

FRIENDS OF THE NORTH FORK NOVEMBER 3, 2011
REBUTTAL EVIDENCE LIST

Note: All documents are from DWR Division of Safety of Dams, Sacramento, files for Wastewater Storage Dam No. 2022-0

1. 9/23/10 Letter to Colfax
2. 3/2/09 Letter to Colfax
3. 12/23/08 Inspection of Dam
4. 3/7/08 Letter to Colfax
5. 4/6/07 Inspection of Dam
6. 3/14/07 Letter to Colfax
7. 2/15/06 Letter to Colfax
8. 2/18/00 Letter to Colfax
9. 4/1/80 Memo to Files with copy of 3/80 Division of Water Quality letter to Colfax attached
10. 9/29/78 Inspection of Dam Construction & photo (1 page photo)
11. 9/25/78 Photo (1 page)
12. 9/21/78 Photos (1 page)
13. 8/30/78 Inspection of Dam Construction
14. 8/29/78 Inspection of Dam Construction & photo (1 page photos)
15. 8/14, 8/15, 8/16/78 Inspection of Dam Construction
16. 8/4/78 Photos (1 page)
17. 7/21/78 Photos (2 pages)
18. 7/10/78 (9/22/78) Photos (3 pages)
19. 7/19/78 (9/20/78) Photos (2 pages)
20. Dam Safety Summary Sheet

f. kag

SEP 23 2010

Mr. Bruce Kranz, City Manager
City of Colfax
Post Office Box 702
Colfax, California 95713

Wastewater Storage Dam, No. 2022
Placer County

Dear Mr. Kranz:

Thank you for the surveillance data transmitted to us on August 10, 2010. We collect this information in accordance with Division 3, Sections 6101 and 6102, of the California Water Code to monitor ongoing conditions for safety.

We appreciate your efforts to resolve past discrepancies and reconcile old data with new in order to provide a quality instrumentation report. Your engineer's assessment of historical records and the format in which the new data was presented is acceptable. We have the following comments:

1. All historical survey data needs to be presented in long-term time plots as well as in tabular format.
2. In addition to the short-term plots provided for piezometers and seepage, long-term plots with all historical data are needed.
3. We will consider decreasing the frequency of monument surveys once data trends are established and no significant movements are noted over several years.

Please address Items No. 1 and 2 above in your next submittal due in August 2011. We understand that the old monument and piezometer elevations cannot be tied into the new data with accuracy, but it will be beneficial to see all past data related to the dam.

If you have any questions or need additional information, you may contact Field Engineer Austin Roundtree at (916) 227-2148 or Regional Engineer Andrew Mangney at (916) 227-4631.

Sincerely,

ORIGINAL SIGNED BY

Andrew J. Mangney, Regional Engineer
Field Engineering Branch
Division of Safety of Dams

cc: Mr. Frederick J. Wentz, Jr., G.E.
Principal Engineer
Paragon Geotechnical, Inc.
1049 Kimi Way
Placerville, California 95667

ACRoundtree:ajackson
SHR:AWWastewaterStorage.docx
DWF 155 (Rev 1/09)
Spill Check 9/23/10
AC ROUNDTREE
9/23/10

August 23
9/23/10

Files

MAR 02 2009

Ms. Joan Phillipe, City Manager
City of Colfax
Post Office Box 702
Colfax, California 95713

Wastewater Storage, No. 2022
Placer County

Dear Ms. Phillipe:

Thank you for the surveillance data transmitted to us on January 31, 2009. We collect this information in accordance with Division 3, Sections 6101 and 6102, of the California Water Code to monitor ongoing conditions for safety. We have completed our review of the submittal and have the following comments:

1. The survey data shows excessive movements. An engineer's evaluation of the survey data is needed and consideration should be given to employing more accurate survey methods.
2. Long and short term time-plots showing reservoir level and instrumentation data are needed. Sample plots have been given to Mr. Tom Parnham during maintenance inspections.
3. A plan view is needed that shows the location of instrumentation at the dam.
4. An engineer's evaluation of the instrumentation data and network at the dam is needed.

These comments have been discussed in past correspondence to you and have not been properly addressed. During a phone conversation with Area Engineer Andrew Mangney on February 26, 2009, you committed to submitting a revised submittal that addresses all of our comments. Please submit your revised submittal by July 1, 2009.

If you have any questions or need any additional information, you may contact me at (916) 227-4631 or Mr. Mangney at (916) 227-4635.

Sincerely,



Mike Zumot, Central Regional Engineer
Field Engineering Branch
Division of Safety of Dams

AJMANGNEY:abeeman
T:\AMY\Letters\surveillance letters\Surveillance\WastewaterStorage.doc
Spell check 2/27/09

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF SAFETY OF DAMS

FILE COPY

INSPECTION OF DAM AND RESERVOIR IN CERTIFIED STATUS

Name of Dam Wastewater Storage Dam No. 2022 County Placer
 Type of Dam earth Type of Spillway Concrete sill with unlined Channel
 Water is 30 feet Below spillway crest and 34 feet Below dam crest.
(above, below) (above, below)

Weather Conditions Overcast and occasional showers
 Contacts made David Woodford, Director of Public Works, City of Colfax, prior to the inspection.
 Reason for Inspection Periodic Maintenance Inspection

Important Observations, Recommendations or Actions Taken

The owner needs to send their most recent instrumentation data to DSOD in the format provided to them.

Conclusions

From the known information and the visual inspection, the dam, reservoir, and the appurtenances are judged satisfactory for continued use.

Observations and Comments

Item No.*	Item Name and Observations and Comments
A1 - A4	<u>Embankment</u> – There were no visible signs of movement or instability with regards to the upstream face, crest, and downstream face of the dam. As observed in previous inspection, vegetation control was excellent. There were no signs of any type of erosion on either faces. Rodent activity was non-existent.
8 - 10	<u>Spillway</u> - The approach, control section, and downstream channel were clear and free of obstructions. No problems were observed.
12 - 16	<u>Outlet Works</u> – The outlet system consists of a 15 inch upstream slide gate and a 16 inch gate valve downstream. The entire system was cycled for DSOD on 1/11/2008. The process involved a sewage pump truck/tanker. A vacuum line was placed inside the outlet pipe to collect the wastewater as it was released. Because of the truck's limitations, the low level outlet could only be opened ½ a turn at a time. The upstream control has been used throughout the year.
17	<u>Seepage</u> – The downstream face and groins were wet from recent showers. The dam has two seepage measurement points. The first one is where accumulated water is diverted to. The total flows come from locations which were originally identified as S1, S3, and the left groin weir. This water flows through an underground pipe with an in-line flow meter. The seepage flow on this date was 25 gpm which appears to be normal when compared to early reports. The other seepage point for the right groin, a v-notch weir, was dry.

Typed by mjs
 Date 01/16/2009
 cc for Owner

*Use Field Sheet Standard
 Numbers and Items
 (See Reverse Side)

Inspected by M. Sutliff
 Date of Inspection 12/23/2008
 Date of Report 01/16/2009
 Photos taken? Yes No

MJS
1/16/09
AS
1/20/09
M2
1/20

INSPECTION OF DAM AND RESERVOIR IN CERTIFIED STATUS

Name of Dam Wastewater Storage Dam No. 2022

Date of Inspection 12/23/2008

Item No.* Item Name and Observations and Comments

18 Instrumentation – Instrumentation for this dam consists of two piezometers, four survey monuments, one seepage weir, and a seepage collection pipe. A letter was sent to the owner on 3/7/2008 requesting that they re-submit their instrumentation data in the correct format. A CD was given to them with the required format. No submittal has been received. I was informed during the inspection that they are working on the instrumentation report and will forward it to DSOD when it is completed.

The previous submittal was transmitted on 2/6/2007 and reviewed in the maintenance report dated 4/11/2007.

MAR 7 2008

Ms. Joan Phillipe, City Manager
City of Colfax
Post Office Box 702
Colfax, California 95713

Wastewater Storage Dam, No. 2022
Placer County

Dear Ms. Phillipe:

Thank you for the surveillance data transmitted to us on January 31, 2008. We collect this information in accordance with Division 3, Sections 6101 and 6102 of the California Water Code to monitor ongoing conditions for safety. We have reviewed the data and have the following comments:

1. The survey data shows excessive movements. Mr. Tom Parnham, of your staff, informed us that the measured movements are due to new survey equipment and do not represent actual movements. The monuments need to be surveyed with the old equipment and an evaluation is needed to confirm Mr. Parnham's assessment.
2. During the maintenance inspection on December 10, 2007, Field Engineer Mike Sutliff gave Mr. Parnham sample seepage time-plots that meet our formatting requirements. We note the necessary formatting changes have not been incorporated into the surveillance report.

Please submit a revised surveillance data report addressing the above comments by May 1, 2008.

If you have any questions or need additional information, you may contact me at (916) 227-4635 or Field Engineer Mike Sutliff at (916) 227-2148.

Sincerely,

ORIGINAL SIGNED BY

Andrew Mangney, Acting Regional Engineer
Field Engineering Branch
Division of Safety of Dams

Mike Sutliff:dnichols
Z:\data on dams\admin\debbie\Wastewater Storage dam surveillance letter
Spell checked 03/06/08

MS 3/7/08

INSPECTION OF DAM AND RESERVOIR IN CERTIFIED STATUS

Name of Dam Wastewater Storage Dam No. 2022 County Placer
 Type of Dam earth Type of Spillway Concrete sill with unlined Channel
 Water is 18 feet Below spillway crest and 22 feet Below dam crest.
(above, below) (above, below)
 Weather Conditions Sunny and mild
 Contacts made David Woodford, Director of Public Works, City of Colfax
 Reason for Inspection Periodic Maintenance Inspection

Important Observations, Recommendations or Actions Taken

The following item required immediate attention from the owner:

Submit their latest instrumentation report to DSOD in the correct format, as referenced in the letters to the owner dated 2/15/2006 and 3/14/2007.

Conclusions

From the known information and the visual inspection, the dam, reservoir, and the appurtenances are judged satisfactory for continued use.

Observations and Comments

Item No.*	Item Name and Observations and Comments
A1 - A4	<u>Embankment</u> – There were no visible signs of movement or instability with regards to the upstream face, crest, and downstream face of the dam. Vegetation control was excellent. The low lying vegetation is excellent ^{for} erosion protection. There were no signs of erosion on either face. Rodent problems were not an issue.
8 - 10	<u>Spillway</u> - The approach, control section, and downstream channel was clear and free of obstructions. During the last inspection David was instructed to remove a very large amount of woody vegetation in the downstream channel. As of this inspection, all vegetation has been removed.
12 - 16	<u>Outlet Works</u> – The outlet has a 15 inch upstream slide gate and a 16 inch gate valve downstream. It has been a number of years since DSOD has observed the cycling of the downstream control. David mentioned that they are working on a way to capture the released water and pump it back into the reservoir so that they do not violate SWRCB regulations. I asked him to contact us when he is prepared to proceed with the cycling process. David agreed to contact me when they are ready. The upstream control was cycled in October 2006. No problems were reported. It was last cycled for DSOD on 3/22/2006 without any problems.

Typed by mjs
 Date 4/11/2007
 cc for Owner

*Use Field Sheet Standard
 Numbers and Items
 (See Reverse Side)

Inspected by M. Sutliff
 Date of Inspection 4/06/2007
 Date of Report 4/11/2007
 Photos taken? Yes X No

MJS
4/11/07
AS
for
m2
4/11/07

INSPECTION OF DAM AND RESERVOIR IN CERTIFIED STATUS

Name of Dam Wastewater Storage Dam No. 2022

Date of Inspection 4/06/2007

Item No.*	Item Name and Observations and Comments
17	<p><u>Seepage</u> – The owner has removed the small treatment plant at the toe of the dam. Originally, all seepage was treated through this plant and then released into the stream. Now, all seepage is pumped back into the reservoir. There are now two seepage measurement points. The first one is the original point where the accumulated water was diverted to. The total flows come from locations which were originally identified as S1, S3, and the left groin weir. This water now flows through an underground pipe with an in-line flow meter. The seepage flow on this date was 75 gpm which appears to be normal when compared to early reports. There is also a new seepage measurement point. During last year's inspection, I requested that David install a seepage weir to measure flows from the right groin. A new 90 degree V-Notch weir has now been installed. On this date, the weir was dry, which is understandable with the reservoir at its present level. When the reservoir level rises, seepage flow will again appear. This seepage also flows to the main collection point before it is pumped back into the reservoir.</p>
18	<p><u>Instrumentation</u> – Instrumentation for this dam consist of two piezometers, four survey monuments, one seepage weir, and a seepage collection pipe. The latest data was transmitted on 2/6/2007. Settlement values continue to follow historical rates with readings varying between .01' at monument # 4 and 0.045' at monument number 2. Piezometer readings were somewhat difficult to interpret since the owner submitted a record sheet with just this year's readings. The same problem was experienced with seepage flows. A letter was sent to the owner on 2/15/06 and again on 2/14/07 instructing the owner to include the following items in their instrumentation report:</p> <ol style="list-style-type: none"> 1. Long term time-plots showing reservoir elevation, and historical data for all instruments. 2. Short term time-plots showing reservoir elevation, and the last three to five years of data for the piezometers and seepage weirs. 3. A plan sheet showing the general location of instruments at the dam. A description of what the seepage weirs are measuring should be included on the plan. 4. An evaluation of the data. <p>David mentioned that they were in the process of re-doing their submittal. A more thorough evaluation will be performed when the data is submitted in the correct format.</p>

Author/Typist: mjs

Sheet 2 of 2 Sheets

MAR 14 2007

Ms. Joan Phillipe, City Manager
City of Colfax
Post Office Box 702
Colfax, California 95713

Wastewater Storage Dam, No. 2022
Placer County

Dear Ms. Phillipe:

Thank you for the surveillance data transmitted to us on February 6, 2007. We collect this information in accordance with Division 3, Sections 6101 and 6102, of the California Water Code to monitor ongoing conditions for safety. We have reviewed the data. The following items, which were identified in our letter dated February 15, 2006, are still outstanding:

1. Long term time-plots showing reservoir elevation, and historical data for all instruments.
2. Short term time-plots showing the reservoir elevation, and the last three to five years of data for the piezometers and seepage weirs.
3. A plan sheet showing the general location of instruments at the dam. A description of what the seepage weirs are measuring should be included on the plan.
4. An evaluation of the data.

Please submit a revised instrumentation report that incorporates the above items by April 15, 2007.

If you have any questions or need additional information, you may contact me at (916) 227-4631 or Field Engineer Mike Sutliff at (916) 227-2148.

Sincerely,



Mike I. Zumot, Central Regional Engineer
Field Engineering Branch
Division of Safety of Dams

MJSutliff:dnichols/TG
Z:\admin\debbie\Wastewater Storage Dam Data Request 2 Letter
Spell checked: 03/14/07

FEB 15 2006

Mr. Bob Perrault, City Manager
City of Colfax
Post Office Box 702
Colfax, California 95713

Wastewater Storage Dam, No. 2022
Placer County

Dear Mr. Perrault:

Thank you for the surveillance data transmitted to us on January 22, 2006. We collect this information in accordance with Division 3, Sections 6101 and 6102, of the California Water Code to monitor ongoing conditions for safety. We have completed our review of the submittal, and the following items need to be included in your next submittal:

1. Annual survey data.
2. Long term time plots showing reservoir elevation and historical data for all instruments.
3. Short term time-plots showing reservoir elevation, and the last three to five years of data for the piezometers and the seepage weirs.
4. A plan sheet showing the general location of instruments at the dam. A description of what the seepage weirs are measuring should be included on the plan.
5. An evaluation of the data.

Please submit a revised instrumentation submittal that incorporates the above items by April 1, 2006. Some sample time-plots are enclosed for your reference.

If you have any questions or need additional information, you may contact Area Engineer Andrew Mangney at (916) 227-4635 or Regional Engineer Mike Zumot at (916) 227-4631.

Sincerely,

Original signed by

FREDERICK J. SAGE

Frederick J. Sage, Chief
Field Engineering Branch
Division of Safety of Dams

Enclosures

Andy Mangney:dnichols/rd
t:\debbie\wastewater storage surveillance plus letter.doc
Spell check: 02/06/06

FEB 18 2000

Mr. David Humphrey
WWTP Manager
City of Colfax
Post Office Box 702
Colfax, California 95713

Dear Mr. Humphrey:

Wastewater Storage Dam, No. 2022
Placer County

Thank you for the surveillance data transmitted to us on January 12, 2000. We collect this information in accordance with Division 3, Sections 6101 and 6102, of the California Water Code to monitor ongoing conditions for safety.

In future transmittals, we recommend that your instrumentation readings be presented with line charts of approximately ten years of historical records. Also, we suggest including the reservoir levels in the piezometer and leakage graphs for establishing trends of their responses to reservoir variations. Two samples are enclosed for your reference. This will help the Division of Safety of Dams as well as your organization identify and evaluate long-term trends as well as provide the perspective needed to evaluate new data.

We appreciate your cooperation.

If you have any questions, please contact Area Engineer Mike Zumot at (916) 323-5365 or Regional Engineer Richard Baines at (916) 323-5300.

Sincerely,

Original signed by
D.A. Gutierrez

David A. Gutierrez, Chief
Design Engineering Branch
Division of Safety of Dams

Enclosures

WCLam:LupeZamudio
N:\Lupelwastewater.wpd
SpellCheck: 2/14/00

SURNAME DWR 540 (Rev. 1/86)	W. Jim 2/16/00 T.C. Liu 2/16/00	M Zumot 2/16/2000 R Baines 2/14/00		
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Memorandum

To : 1. V. B. Tipton ^{MAY 6 '80 VBT}
2. Files

Date : April 1, 1980

File No.:

Subject: Wastewater Storage Dam
No. 2022
Placer County

From : B. Vanberg
Department of Water Resources

On April 1, 1980, Tom McLean and I talked to Bob Rogers, City Manager for Colfax, before and after our inspection of the dam. This is in addition to our inspection report.

According to Mr. Rogers, the City is under a stop order on the filling of the Wastewater Storage Reservoir from the Division of Water Quality until they solve the leakage problem which contaminates the natural flow in the area.

Mr. Rogers gave us the attached copy of a letter from the Division of Water Quality which explains some of the present problems the City is having. After some discussion, my concept of the situation is as follows:

1. The Wastewater Treatment Plant is designed for a maximum capacity of 1.5 MGD which should occur at least 10 years from now.
2. Last winter's storms produced a maximum flow of 3.8 MGD mainly from storm runoff. At that time Holding Pond #1 overtopped and flowed into the storage reservoir.
3. From our inspection, the reservoir levels were determined:

Dam Crest	El. 2115
Spillway Crest	El. 2111
Water Surface	El. 2093
Max. W. S. from Rain	El. 2096

4. The City has to remove part or most of the infiltration from the collector system but has no money for a storm sewer system.
5. Water Quality wants the City to hire a consultant to review the Wastewater Storage Reservoir leakage. The consultant is to determine (a) the best method of reducing or eliminating the leakage and (b) was the leakage foreseeable and an oversight by the engineer during design and water quality during review or unforeseeable and covered by a grant extension.

Mr. Rogers said he would send us copies of the future correspondence to keep us apprised of the situation.

Attachment
BJVanberg:ef

STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER QUALITY

P. O. Box 100 • Sacramento 95801

(916) 445-7071

MAR 1 1980

Honorable Frank Bozza
Mayor of the City of Colfax
P.O. Box 702
Colfax, CA 95713In Reply Refer
to: 511:SN

Dear Mayor Bozza:

CITY OF COLFAX, WASTEWATER PROJECT, I.D. NO. C-06-0861-110

During our meeting of February 22nd, the City expressed its concerns regarding the adequacy of the proposed sewer system rehabilitation work to remove the excessive Infiltration/Inflow (I/I) from the system. Plans and specifications for the rehabilitation of the City's sewer system were submitted to this office in December 1979, but on February 5, 1980, the City requested that we stop our review and approval. Based on a measured flow of 3.8 MGD during a recent rainstorm, the City believes that the peak flows used by its consultant in design of the proposed rehabilitation work are far below the flows it is now experiencing during the wet season.

Also, the City expressed its concerns about the present leak from the effluent storage pond located at its treatment plant. The City stated its inability to unilaterally finance the corrective work of lining the pond at an estimated cost of \$200,000.

Due to lack of local funds, the City requested the release of grant funds up to 98% of the construction cost in order to ease its present financial situation.

During the meeting, we advised the City that a study by an independent consultant of the matter of the leak from the storage pond and the adequacy of the proposed I/I design would be grant funded by appropriate grant amendment. We also advised the City that the grant funding of the above study does not constitute a commitment by this office to fund any corrective work.

In response to your letter of February 25, 1980, we would like to advise you of the following:

1. You are authorized to prepare a study concerning the present leak from the storage pond. The purpose of the study shall be limited to determination of the cause of the leak, any design and/or construction deficiencies, corrective measures necessary to bring the facilities into compliance with the Regional Board requirements and orders, estimated costs of the corrective measures, the time required to complete the work and additional factors deemed relevant to the case if approved by this office. The study shall be performed by an expert, independent consultant retained by the City and satisfactory to this office. The consultant shall not be otherwise associated with the project.

2. Grant funding of the necessary corrective work will be considered by this office pending the outcome of the study described in No. 1 above and our review and evaluation thereof.
3. Please contact the Regional Board concerning your request to relax the present requirements. The City is expected to take all reasonable interim actions necessary to minimize violations at its own expense.
4. On several occasions, you indicated that you have reasons to question the design criteria used in the preparation of the Plans and Specifications for the rehabilitation work. On December 1979, your consulting engineer submitted to this office the final Plans and Specifications for the rehabilitation work. As requested by your letter of February 1, 1980, we have stopped processing our approval of the submitted Plans and Specifications. As requested by you, in our meeting of February 22nd, this office is authorizing the City to retain an expert, independent consultant to analyze the adequacy of the submitted design for the I/I work and render his opinion on this matter. The consultant shall be retained by the City and shall be satisfactory to this office. The consultant shall not be otherwise associated with the project.
5. Your request to release grant funds up to the 98% level is presently under consideration by this office. If approved, additional grant amount of approximately \$50,000 will be disbursed to the City.

In regard to the procurement of services for the "independent study", please be sure to contact Mr. Ralph Blackburn in our Contracts Unit (916/322-4751) to assure that the proper procedures are followed. Failure to do so could result in costs being declared ineligible which would otherwise be eligible.

If you need any further assistance, please contact Samir Nessim, of my staff, at (916) 322-6457.

Sincerely,



Mel Holland
Assistant Division Chief

cc: Honorable Harold T. Johnson
Congressman, District 1
320 Vernon Street
Roseville, CA 95678

Honorable Ray Johnson
State Senator, District 1
2400 Washington Plaza
Redding, CA 96001

Bill Johnson
CRWQCB, Central Valley Region (5)
Sacramento

Honorable Eugene Chappie
Assemblyman, District 3
459 Pelora
Yuba City, CA 95991

George Atteberry
Atteberry & Associates
730 Sunrise Avenue
Roseville, CA 95678

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF SAFETY OF DAMS

INSPECTION OF DAM CONSTRUCTION

Name of Dam Wastewater Treatment

Dam No. 2022

Contacts Made

County Placer

Messrs. G. Atteberry, and G. Moore

Stage of Construction

Embankment constructed to 10 feet \pm below Grade.

Important Observations, Recommendations, or Actions

See remarks.

Conditions Noted and Remarks

When I arrived at the site, I found little to be pleased with, namely:

1. No inspector on the job
2. Embankment lift being placed up to 2 feet thick.
3. Two large boulders attached to right abutment were being ignored.
4. Two scrapers on short haul ($\frac{1}{2}$ mile round trip) with only one tamper working.
5. Moisture content of the borrow, however, appeared excellent for working.

When Mr. Atteberry showed up about 1 hour later, I demanded:

1. One scraper be taken off the fill (done).
2. Density test be taken on lift being placed (promised).
3. Lift being placed be spread out (done).
4. Get hand compactor on job for compaction around right abutment boulders (promised).

By the time I left the job, everything was apparently running smoothly.

dkc
10/6/78

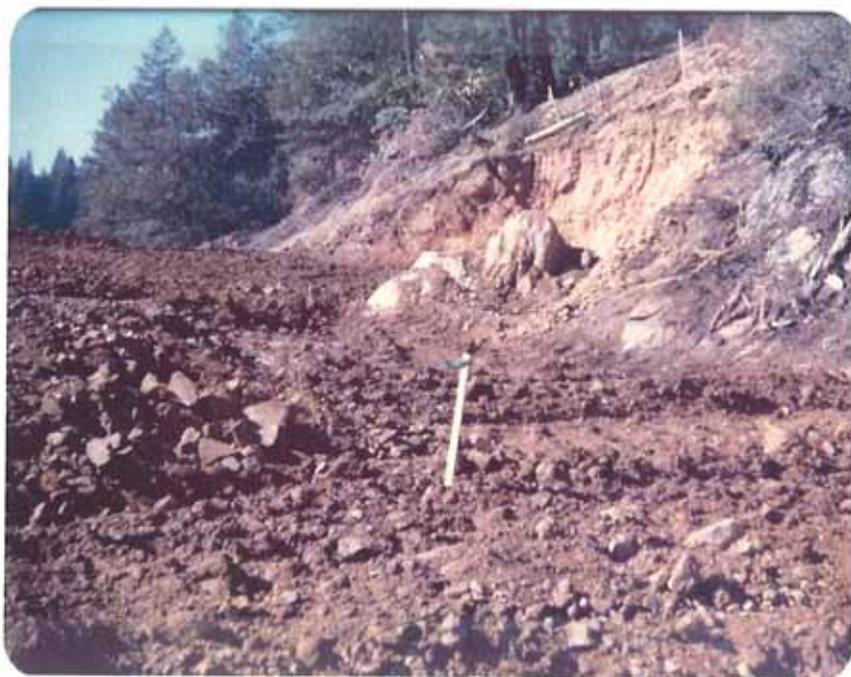
Inspection by TAPatton
Date of inspection 9/29/78
Date of report 10/5/78
Photos taken? Yes

Wastewater Treatment Dam, No. 2022
September 29, 1978
Page 2

We discussed placing a lift of 8-inch rock spalls on entire downstream face instead of just on the drain zone as discussed previously. The material would come from the spillway and bypass trench excavations. I later talked it over with Messrs. Garber and Fitzpatrick who had no objection to replacing the 6-inch sod with a lift of rock spalls.

TAPatton:dkc
10/6/78

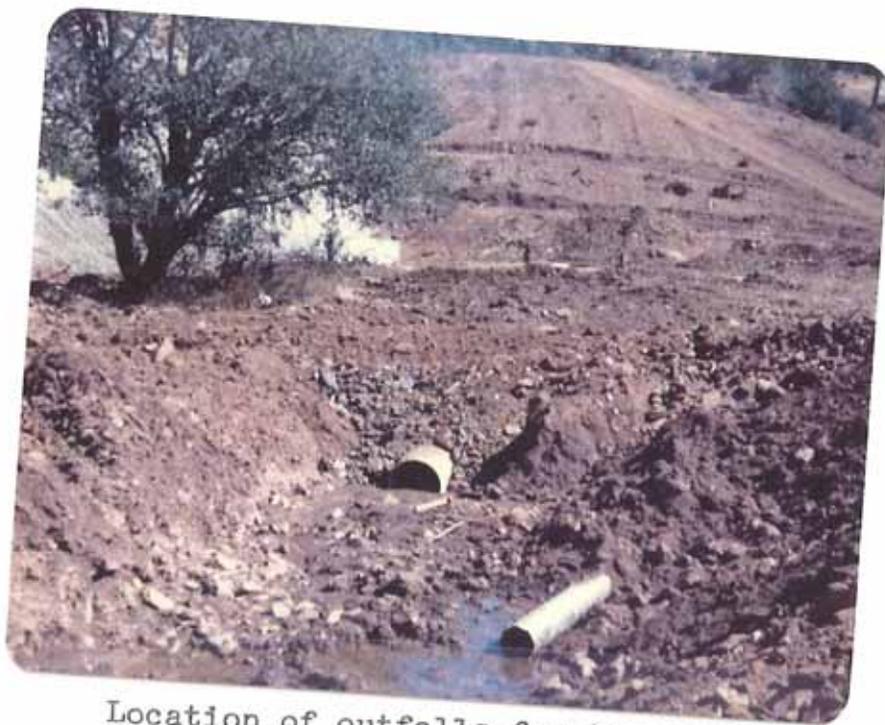
OCT 12 '78 TAP



Closeup of right abutment. Two large boulders in background are the ones referred to in the report. Left of the lath you can see the end of the two foot lift.

WASTEWATER STORAGE DAM, NO. 2022
TAPatton 9/29/78

NOV 17 '78 TAP



Location of outfalls for the left
8-inch drain and the outlet pipe.

WASTEWATER STORAGE, No. 2022
TAPatton 9/25/78

NOV 17 '78 TAP



Toe drain left of outlet



Toe drain right of outlet

WASTEWATER STORAGE, NO. 2022
TAPatton
9/21/78

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF SAFETY OF DAMS

25/01
F/S 11

INSPECTION OF DAM CONSTRUCTION

Name of Dam
Wastewater Storage
Contacts Made

Dam No. 2022
County Placer

Dennis Richardson

Stage of Construction

Fill at Elevation 2065.

Important Observations, Recommendations, or Actions

See remarks.

Conditions Noted and Remarks

To adequately moisture condition the fill material, watering and mixing is necessary on the embankment. Water trucks sprinkle the borrow pit but the area is small and therefore there is not enough time for moisture distribution through the material.

Fill placement is frequently delayed while materials are moisture conditioned and mixed. This requires close inspection on the fill to make sure dry material is watered before it is covered.

A dozer trench was excavated into the upstream shell of the embankment to examine the fill. No dry layers were found and the fill was found to be adequately moisture conditioned.

Enroute home we stopped in Roseville to discuss the work with Mr. John Atteberry. Mr. Atteberry stated that it was his intention to require moisture conditioning prior to bringing fill to the dam. This may be difficult to enforce because some of the material requires only a small amount of additional water. Mr. Atteberry assured us that a full time inspector would be on the job anytime fill is being placed in the embankment.

SEP 18 78 RFD

rr
9/15/78

Inspection by Tipton
Date of inspection Patton
Date of report RFDelparte
Photos taken? 8/30/78
9/1/78
Yes

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF SAFETY OF DAMS

INSPECTION OF DAM CONSTRUCTION

Name of Dam

Dam No. 2022

Wastewater Storage
Contacts Made

County Placer

Einar Maisch

Stage of Construction

Fill at average Elevation 2063.

Important Observations, Recommendations, or Actions

Requested continuous inspection fill placement. Requested exploration trench in upstream shell of embankment.

Conditions Noted and Remarks

Until noon fill was being placed on the embankment without an inspector on the job. Mr. Maisch explained that he was at a meeting with the contractor in Roseville. At noon I telephoned Mr. John Atteberry and reminded him that he previously agreed to have an inspector on the job continuously. He again agreed that an inspector would be present any-time fill was being placed in the dam.

Material in the borrow pit is dry and it is not being adequately moisture conditioned before it is brought to the fill. Several loads of dry material had to be removed from the fill and the rest of the material watered and mixed before it could compacted.

To check the fill for dry material and uncompacted lifts I requested that a trench be excavated in the upstream shell. A trench 5 feet deep and 20 feet long was excavated with a dozer. All except the top 1-foot of fill was well compacted and the moisture content was adequate. The top 6 inches of fill was then windrowed along one side of the embankment to permit compaction of the lower 6 inches. The windrowed material was then spread and compacted.

SEP 18 78 RFD

rr
9/18/78

Inspection by
Date of inspection
Date of report
Photos taken?

RFDelparte
8/29/78
8/30/78
Yes



Arrows point to dry fill material.



Arrow points to load of dry fill.

WASTEWATER DAM, NO. 2022
RFDelparte 8/29/78

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF SAFETY OF DAMS

INSPECTION OF DAM CONSTRUCTION

Name of Dam Wastewater Storage

Dam No. 2022

Contacts Made

County Placer

Einar Maisch

Stage of Construction

Placing fill adjacent to outlet conduit.

Important Observations, Recommendations, or Actions

Requested continous full time inspection. Requested a construction schedule. Approved the drain installation to collect seepage in core trench.

Conditions Noted and Remarks

Inspection

Several times during these inspections hand compacted fill was being placed along the outlet without an inspector on the job. The workmen are conscientious but to control lift thickness for hand compaction, continous inspection is required.

I informed Mr. Maisch of this and on August 16, 1978, I telephoned Mr. John Atteberry and informed him that full time inspection was required when work is in progress on the dam. Mr. Atteberry agreed to provide full time inspection.

Drain Installation

On the left side of the outlet in the core trench there are three seeps. Total leakage amounts to about 5 gpm. Most of the flow comes from the two upstream seeps.

To collect the two upstream flows, trenches were dug to a central sump alongside the outlet conduit. A grout pipe was placed in each trench and then the trench was backfilled with open graded $1\frac{1}{2}$ -inch rock, and covered with polyethylene sheets. A vertical 14-inch-diameter plastic pipe was placed in the sump. An electric pump was lowered into the 14-inch pipe to remove the water while fill was compacted in the core trench. The collector drain performed satisfactorily and the pump will be operated continously until the fill is high enough to permit grouting of the drain rock.

SEP 15 78 RFD

Inspection by	R. F. Delparte
Date of inspection	8/14, 8/15, 8/16/78
Date of report	8/17/78
Photos taken?	yes

The downstream seep was found to be connected to the other seeps. It was adequately sealed when fill was compacted over the area.

Schedule

I have requested a schedule for construction of the dam. The schedule we have includes all the earthwork on the job. At this time it appears that it may be difficult to complete the dam by November 1st. Material for the drain rock section has not been processed and the supplier has indicated it will be at least another week before he begins. Core material meeting the requirement for 20 percent passing the No. 200 screen is scarce. In addition, embankment materials are dry and no provisions have been made for irrigation in the borrow area.

Mr. John Atteberry is aware that a diversion plan will be required if the dam cannot be completed by November 1, 1978.

RFDelparte:cmb



Core trench cleanup at base of right abutment.



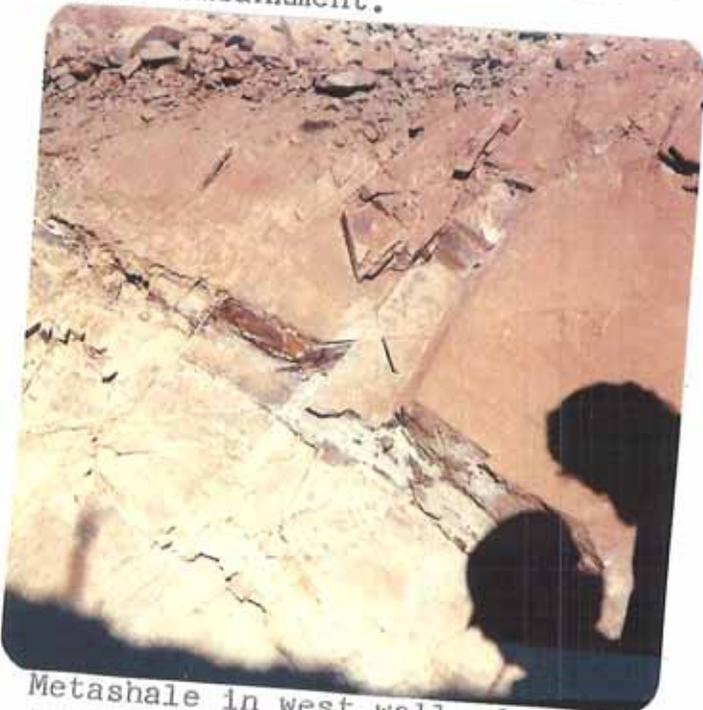
Initial fill in core trench.



Left abutment foundation for main embankment.



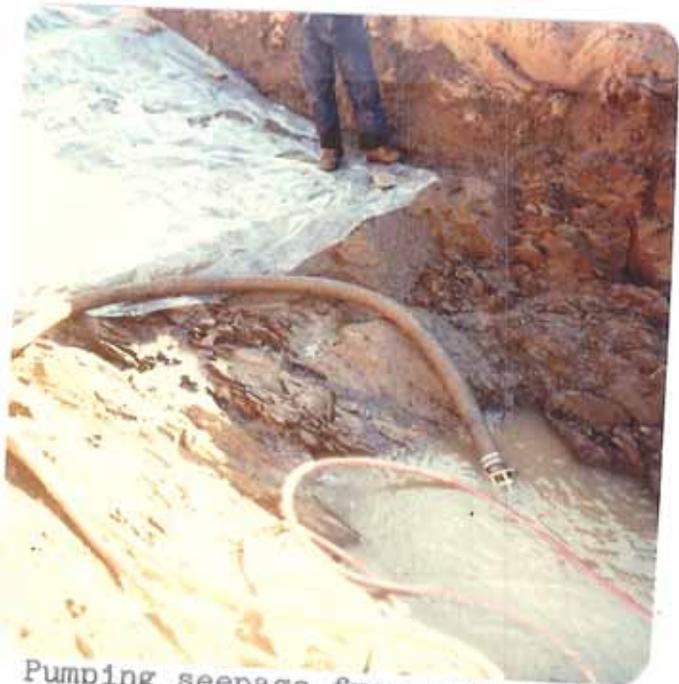
Left abutment cutoff trench from centerline.



Metashale in west wall of outlet trench downstream from cutoff.

WASTE WATER STORAGE, NO. 2022
AW Ayers
7/21/78

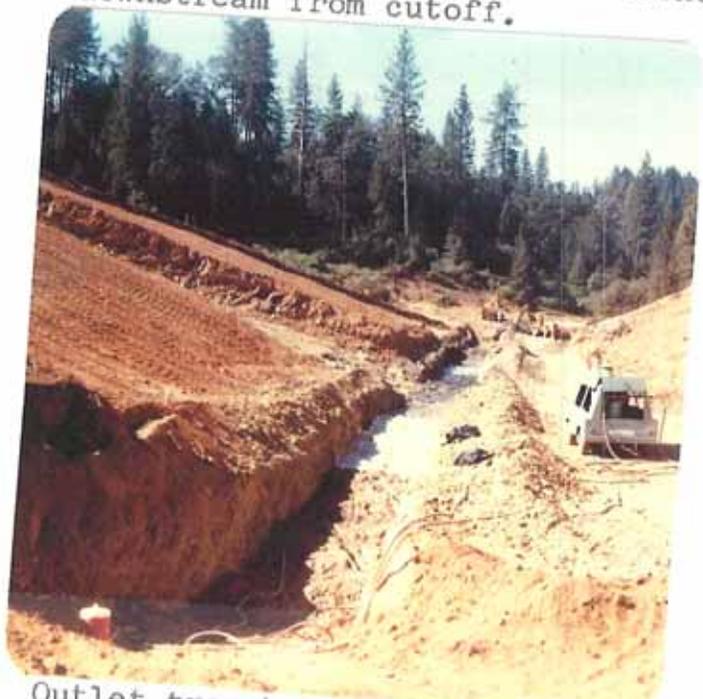
OCT 5 '78



Pumping seepage from outlet trench downstream from cutoff.



Seepage from left abutment into outlet trench at cutoff.



Outlet trench seen from upstream.

WASTE WATER STORAGE, NO. 2022
AW Ayers
7/21/78

OCT 5 '78 ALVA



Closeup of Zone 2 foundation.



Typical Zone 2 foundation.

WASTEWATER STORAGE DAM, NO. 202
TAPatton 7/30/78



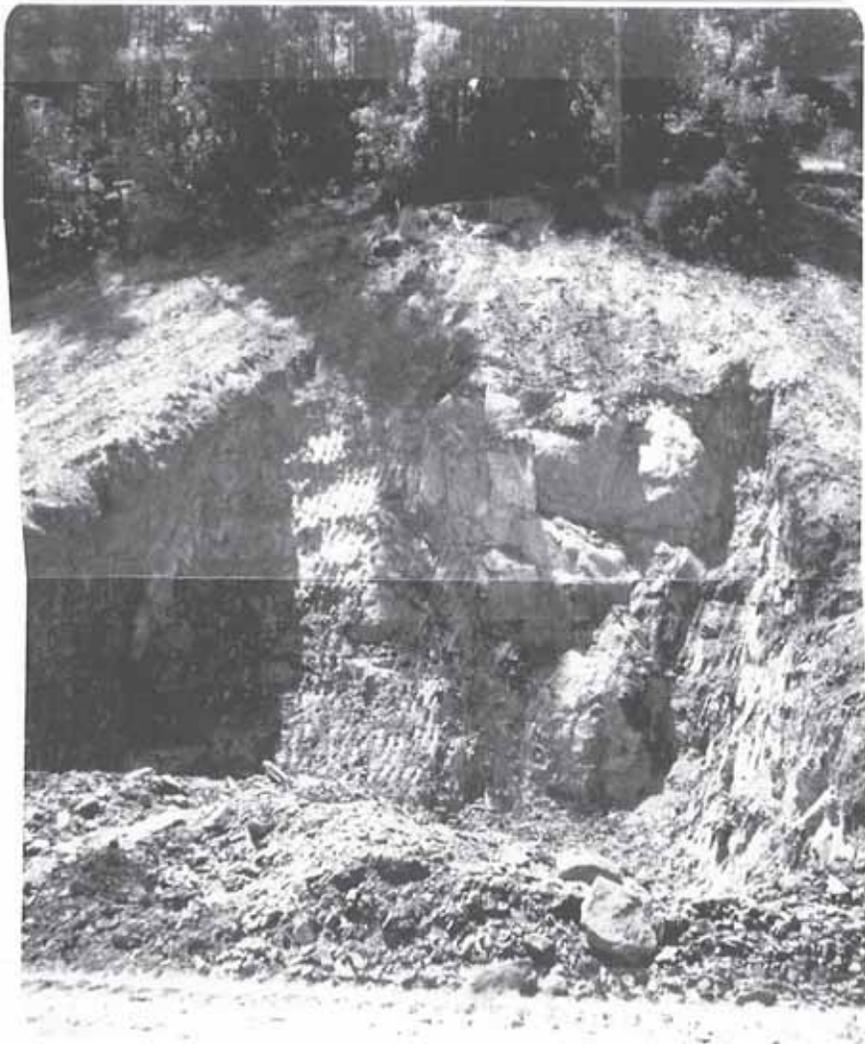
Outlet trench excavation looking upstream from below dam centerline.



Outlet trench excavation looking up left half of cutoff trench excavation from the dam centerline. Note distinct bedding planes in the rock structure.

WASTEWATER STORAGE DAM, NO. 2022
TAPatton 7/21/78

SEP 22 '78 TAP



Right abutment cutoff trench.

WASTEWATER STORAGE DAM, NO. 2022
TAPatton 7/10/78



Kaolinized slate and soil cover--
upstream wall of right abutment
cutoff trench.



Slate (Mariposa Fm.) in downstream
wall of right abutment cutoff
trench.

COLFAX W.W. DAM, NO. 2022
Wayers 7/20/78



Metasandstone in upper right
abutment cutoff trench.



Loose slate in bottom of right
abutment cutoff trench.

COLFAX W.W. DAM, NO. 2022
Wayers 7/10/78

FILE COPY



DAM STATISTICS SUMMARY SHEET

Wastewater Storage Dam No. 2022-0

Placer County

JURIS

Application Activity

<u>File Date</u>	<u>Type</u>	<u>Status</u>	<u>Date</u>	<u>Description</u>
	CS	COMPL	12/28/1978	

Owner: City Of Colfax

Emergency Contacts: David Woodford 530-308-4823
 530-346-2313
 Inspection Contacts: David Woodford 530-346-2313

Dam		Reservoir	
Type:	ERTH	Name	
Height, ft	75.0	Storage Capacity, AF	212.0
Length, ft	385	Surface Area, acre	7.0
Instrumentation Reported	YES	Drainage Area, sq mi	0.2
Parapet Code	3	Reservoir Routing	
Volume, cu yd	54,260	Storm Type and Date	1000 5/10/1978
Crest Elev., Width, ft	2115.0 12.0	Impaired	NO
Cost	\$301,911.00	Hazard Class and TCW	2B, 12
Year Completed	1978	Peak Inflow, cfs	210
Certificate Date	12/28/1978	Peak Inflow, cfs/sq mi	1,364
Location		Residual Freeboard, ft	2.7
Region, Area	Central 4	Peak Outflow, cfs	128
Watercourse	Tr Smuthers Ravine	Gating Code	UNGATED UNRESTRICTED
CA Coordinates	S11 T14N R9E MDB&M	Operation	
Latitude, Longitude	39.0780 -120.9400	Purpose and Use	STO,IRR,SEW
Quad Book	COLFAX 2A-17C3	Total Freeboard, ft	4.0
Nearest Town	Illinois Town	Operating Freeboard, ft	
Town Distance, mi	1	Maximum Storage Elevation, ft	
Correspondence Address			
City Of Colfax PO Box 702 Colfax, CA 95713			

Federal Agency Coordination

Hazard Class = SIGNIFIC FERC = National ID = CA01137
 Remediation: National Forest = N.I.N.F.

12/28/2007 abeeman

Wastewater Storage Dam No. 2022-0