gene; Gouveia, Patricia; Karkoski, Joe

Gene Davis

To:

Gouveia, Patricia; Richard, Nancy

Date:

12/6/04 10:54:00 AM

Subject:

One more correction for 303(d) list

Nancy,

Please add the following pollutants to the 303(d) list info for the San Joaquin River (Stanislaus River to Delta Boundary) - Boron, Chlorpyrifos, DDT, Electrical Conductivity, Mercury, and Unknown Toxicity. Thanks,

-Gene

CC:

Karkoski, Joe

Nancy Richard Gene Davis

To: Date:

11/29/04 12:11:41 PM

Subject:

Re: Region 5 303d listings and GIS - Part 1

Hi Gene,

Thank you for checking this out thoroughly. You have correctly pointed out that I forgot to enter the pollutant and other info for the new portion I mapped for Panoche. I will correct that and correct Putah. Thanks and waiting for more...

Nancy

>>> Gene Davis 11/29/04 11:15AM >>>

Nancy.

Since I have received several emails from you with various attachments, and I am receiving comments from in-house regarding some of these, I am going to separate the issues and email you about them one or two at a time, so I can keep them straight.

First, Panoche Creek. I asked you to separate the portion above Silver Creek from the portion below Silver Creek. The upper portion (Headwaters to Silver Creek) should be listed for sedimentation/siltation and selenium only (no mercury). The lower portion, below Silver Creek (Silver Creek to Belmont Avenue) should be listed for mercury, sedimentation/siltation, and selenium. Do you and your GIS files concur?

Second, Putah Creek. Michelle Wood (in our mercury TMDL unit) has provided me with a GIS coverage of the portion of Putah Creek impaired by mercury (notably starting below Solano Lake and ending on the South Fork near the Putah Sinks). I am forwarding this GIS coverage to you and asking that you revise the g_rivs shapefile accordingly.

I am reviewing the Delta, the Stockton Deep Water Channel, and the San Joaquin River segments and will address those in another email.

Thanks Nancy, -Gene

CC:

Craig J. Wilson; Gene Davis; Joe Karkoski; Patricia Gouveia

Nancy Richard

To:

gmdavis@waterboards.ca.gov

Date:

11/23/04 5:35:10 PM

Subject:

pdf of Reg5 list with map and Marsh Creek changes

Gene,

Here is a pdf of changes to 303d list for 2004. The only changes that you would see on this attached list are the map changes and Marsh Creek. (I just made the Marsh Creek change.) At this point in time, no new listings decisions have been added into GeoWBS.

Please check for errors (eg.,correct pollutants, sources)for the water bodies that we've changed. Don't worry about the TMDL completion dates. Those will be dealt with later.

Thanks

Nancy

CC:

jkarkoski@waterboards.ca.gov, cjwilson@waterboards.ca.gov, pgouve ia@waterboards.ca.gov, nrichard@waterboards.ca.gov

"Patricia Gouveia" <gouvp@dwq.swrcb.ca.gov> 09/28/2004 02:34 PM

To: <cnalpers@usgs.gov>

CC:

Subject:

data for 2004 303(d) list

Charles, I have been reviewing the data you sent Craig Wilson for the 303(d) list. Your e-mail mentions that the data is preliminary. With our Policy, days away from being adopted (we hope), there is some angst regarding the use of preliminary data; just how preliminary is the data? Has it been cited or used in any publications? Since the lines will be very blurred between the creation of the 2004 list and the 2006 list (expectations are that the RWQCBs will be sending out solicitation letters soon), would it be better to wait and use this data for the 2006 list?

Any insight you can give me would be appreciated. Thanks in advance for your help.

Regards, Pattie

Patricia Gouveia
Division of Water Quality
State Water Resources Control Board
1001 I Street
Sacramento, CA 95812
email: gouvp@swrcb.ca.gov
phone: 916/341-5306
fax: 916/341-5550

CC:

"Debra S Curry" <dcurry@usgs.gov>, "Jason May" <jasonmay@usgs.gov>

"Charles N Alpers" <cnalpers@usgs.gov>

To:

"Patricia Gouveia" <gouvp@dwq.swrcb.ca.gov>

Date:

9/28/04 6:40:06 PM

Subject:

Re: data for 2004 303(d) list

Dear Pattie -

Some data are close to publication, other data remain farther away. I will need to go over it with you on a case-by-case basis. I'll leave it up to you to decide which round of 303(d) listing (2004 vs. 2006) is more appropriate.

I can tell you that our fish tissue data for Lake Natoma are final, published by the USGS in early September 2004 (in conjunction with OEHHA's final advisory for Lake Natoma and the lower American River)

Our Greenhorn Creek report (Bear River watershed) with data on water, sediment, and biota from 1999-2001 is through colleague review and

is currently being prepared for USGS approval, which should happen during early to mid October. Barring unforseen problems.

the report should be on the web by late October or early November.

Other water-quality data from the Bear River and Yuba River (Jan. 2001-June 2003) should be published in early 2005.

Fish tissue data from the Trinity River are being used by OEHHA in a draft advisory that may be released soon for public comment (contact Bob Brodberg or Susan Klasing).

USGS plans to publish these data remain uncertain. They may be released on the web after QA/QC review instead of a formal USGS publication. You can contact Jason May (916-278-3079; jasonmay@usgs.gov) for additional information on that.

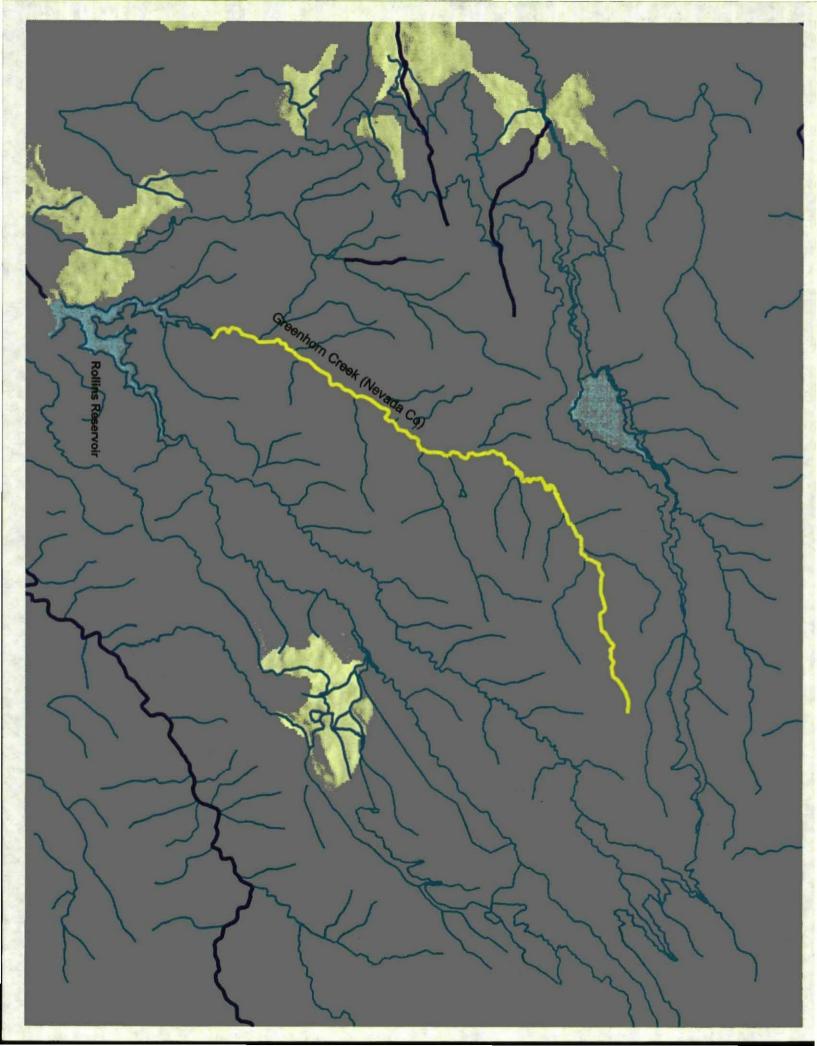
I think I covered it all - please let me know if you need any additional information or clarification.

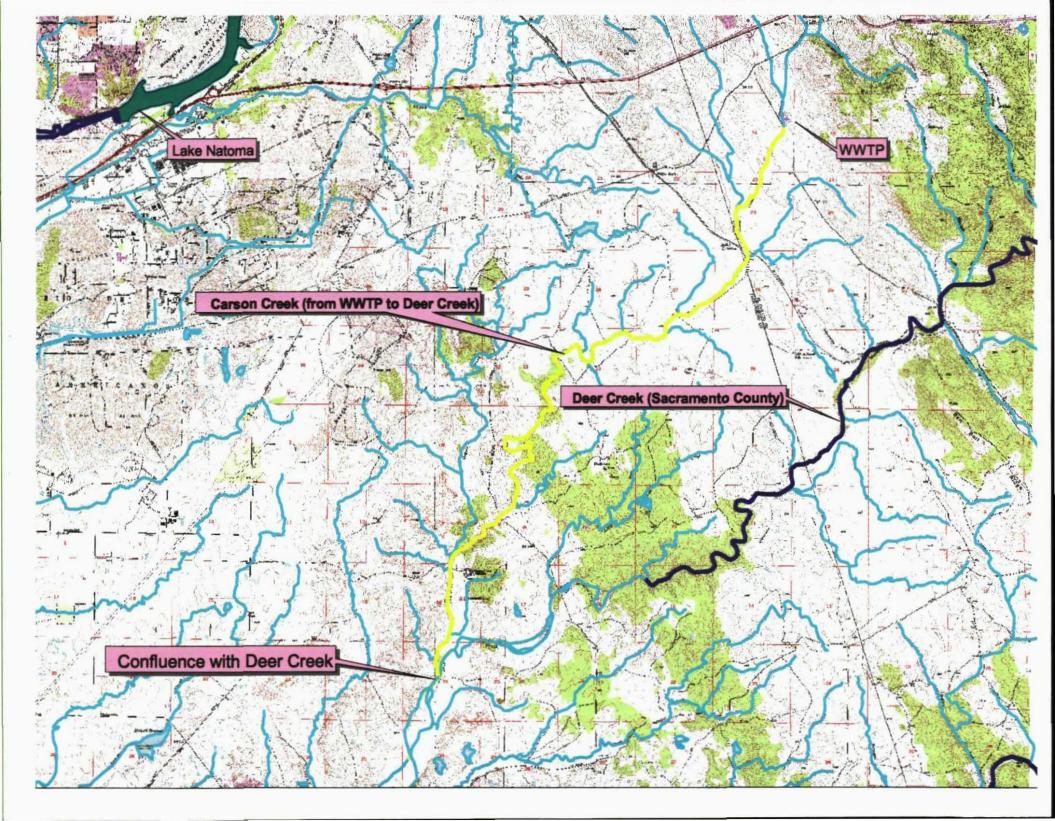
- Charlie

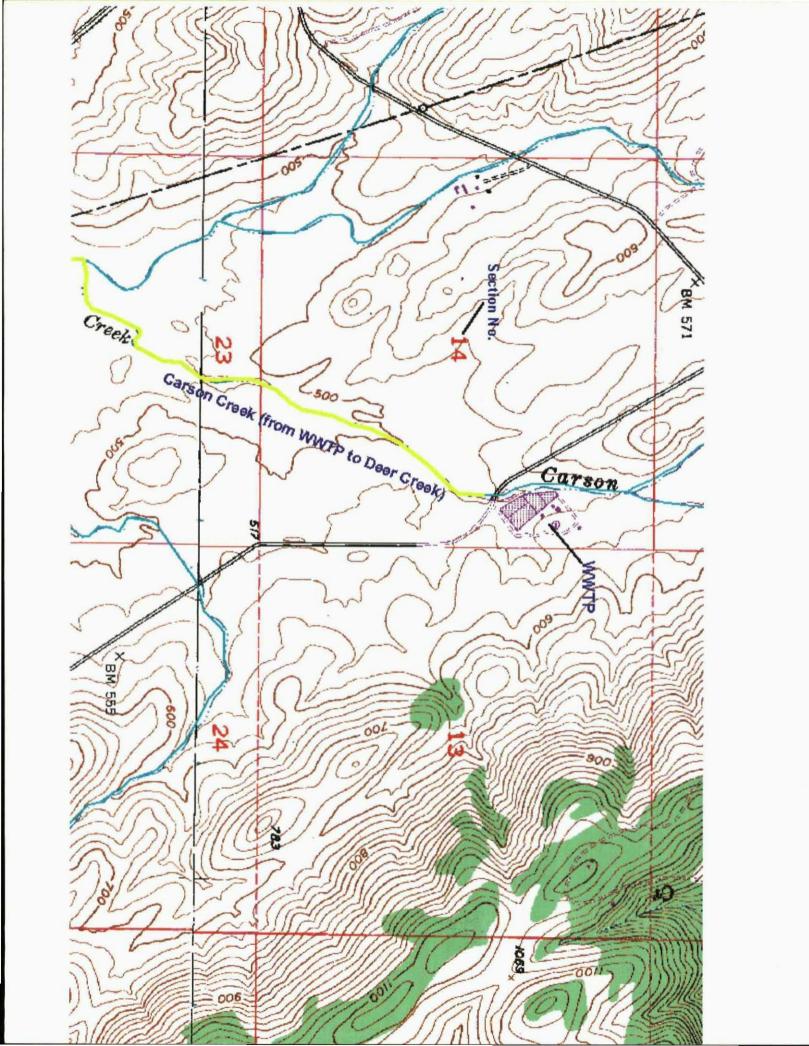
Charles N. Alpers U.S. Geological Survey, WRD Placer Hall 6000 J Street Sacramento, CA 95819-6129

tel. 916-278-3134 fax. 916-278-3013 e-mail cnalpers@usgs.gov

e-mail chalpers@usgs.gov







Gene Davis

To:

Gouveia, Patricia

Date: Subject:

10/5/04 12:38:04 PM Re: Bear River

Pattie.

I am sorry to say that I cannot give you a complete listing of upstream waterbodies for the two outfalls. The outfalls collect water from numerous canals and ditches, for which we don't have names. We don't have the supporting data to indicate which canals and ditches are contributing pollutants to the outfall locations. In general, each outfall location can be said to collect water from an upstream region that includes, at a minimum, Wadsworth Canal, Snake River, Morrison Slough, and Gilsizer Slough. I hope you can make some sense of this.

-Gene

>>> Patricia Gouveia 10/05/04 07:47AM >>>

Gene, thanks. You are right. I need to know the waterways upstream of the outfalls.

>>> Gene Davis 10/4/04 5:02:56 PM >>>

No, they are discharging into the bypass water collected from canals and ditches and streams. - Gene

>>> Patricia Gouveia 10/04/04 04:04PM >>>

Gene, are these discharging into the bypass from the Sac River?

>>> Gene Davis 10/4/04 3:52:35 PM >>>

Pattie,

Both outfalls discharge into the Sutter Bypass. However, samples collected from these locations are more appropriately associated with water quality in the waterways upstream of the outfalls. If this is what you are asking, I will need to confer with someone who is out today (scheduled to return tomorrow). Is this what you will need? - Gene

>>> Patricia Gouveia 10/04/04 02:49PM >>>

Thanks. Now, can you tell me the locations of the following: Obanion Outfall, Sacramento Outfall?

I hope you don't mind but I have a feeling you will be getting pummeled with e-mails wanting little tidbits of information....but I don't really have a better method for going through this stuff. Thanks for all your help.

Pattie

Patricia Gouveia
Division of Water Quality
State Water Resources Control Board
1001 I Street
Sacramento, CA 95812
email: gouvp@swrcb.ca.gov
phone: 916/341-5306

phone: 916/341-5306 fax: 916/341-5550

>>> Gene Davis 10/4/04 2:27:05 PM >>>

Lower Bear River (near its mouth). -Gene

>>> Patricia Gouveia 10/04/04 02:15PM >>>

Gene, I have sampling data for Bear River on Berry Rd. Can you tell me if that is Upper or Lower Bear River?

Thanks, Pattie

5-26

From: To: Nancy Richard Patricia Gouveia

Date:

9/2/04 10:11AM

Subject:

Fwd: all correspondence with Gene Davis Region 5

CC:

Craig J. Wilson; Melenee Emanuel



Gene Davis

To: Date: Richard, Nancy

Date:

6/14/04 3:28PM

Subject:

2004 303(d) revisions pending

Nancy,

I am intending to send you info for a couple of revisions (Delta and Marsh Creek). When I get approval of the revised Delta delineation, I will send you the materials 'officially'. I just wanted you to know that something is coming this week. - Gene

Gene Davis

To:

Emanuel, Melenee; Richard, Nancy

Date:

7/29/04 9:58AM

Subject:

Fwd: Corrections to 303(d) List

Nancy and Melenee,

In response to your (Nancy's) request this morning:

here (in the forwarded email) are descriptions of the corrections for Marsh Creek we would like to see made this go-round.

I will be on vacation next week (week of August 2), and I don't work on Fridays, so please call me today (or on/after Aug. 9) if you have any questions. Otherwise, you can call Joe Karkoski next week.

-Gene

CC:

Davis, Gene; Karkoski, Joe

Joe Karkoski

To:

Craig J. Wilson; Laura Sharpe

Date:

2/3/03 4:19PM

Subject:

Corrections to 303(d) List

The following corrections should be made to the 2002 303(d) list:

Marsh Creek (Dunn Creek to Marsh Creek Reservoir) should be listed for both mercury and metals (currently only shown for metals).

Marsh Creek (Marsh Creek Reservoir to San Joaquin River) should be listed only for mercury (currently listed for metals and mercury).

A separate listing should be created for Panoche Creek (Headwaters to Silver Creek) for sedimentation/siltation and selenium. The Panoche Creek listing for these pollutants is only for Silver Creek to Belmont Ave.

Sorry for the late notice. I only became aware of these issues this afternoon. Do you need me to testify or can you make late changes?

Joe

Joe Karkoski

To:

Craig J. Wilson; Laura Sharpe

Date:

2/3/03 4:19PM

Subject:

Corrections to 303(d) List

The following corrections should be made to the 2002 303(d) list:

Marsh Creek (Dunn Creek to Marsh Creek Reservoir) should be listed for both mercury and metals (currently only shown for metals).

Marsh Creek (Marsh Creek Reservoir to San Joaquin River) should be listed only for mercury (currently listed for metals and mercury).

A separate listing should be created for Panoche Creek (Headwaters to Silver Creek) for sedimentation/siltation and selenium. The Panoche Creek listing for these pollutants is only for Silver Creek to Belmont Ave.

Sorry for the late notice. I only became aware of these issues this afternoon. Do you need me to testify or can you make late changes?

Joe-

Gene Davis

To:

Richard, Nancy

Date:

8/19/04 4:22PM

Subject:

request for Delta shape files

Nancy,

I am reluctant to broach this subject with you, because I'm afraid that you may still be upset with me. Again, I'm sorry for your catching heat from that episode, and hope that we are OK.

Anyway, Michelle Wood is asking me for a delineation of the Delta waterways (in terms of "eastern", Western, etc.) that she needs for her mercury TMDL work.

I don't know whether you have had a chance to re-apportion the Delta according to my notes and color-coded figures that I sent dated June 28, but if you have, would you please send the associated shape file(s) to both me and Michelle?

Thank you: -Gene

CC:

Wood, Michelle

Gene Davis

To:

Richard, Nancy

Date:

8/19/04 4:22PM

Subject:

request for Delta shape files

Nancy,

I am reluctant to broach this subject with you, because I'm afraid that you may still be upset with me. Again, I'm sorry for your catching heat from that episode, and hope that we are OK.

Anyway, Michelle Wood is asking me for a delineation of the Delta waterways (in terms of "eastern", Western, etc.) that she needs for her mercury TMDL work.

I don't know whether you have had a chance to re-apportion the Delta according to my notes and color-coded figures that I sent dated June 28, but if you have, would you please send the associated shape file(s) to both me and Michelle?

Thank you.
-Gene

CC:

Wood, Michelle

Gene Davis

To:

Richard, Nancy

Date:

8/24/04 12:19PM

Subject:

Re: request for Delta shape files

Hi Nancy.

I was reluctant to (intimidated by) make the Delta changes as you suggested, but I am actually in the middle of doing it right now. I will send you the revised Delta shapefile when I am done, possibly later today or tomorrow. I guess I might as well 'fess up - it's kind of fun (I don't get to do much GIS work these days).

-Gene

>>> Nancy Richard 08/23/04 01:07PM >>>

We are okay. I haven't started making any changes to maps as yet. I have requested that map changes be the first items to go thru the assessment/factsheet making process, which has to happen before I can make changes.

I do have an idea on this though. I was wondering if you would be interested in making the changes to the Delta waterways according to your official drawing you sent us. THIS IS NOT USING GeoWBS but just editing the shapefile for the Deltawaterways in ArcView at your office and sending me the edited shapefile. I can capture your changes in GeoWBS easily and replace the old delineations. That way it eliminates me as the middle person trying to correctly interpret what you need.

.Nancy

>>> Gene Davis 08/19/04 04:20PM >>>

Nancy,

I am reluctant to broach this subject with you, because I'm afraid that you may still be upset with me. Again, I'm sorry for your catching heat from that episode, and hope that we are OK.

Anyway, Michelle Wood is asking me for a delineation of the Delta waterways (in terms of "eastern", Western, etc.) that she needs for her mercury TMDL work.

I don't know whether you have had a chance to re-apportion the Delta according to my notes and color-coded figures that I sent dated June 28, but if you have, would you please send the associated shape file(s) to both me and Michelle?

Thank you.

Gene Davis

To:

Richard, Nancy

Date:

8/24/04 12:19PM

Subject:

Re: request for Delta shape files

Hi Nancy,

I was reluctant to (intimidated by) make the Delta changes as you suggested, but I am actually in the middle of doing it right now. I will send you the revised Delta shapefile when I am done, possibly later today or tomorrow. I guess I might as well 'fess up - it's kind of fun (I don't get to do much GIS work these days).

-Gene

>>> Nancy Richard 08/23/04 01:07PM >>> Hi Gene

We are okay. I haven't started making any changes to maps as yet. I have requested that map changes be the first items to go thru the assessment/factsheet making process, which has to happen before I can make changes.

I do have an idea on this though. I was wondering if you would be interested in making the changes to the Delta waterways according to your official drawing you sent us. THIS IS NOT USING GeoWBS but just editing the shapefile for the Deltawaterways in ArcView at your office and sending me the edited shapefile. I can capture your changes in GeoWBS easily and replace the old delineations. That way it eliminates me as the middle person trying to correctly interpret what you need.

Nancy

>>> Gene Davis 08/19/04 04:20PM >>>

Nancy.

I am reluctant to broach this subject with you, because I'm afraid that you may still be upset with me. Again, I'm sorry for your catching heat from that episode, and hope that we are OK.

Anyway, Michelle Wood is asking me for a delineation of the Delta waterways (in terms of "eastern", Western, etc.) that she needs for her mercury TMDL work.

I don't know whether you have had a chance to re-apportion the Delta according to my notes and color-coded figures that I sent dated June 28, but if you have, would you please send the associated shape file(s) to both me and Michelle?

Thank you.

Gene Davis

To:

Richard, Nancy

Date:

8/24/04 1:13PM

Subject:

Delta waterways revised shapefile attached

Nancy,

As promised, please find the revised shapefile attached. Call me if you have any questions.

Gene Davis

To:

Richard, Nancy

Date:

8/24/04 1:59PM

Subject:

Re: request for Delta shape files

Nancy,

That is a good idea - but he is on vacation until next week.

Can we wait to make it an 'official' submittal to you until early next week?

-Gene

>>> Nancy Richard 08/24/04 01:49PM >>>

Yey and yes it is quite fun. We should have done this last time. I am wondering if you need to pass it on for Joe to view before you send it to me???

Thanks

Nancy

>>> Gene Davis 08/24/04 12:18PM >>>

Hi Nancy.

I was reluctant to (intimidated by) make the Delta changes as you suggested, but I am actually in the middle of doing it right now. I will send you the revised Delta shapefile when I am done, possibly later today or tomorrow. I guess I might as well 'fess up - it's kind of fun (I don't get to do much GIS work these days).

-Gene

>>> Nancy Richard 08/23/04 01:07PM >>> Hi Gene,

We are okay. I haven't started making any changes to maps as yet. I have requested that map changes be the first items to go thru the assessment/factsheet making process, which has to happen before I can make changes.

I do have an idea on this though. I was wondering if you would be interested in making the changes to the Delta waterways according to your official drawing you sent us. THIS IS NOT USING GeoWBS but just editing the shapefile for the Deltawaterways in ArcView at your office and sending me the edited shapefile. I can capture your changes in GeoWBS easily and replace the old delineations. That way it eliminates me as the middle person trying to correctly interest what you need.

Nancy

>>> Gene Davis 08/19/04 04:20PM >>>

Nancy.

I am reluctant to broach this subject with you, because I'm afraid that you may still be upset with me. Again, I'm sorry for your catching heat from that episode, and hope that we are OK.

Anyway, Michelle Wood is asking me for a delineation of the Delta waterways (in terms of "eastern", Western, etc.) that she needs for her mercury TMDL work.

I don't know whether you have had a chance to re-apportion the Delta according to my notes and color-coded figures that I sent dated June 28, but if you have, would you please send the associated shape file(s) to both me and Michelle?

Thank you.

FèOO+OóYOÅOÁ%Ü~¿¹ñâÀwæÊ‡öãùÀ@Þ2ÝÊ%ð@28Ö9

□ò6□+FG,□rÌ□hJ□Û□□>R

Gene Davis

To:

Richard, Nancy 8/30/04 3:37PM

Date: Subject:

Re: Deltawaterways

Nancy,

I hope that you will be pleased to know that several of us have agreed on Delta subregion division boundaries. Now it remains for me to revise the Delta map and send it to you with seven - yes, seven-subregions! I have attached a revised version of your Excel spreadsheet that lists the pollutant/stressors for each subregion.

In reviewing the spreadsheet that you sent to me, I noticed that the total Delta (waterways) area is only ~4,000 acres. We also noticed that the "Proposed TMDL Completion" dates were all 2004. Do these numbers (acres & dates) seem correct to you?

-Gene

>>> Nancy Richard 08/30/04 09:21AM >>> Hi Gene,

I need some clarification on the Delta map changes. Can you describe what Delta waterway pollutants go to the Export area and Southern Delta by filling in or correcting the attached table?

I also have some bitmaps of both the 2002 Delta W and the 2004 Delta W that I will attach in a separate email.

Thanks,

Nancy

PS

ſ	Water Body Name	Estimated Size Affected (reflects new size)	Unit	Pollutant_Stressor	TMDL Priority	Potential Sources	Comments	Proposed TMDL Completion
∖ lo	elta Waterways (eastern portion)		Acres	Unknown Toxicity	Low ·	Source Unknown		
Ì				Mercury	Medium	Resource Extraction	All resource extraction sources are abandoned mines.	
				Chlorovrifos	High	Agriculture		
⊢		<u> </u>		loor.		Urban Runoff/Storm Sewers	· · · · · · · · · · · · · · · · · · ·	
-	·· ···			DDT Diazinon	Low High	Agriculture .	<u> </u>	
-				Diagnoti	FIRM	Urban Runoff/Storm Sewers		
				Group A Pesticides	Low	Agriculture		
<u>D</u>	elta Waterways (northern portion)			Unknown Toxicity	Low	Source Unknown		
\vdash	<u></u>			Mercury	Medium	Resource Extraction	All resource extraction sources are abandoned mines.	·
-				Chlorpyrifos	High	Agriculture Urban Runoff/Storm Sewers		
-				DDT	Low	Agriculture	<u> </u>	
				Diazinon	' High	Agriculture	_	
						Urban Runoff/Storm Sewers		
۱L.				Group A Pesticides	Low	Agriculture		
Æ	olta Watanasa (Charleton Chin Charleton		Acces	Hukawa Tarisitu	1	Sauras Haliania	 	
۲	elta Waterways (Stockton Ship Channel)			Unknown Toxicity Mercury	Low	Source Unknown Resource Extraction	All resource extraction sources are abandoned mines.	
-		· ,		Organic Enrichment/Low Dissolved Oxygen	High	Municipal Point Sources	TOTAL ESPACION SULLES ALC ADMINISTRATIONS.	
						Urban Runoff/Storm Sewers		
				Chlorpyrifos	High	Agriculture		
⊢						Urban Runoff/Storm Sewers		
-				DDT	Low	Agriculture		
- 1-				Diazinon	High	Agriculture Urban Runoff/Storm Sewers		
- 1-				Group A Pesticides	Low	Agriculture		
< i⁻								
T	elta Waterways (western portion)			Unknown Toxicity	Low	Source Unknown		
-				Mercury	Medium	Resource Extraction	All resource extraction sources are abandoned mines.	<u> </u>
⊢				Electrical Conductivity Chlorovnios	Medium High	Agriculture	, , ,	
-				i Cilorpyrilos -	mign	Agriculture Urban Runoff/Storm Sewers		
-				DDT	Low	Agriculture		
				Diazinon	High	Agriculture		
L						Urban Runoff/Storm Sewers		
ŀ				Group A Pesticides	Low	Agriculture	÷	
_ la	elta Waterways (northwestern portion)	*	Acres	Unknown Toxicity	Low	Source Unknown		· · · · · · · · · · · · · · · · · · ·
ľ	cità maternata (northmestern portion)		Fully	Mercury	Medium	Resource Extraction	All resource extraction sources are abandoned mines.	
				Electrical Conductivity	Medium	Agriculture		
	· · · · · · · · · · · · · · · · · · ·			Chlorovnfos -	High	Agriculture		
⊢		ļ		l port		Urban Runoff/Storm Sewers	<u> </u>	ļ
⊢				Diazinon	Low High	Agriculture Agriculture		
- 1-				Diazmon	1.080	Urban Runoff/Storm Sewers		
t				Group A Pesticides	Low	Agriculture		
D	elta Waterways (export area)		Acres	Unknown Toxicity	Low	Source Unknown		
\perp	· · · · · · · · · · · · · · · · · · ·	l	.	Mercury Electrical Conductivity	. Medium Medium	Resource Extraction Agriculture	All resource extraction sources are abandoned mines.	
ŀ		·	 	Electrical Conductivity Chlorovrifos	High	Agriculture		
-					1	Urban Runoff/Storm Sewers		
				DDT	Low	Agriculture		
E				Diazinon	High	Agriculture		
-			—	Cours & Bootisides		Urban Runoff/Storm Sewers		ļ
⊢				Group A Pesticides	Low	Agriculture ·		
ī	elta Waterways (southern portion)	 	Acres	Unknown Toxicity	Low	Source Unknown	· · · · · · · · · · · · · · · · · · ·	1
ľ			1	Mercury	Medium	Resource Extraction	All resource extraction sources are abandoned mines.	
				Electrical Conductivity	Medium	Agriculture		
				Chlorovnitos	High	Agriculture -		
1-			l	PDT	l	Urban Runoff/Storm Sewers		+
⊢				DDT Diazinon	Low High	Agriculture Agriculture		
I-				, ,	Jakii	Urban Runoff/Storm Sewers		

Continue for additions to database

Gene Davis

To:

Richard, Nancy

Date:

9/1/04 1:42PM

Subject:

We have created 8 Delta Waterways portions - revised Excel attached

Nancy,

I miscounted the portions of Delta waterways that we have identified - there are eight. I have added the eighth (central) portion's information to the Excel file (attached).

I will try to get the GIS themes for the Delta Waterways to you today or tomorrow. Sorry for any inconvenience I have caused (again).

-Gene

			•			
				•		·
			• .			
			46			
•			•			
•					•	•
	Estimated Size					, ,
. Water Body Name	Affected	Unit	Pollutant_Stressor	TMDL Priority -	Potential Sources	Comments
·	(reflects new size)	••				W
Delta Waterways (eastern portion)		Acres	Unknown Toxicity Mercury	Low Medium	Resource Extraction	All resource extraction sources are abandoned mines.
			Chlorpyrifos	High	Agriculture	All resource extraction sources are abandoned yimos
			DDT	Low	Urban Runoff/Storm Sewers Agriculture	·
			Diazinon	High	Agriculture	
·			Group A Pesticides	1	Urban Runoff/Storm Sewers	
			Group A resticides	Low	Agriculture	
Delta Waterways (northern portion)		Acres	Unknown Toxicity .	Low	Source Unknown	
			Mercury Chlorpyrifos	Medium High	Resource Extraction Agriculture	All resource extraction sources are abandoned mines.
					Urban Runoff/Storm Sewers	
			DDT Diazinon	Low High	Agriculture Agriculture	
					Urban Runoff/Storm Sewers	
			Group A Pesticides	Low	Agriculture	·
Delta Waterways (Stockton Ship Channel)		Acres	Unknown Toxicity	Low	Source Unknown	
			Mercury	Medium	Resource Extraction	All resource extraction sources are abandoned mines.
· · · · · · · · · · · · · · · · · · ·			Organic Enrichment/Low Dissolved Oxygen	High	Municipal Point Sources Urban Runoff/Storm Sewers	
			Chlorpyrifos	High	Agriculture	
· · · · · · · · · · · · · · · · · · ·		-	TOOT	Low	Urban Runoff/Storm Sewers Agriculture	
			Diazinon	High	Agriculture	
			Group A Pesticides	Low	Urban Runoff/Storm Sewers Agriculture	
					1	
Delta Waterways (western portion)		Acres	Unknown Toxicity	Low Medium	Source Unknown Resource Extraction	All resource autraction sources are abandoned minet
		<u> </u>	Mercury Electrical Conductivity	Medium	Agriculture	All resource extraction sources are abandoned mines.
			Chlorpyrifos	High	Agriculture	· · · · · · · · · · · · · · · · · · ·
<u> </u>			DDT	Low	Urban Runoff/Storm Sewers Agriculture	·
			Diazinon -	High	Agriculture	
			Group A Pesticides	Low	Urban Runoff/Storm Sewers Agriculture	
Delta Waterways (northwestern portion)	1	Acres	Unknown Toxicity Mercury	Low Medium	Source Unknown Resource Extraction	All resource extraction sources are abandoned mines.
			Electrical Conductivity	Medium	Agriculture	
			Chlorpyrifos	High	Agriculture Urban Runoff/Storm Sewers	
		<u> </u>	DDT	Low	Agriculture	
· · · ·	-		Diazinon	High	Agriculture Urban Runoff/Storm Sewers	
			Group A Pesticides	Low	Agriculture	
Delta Waterways (export area)		Acres	Unknown Toxicity	Low	Source Unknown	<u> </u>
DELLE MALCHARYS (EXPORT AIREA)		- Acres	Mercury	Medium	Resource Extraction	All resource extraction sources are abandoned mines.
		ļ. <u>.</u>	Electrical Conductivity	Medium	Agriculture Agriculture	· · · · · · · · · · · · · · · · · · ·
		<u> </u>	Chlorpyrifos	High	Urban Runoff/Storm Sewers	
			DDT	Low	Agriculture	
		L	Diazinon	High	Agriculture Urban Runoff/Storm Sewers	
			Group A Pesticides	Low	Agriculture	
Delta Waterways (southern portion)	1	Acres	Unknown Toxicity	· Low	Source Unknown	• • • • • • • • • • • • • • • • • • • •
			Mercury	Medium	Resource Extraction	All resource extraction sources are abandoned mines.
	1	 	Electrical Conductivity Chlorpyrifos	Medium High	Agriculture Agriculture	
				1	Urban Runoff/Storm Sewers	
	-		DOT	Low High	Agriculture Agriculture	·
			Diazinon		Urban Runoff/Storm Sewers	
			Group A Pesticides	Low	Agriculture	
Delta Waterways (central portion)		Acres	Unknown Toxicity	Low	Source Unknown	
			Mercury	Medium - High	Resource Extraction	All resource extraction sources are abandoned mines.
			Chlorpyrifos	- High	Agriculture Urban Runoff/Storm Sewers	
		<u> </u>	DDT	Low	Agriculture	
		 	Diazinon	High	- Agriculture Urban Runoff/Storm Sewers	
			Group A Pesticides	Low	Agriculture	