



September 25, 2023

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

**Re: Pensacola Hydroelectric Project, FERC Project No. 1494-461;
Notification of Submittal of Request for Water Quality Certification**

Dear Secretary Bose:

Pursuant to section 5.23(b) of the Integrated Licensing Process regulations of the Federal Energy Regulatory Commission (Commission or FERC), 18 C.F.R. § 5.23(b), the Grand River Dam Authority (GRDA), licensee for the Pensacola Hydroelectric Project (Project), hereby notifies the Commission that it has submitted its request for water quality certification from the Oklahoma Department of Environmental Quality (ODEQ) pursuant to section 401 of the Clean Water Act (CWA), 33 U.S.C. § 1341, in conjunction with the Commission's issuance of a new license for the Project. GRDA filed its Final License Application with the Commission in the above-referenced proceeding on May 30, 2023. GRDA's request appears at Attachment A to this letter.

Please be advised that this letter is also being submitted pursuant to applicable regulations of the Environmental Protection Agency (EPA) promulgated on July 13, 2020, *see* 85 Fed. Reg. 42210, which require GRDA to submit its water quality certification request to "to the certifying authority and to the Federal agency concurrently." 40 C.F.R. § 121.5(a).

As required by EPA regulation, *see id.* § 121.6(b), GRDA respectfully requests that the Commission provide the following information to ODEQ within 15 days:

1. The date of the Commission's receipt of this letter;
2. The applicable reasonable period of time for ODEQ to act on GRDA's request for water quality certification; and
3. The date upon which waiver will occur of ODEQ fails or refuses to act on GRDA's certification request.

Should you have any questions, please contact Jacklyn Smittle at jacklyn.smittle@grda.com.

Sincerely,

Brian N. Edwards
Executive Vice President
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Attachment
cc: Attached Distribution List

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ATTACHMENT A

Request for Water Quality Certification



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September 25, 2023

Mr. Joe Long
Environmental Programs Manager
Water Quality Division
Oklahoma Department of Environmental Quality
PO Box 1677
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**Subject: 401 Water Quality Certification Request
Pensacola Hydroelectric Project (FERC Project No. 1494)**

Dear Mr. Long:

Pursuant to section 401 of the federal Clean Water Act (CWA), 33 U.S.C. § 1341, and applicable implementing regulations promulgated by the Environmental Protection Agency on July 13, 2020, 40 C.F.R. Part 121, the Grand River Dam Authority (GRDA) hereby requests a Water Quality Certification (WQC) for the Pensacola Project, FERC Project No. 1494 (Project). GRDA has applied for a new license for the Project with the Federal Energy Regulatory Commission (FERC). Because the ongoing operation of the Project may result in a discharge for purposes of CWA section 401(a)(1) and 33 C.F.R. section 121.2, GRDA is required to seek a WQC from the Oklahoma Department of Environmental Quality (ODEQ) with respect to the discharge associated with the Project. See 33 C.F.R. § 121.3.

In accordance with 33 C.F.R. section 121.5(b), GRDA provides the following information to properly request WQC from ODEQ and commence the reasonable time, not to exceed one year, for ODEQ to render a decision or waive certification in this matter:

(1) Identify the project proponents(s) and a point of contact:

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We deliver affordable,
reliable **ELECTRICITY**,
with a focus on **EFFICIENCY**
and a commitment to
ENVIRONMENTAL
STEWARDSHIP.

We are dedicated to
ECONOMIC DEVELOPMENT,
providing resources and
supporting economic growth.

Our **EMPLOYEES**
are our greatest asset in
meeting our mission to be an
Oklahoma Agency
of Excellence.



(2) *Identify the proposed project:*

Pensacola Hydroelectric Project, FERC Project No. 1494

(3) *Identify the applicable federal license or permit:*

GRDA is seeking a new license from FERC for the Pensacola Hydroelectric Project, FERC Project No. 1494, pursuant to section 15 of the Federal Power Act (FPA), 16 U.S.C. § 808, and in accordance with FERC's Integrated Licensing Application Process regulations. *See* 18 C.F.R. Part 5.

(4) *Identify the location and nature of any potential discharge that may result from the proposed project and the location of receiving waters:*

The discharge point for the Project is located at the tailrace of the Pensacola Powerhouse, located at River Mile 77 of the Grand River. At this discharge point, waters from Grand Lake O' the Cherokees that have passed through the Pensacola Powerhouse are discharged into the Grand (Neosho) River.

(5) *Include a description of any methods and means proposed to monitor the discharge and the equipment or measures planned to treat, control, or manage the discharge:*

For more than 10 years, GRDA has contracted with the Oklahoma Water Resources Board (OWRB) for comprehensive monitoring of dissolved oxygen to achieve compliance with applicable water quality standards in the Project's tailrace. A copy of the latest report for 2021-22 monitoring is attached hereto as Attachment A. GRDA proposes to continue this arrangement during the proposed new FERC license term. For more information, please see sections 2.2.3 and 3.4 of GRDA's Exhibit E Environmental Report from its Final License Application, filed with FERC on May 30, 2023. For convenience, an electronic copy of GRDA's FLA can be found at <https://grda.com/pensacola-hydroelectric-project-relicensing/>.

(6) *Include a list of all other federal, interstate, tribal, state, territorial, or local agency authorizations required for the proposed project, including all approvals or denials already received:*

The Project requires a new operating license from FERC. On May 30, 2023, GRDA filed its FLA with FERC, as required by FPA section 15(c)(1), 16 U.S.C. § 808(c)(1), and FERC's regulations. *See* 18 C.F.R. § 5.17(a). As of the date of this request for WQC, FERC's action on the FLA is pending. Before acting on GRDA's FLA, FERC will meet obligations under the FPA, National Environmental Policy Act, 42 U.S.C. § 4321 *et seq.*, section 7 of the Endangered Species Act, 16 U.S.C. § 1536, and section 106 of the National Historic Preservation Act, 54 U.S.C. § 306108.

(7) *Include documentation that a pre-filing meeting request was submitted to the certifying authority at least 30 days prior to submitting the certification request:*

As documented in Attachment B, GRDA submitted a meeting request to ODEQ on June 2, 2023, more than 30 days prior to submitting this request for certification. On August 7, 2023, ODEQ responded to GRDA, indicating that no pre-filing meeting is necessary.

- (8) *Contain the following statement: "The project proponent hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief":*

GRDA, the proponent for FERC's issuance of a new license for the Pensacola Hydroelectric Project (FERC No. 1494) and ODEQ's associated WQC under CWA section 401, hereby certifies that all information contained herein is true, accurate, and complete to the best of its knowledge and belief.

- (9) *Contain the following statement: "The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time."*

GRDA hereby requests that ODEQ review and take action on this CWA 401 certification request within the applicable reasonable period of time, which shall not exceed one year of ODEQ's receipt of this request. See 33 U.S.C. § 1341(a)(1); 40 C.F.R. § 121.6(a).

GRDA appreciates ODEQ's attention to this request. Should you have any questions, please contact me at brian.edwards@grda.com.

Sincerely,



Brian N. Edwards
Executive Vice President
Law Enforcement and Lake Operations

Attachments

ATTACHMENT A

Oklahoma Water Resources Board 2021-22 Dissolved Oxygen Monitoring Report

**Sample Year 2022 Testing for
Pensacola Dam/Neosho River
Dissolved Oxygen Mitigation Plan**



OKLAHOMA
Water Resources Board

Final February 2023

Testing for Pensacola Dam/Neosho River Dissolved Oxygen Mitigation Plan

October 15, 2021 to October 14, 2022

Oklahoma Water Resources Board
Water Quality Programs Division
Monitoring and Assessment Section
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EXECUTIVE SUMMARY

Comprehensive monitoring and mitigation efforts are currently ongoing at the Pensacola Dam. These efforts are necessary to meet Article 403 requirements outlined in the Grand River Dam Authority (GRDA) Federal Energy Regulatory Commission (FERC) license. As part of the FERC license, GRDA has implemented a dissolved oxygen mitigation plan intended to achieve compliance with applicable water quality standards in the tailraces of both Markham Ferry (Hudson) and Grand Lake reservoirs. In June of 2021, GRDA and the Oklahoma Water Resources Board (OWRB) extended the previous year's agreement to provide the dissolved oxygen monitoring necessary in Sample Year 2022 (SY-2022) to meet the requirements set by FERC. Continuous monitoring is ongoing in the tailraces of Pensacola Dam (Grand Lake) and downstream at the Markham Ferry Project (Kerr Dam, Hudson Lake).

The Pensacola Adaptive Mitigation Plan (Pensacola AMP) was analyzed for effectiveness and the following observations were made:

- For SY-2022, this location is supporting for dissolved oxygen for the Fish and Wildlife Propagation beneficial use, with fewer than 10% of samples below criterion, and two samples below the nuisance criterion of 2 mg/L.
- Dissolved oxygen values were within the normal range of values expected for this site based on data collected since the onset of the Pensacola AMP.
- For the five-year period of data used in the Integrated Water Quality Assessment Report and 303d list, OWRB recommends this location remain listed as not supporting for dissolved oxygen with respect to the Fish and Wildlife Propagation criterion, due to fifteen samples being below 2 mg/L.

Recommendations for the SY-2023 Pensacola AMP:

- Continue implementation of the Pensacola AMP.
- Proceed with monitoring efforts to keep dissolved oxygen levels within acceptable thresholds, as stated in the Oklahoma Water Quality Standards (OWQS).
- Resume monitoring of a profiling data buoy in Grand Lake to better understand the quality of source water and its effect on mitigation of downstream dissolved oxygen levels.

INTRODUCTION

In accordance with Article 403 of the FERC license for the Pensacola Project (FERC No. 1494), GRDA is required to implement a low dissolved oxygen (DO) mitigation plan. As part of the mitigation plan, an adaptive management approach was recommended to address water quality concerns during the critical/low DO season, May through September. From 2007-2009, the Tennessee Valley Authority (TVA) under contract with GRDA, made modifications to power generation structures to allow for increased infusion of DO while generating power. Based on testing results from the 2009 through 2011 critical/low DO seasons, GRDA and the OWRB recommended further testing of various pulsing scenarios to determine effects on down river DO concentrations.

Based on the conclusions from 2011, OWRB, GRDA, United States Fish and Wildlife Service (USFWS), and the Oklahoma Department of Wildlife Conservation (ODWC) made four general recommendations for the SY-2012 DO enhancement study:

1. An adaptive mitigation plan should be tested.
2. DO mapping should be utilized to determine the extent of DO enhancement downstream.
3. Structured release testing should continue during the scheduled lake drawdown period.
4. Real-time monitoring should occur in the forebay area of Grand Lake.

Three of the four objectives were successfully completed in SY-2012 and SY-2013. A real-time in-lake profiler was installed in the forebay area of Grand Lake and data collection began on the quality of source water. Real-time data collected during the drawdown period in Grand Lake confirmed that mitigation efforts continued to be effective during this transition period, and DO mapping demonstrated that mitigation efforts had a significant positive impact downstream. The adaptive mitigation tests, in the form of three and six-hour release testing, were conducted in SY-2014 and quantified the effect and extent of powerhouse releases on both the tailrace and riverine area using real-time monitoring and the Pensacola Adaptive Mitigation Plan. Based on the conclusion and recommendations from previous studies, the main test objectives for the SY-2022 testing period were to continue with implementation and monitoring of the Pensacola AMP.

METHODS

Study Locations

Current study sites include the following monitoring locations (Figure 1):

Neosho/Langley_4, _5, and_6 (aka, Langley Bridge) — The bridge station instruments are located approximately 940 meters downstream of the tailrace near the left edge of water,

the center of the channel, and the right edge of water, respectively. Each water quality sonde is housed in a HDPE drag tube attached to a metal box on the county road N4475 bridge. The metal boxes contain one site specific data collection platform (DCP) per station.

This location is a year-round, continuous monitoring and compliance point. The redundancy of three separate data collection platforms is beneficial in reducing the likelihood of complete data loss over a significant period.



Figure 1 Testing Sites for Pensacola Dam

Data Collection

Continuous monitoring occurs at each of the three study locations throughout the year. Eureka® Manta 35+ multiparameter sondes with probes for measuring dissolved oxygen and water temperature were used for this study. Dissolved oxygen was measured using optical dissolved oxygen (ODO) probes that have a central wiper system to ensure that the ODO probe membrane remains free of foreign material during service intervals. Data were logged and transmitted at fifteen-minute intervals via cellular telemetry using NexSens® X2 dataloggers and were available for viewing from OWRB and GRDA. Transmitted data include date, time, water temperature (°C), dissolved oxygen (mg/L), DO percent saturation (%DO), and DCP battery voltage (BV).

Sondes were calibrated and maintained biweekly during the months of June through October and at least once every 3-4 weeks during the rest of the year according to OWRB Standard Operating Procedures (SOP) as developed using the USGS Standard Operating Procedures for Continuous Water-Quality Monitors (OWRB, 2013; Wagner et al., 2006). All DO data were post-processed and service interval corrections were applied before analyses occurred. Using these data, records were corrected to account for drift from two sources: fouling and calibration. Probes were cleaned and a pre-cleaning and post-cleaning value recorded. The percentage difference between these two readings was applied to all data in the service interval as a fouling correction. After the sensor was cleaned, a calibration check was performed with calibration occurring as needed. When calibration was necessary, a calibration correction was applied to all data in the service interval. This correction was calculated as the percent difference between the pre-calibration DO percent saturation reading and the post-calibration reading, where 100% DO saturation is expected at the current temperature and barometric pressure. To correct data, the sum of the fouling and calibration corrections was applied as a two-point shift over the service interval with the assumption that drift occurred at a constant rate over that interval. All time-series data were stored and manipulated using AQUARIUS™ Time-Series software (Aquatic Informatics®, 2021).

Data Analysis

The data for these sites were analyzed from a water quality standards perspective. Dissolved oxygen is addressed in two places in Oklahoma statutes—Oklahoma Administrative Code (OAC) Chapter 730 “Oklahoma Water Quality Standards” and OAC Chapter 740 “Implementation of Oklahoma’s Water Quality Standards”. Criteria are set for the subcategory of a Warm Water Aquatic Community (WWAC stream) for two stages: 1) early life stages, from April 1-June 15, and 2) other life stages from June 16-March 31. Due to naturally occurring fluctuations in DO concentrations, a 1 mg/L reduction of DO values is accepted for no more than 8 hours in any 24-hour period during early life stages and summer conditions (Department of Environmental Quality, 2022).

Per OAC 252:730-5-12, if more than two concentrations of DO in a stream are observed to be below 2.0 mg/L in any given year, the Fish and Wildlife Propagation beneficial use shall be deemed to be not supported. The remainder of the support tests according to OAC 252:740-15-5 are as follows:

- A. The WWAC subcategory of the Fish and Wildlife Propagation beneficial use designated for a stream shall be deemed to be fully supported with respect to the DO criterion if 10% or less of the samples across all life stages and seasons exhibit DO concentration below the following season-specific thresholds:
 - (i) April 1 through June 15: 6.0 mg/L
 - (ii) June 16 through March 31: 5.0 mg/L

- B. The WWAC subcategory of the Fish and Wildlife Propagation beneficial use designated for a stream shall be deemed to be undetermined with respect to the DO criterion if more than 10% of the samples across all life stages and seasons exhibit DO concentrations below the upper DO threshold and 10% or less of the samples across all seasons exhibit DO concentrations below the lower DO threshold considering the following season-specific ranges:
- (i) April 1 through June 15: 5.0 mg/L to 6.0 mg/L
 - (ii) June 16 through October 15: 4.0 mg/L to 5.0 mg/L
- C. The WWAC subcategory of the Fish and Wildlife Propagation beneficial use designated for a stream shall be deemed to be not supported with respect to the DO criterion if more than 10% of the samples across all life stages and seasons exhibit DO concentrations below the following season-specific thresholds due to other than naturally occurring conditions:
- (i) April 1 through June 15: 5.0 mg/L
 - (ii) June 16 through October 15: 4.0 mg/L
 - (iii) October 16 through March 31: 5.0 mg/L

	Fish and Wildlife Propagation Support Tests for WWAC Streams with Respect to Dissolved Oxygen	April 1 - June 15	June 16 - October 15	October 16 - March 31
A	<u>FULLY SUPPORTING</u> if no more than 10% of samples are less than	6.0 mg/L	5.0 mg/L	5.0 mg/L
B	<u>UNDETERMINED</u> if more than 10% of samples are less than	6.0 mg/L	5.0 mg/L	
	but no more than 10% of samples are less than	5.0 mg/L	4.0 mg/L	
C	<u>NOT SUPPORTING</u> if more than 10% of samples are less than	5.0 mg/L	4.0 mg/L	5.0 mg/L

Table 1 Support Tests for WWAC Streams

Mitigation Implementation

To meet the OWQS DO criterion and mitigate for potentially harmful effects to aquatic life, the Pensacola AMP was developed during the 2011 testing period and modified after additional testing in 2013 and 2014. The following plan was recommended for implementation, beginning in 2015:

“The action limit will be set at the Oklahoma Water Quality Standards (OWQS) criterion of 6 mg/L from 10/16 through 6/15 and at 5 mg/L from 6/16 through 10/15. Once the action limit is reached, according to any one of the Langley Bridge DO probes, one turbine will begin running at 20% wicket gate (~320 cfs) with full aeration.

Once a release is started, it will continue until the average DO value exceeds the criterion but depending on lake level conditions in Grand Lake and Lake Hudson, will continue for three to eight hours. A second action limit will be set at 4.0 mg/L. If the second action limit is reached, the first turbine will be upped to 25% wicket gate (~ 430 cfs) and will continue for a minimum of 2 hours. This operational plan will run year-round.”

The three sondes along Langley Bridge (Figure 1) are used to implement the Pensacola AMP, with any individual sonde on the bridge activating a mitigation response. To facilitate the response process, an email alert system was established to notify both operators and interested parties. When any individual compliance sonde indicates a DO reading below any of the action limits, the NexSens® WQDataLive web-based software sends out an alarm email to all necessary personnel at GRDA, FERC, ODWC, USFWS, and OWRB. This email indicates the most recently measured DO concentration and specifies the appropriate response according to the mitigation plan. Once measurements exceed the action limit, the system sends an alert notification indicating that target values have been achieved.

As shown in previous reports and evidenced further in this report, this mitigation plan has shown to be quite effective and is now fully implemented and utilized. Beginning in 2018, an increase in the action limits of 6.0, 5.0, and 4.0 mg/L to 6.5, 5.5, and 4.5 mg/L, respectively, during the summer months was made to be more proactive in avoiding DO values dropping below criterion.

RESULTS AND DISCUSSION

Neosho/Langley_4, _5 and _6 (aka Langley Bridge)

Data collected from each of the individual stations (Neosho/Langley_4, _5, and _6) were converted from fifteen-minute to hourly data intervals using the AQUARIUS™ Time-Series software (Aquatic Informatics, 2021). The hourly data from each bridge station were then averaged together, resulting in a single hourly value that was evaluated against the OWQS for the appropriate criterion.

For SY-2022, this location is supporting for DO for the Fish and Wildlife Propagation beneficial use for WWAC. Data were assessed using Table 1, and as shown in Table 2, less than ten percent (2.94%) of the samples were below criterion and below the 1 mg/L excursion criterion (0.59%). July was the only month with more than ten percent of samples (15.05%) below criterion and had the highest percentage of samples greater than the 1 mg/L excursion criterion, with 5.24%. However, the two samples below 2 mg/L occurred in September.

This segment of the Neosho River (OK121600020170_00) will remain on the Integrated Water Quality Assessment Report and 303d list as not supporting for the Fish and Wildlife Propagation beneficial use of the OWQS. Table 4 contains the current five-year data period from May 2017 to April 2022, where less than ten percent of samples were below criterion and below the 1 mg/L excursion criterion, but 15 samples were less than the nuisance criterion of 2 mg/L.

Since the implementation of the Pensacola AMP, water quality standards have been typically met during the summer months. DO values were dropping below standard for short periods of time before mitigation efforts were able to raise DO in the tailrace of the dam. For SY-2022, DO values remained just above standard during a large portion of the summer months, as evidenced by the graphs in Appendix A. Other than SY-2019, which saw record rainfall, the last several sampling years have recorded less than ten percent of samples below criterion as well as below the 1 mg/L excursion criterion. However, the consistency of the number of samples below 2 mg/L fluctuated during the same timeframe. This suggests that mitigation efforts are successful in maintaining elevated DO levels but have difficulty reacting quickly to sudden drops in DO.

CONCLUSION

Moving forward, OWRB and GRDA will continue with full implementation of the Pensacola AMP and its associated continuous monitoring efforts. The Pensacola AMP will continue to give GRDA the ability to mitigate for low dissolved oxygen conditions while still managing for drought conditions and rule curve maintenance by allowing greater flexibility in mitigation flow duration.

Month	# of Samples	# of Samples Below Criterion	% of Samples Below Criterion	# of Samples >1 mg/L Below Criterion	% of Samples >1 mg/L Below Criterion	# of Samples <2 mg/L
Oct. 15 th /31 st - 21	408	3	0.74%	0	0.00%	0
November- 21	696	0	0.00%	0	0.00%	0
December- 21	713	0	0.00%	0	0.00%	0
January-22	713	0	0.00%	0	0.00%	0
February-22	644	0	0.00%	0	0.00%	0
March-22	731	0	0.00%	0	0.00%	0
April-22	720	0	0.00%	0	0.00%	0
May-22	744	39	5.24%	0	0.00%	0
June-22	720	66	9.17%	0	0.00%	0
July-22	744	112	15.05%	39	5.24%	0
August-22	744	15	2.02%	4	0.54%	0
September-22	720	15	2.08%	8	1.11%	2
Oct. 1 st /14 th - 22	336	4	1.19%	0	0.00%	0
Total	8633	254	2.94%	51	0.59%	2

Table 2 Langley Bridge Monthly DO Data Compared to OWQS

Langley Bridge
Number of Days by Month with Samples Below Criterion
October 15, 2021 - October 14, 2022

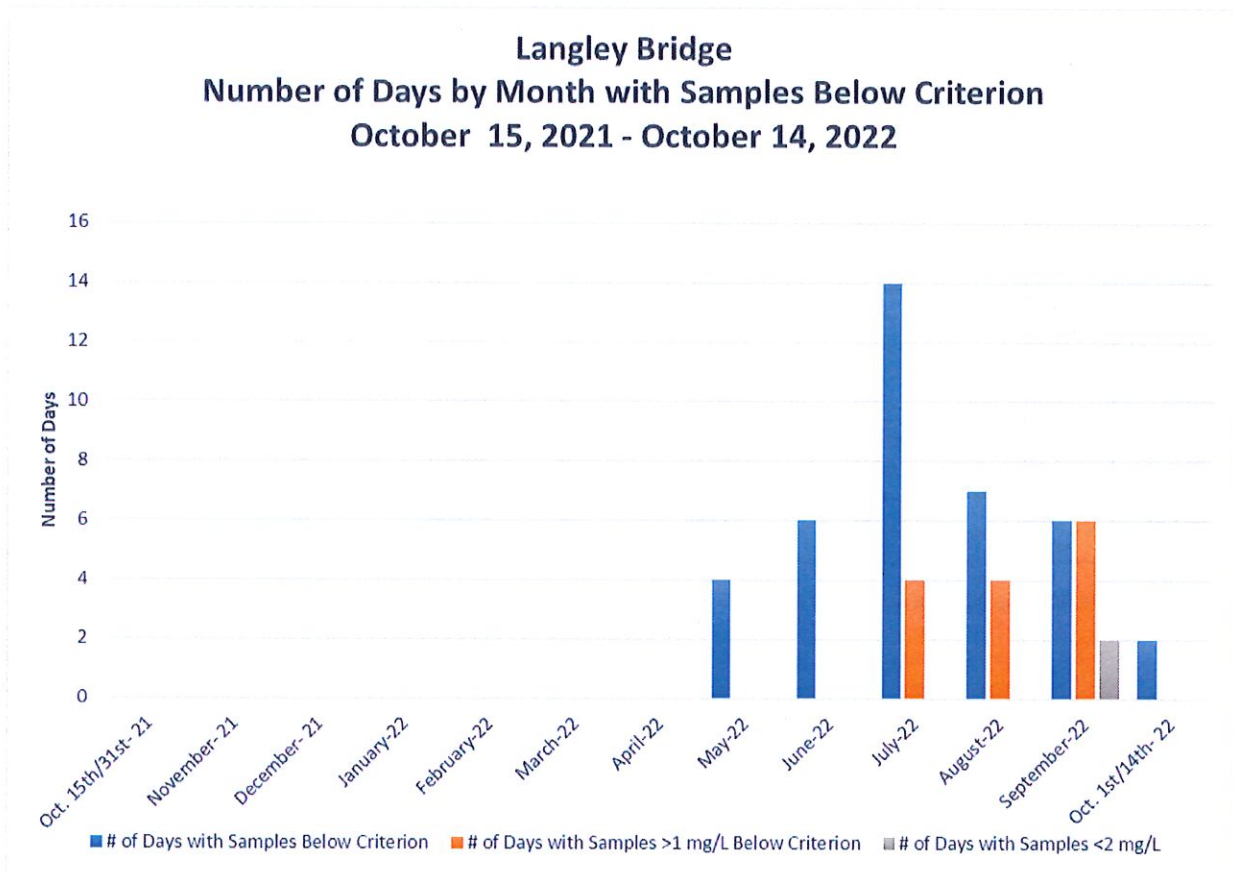


Figure 2 Langley Bridge Number of Days by Month with Samples Below Criterion for SY-2022

Sample Year	Total # of Samples	# of Samples Below Criterion	% of Samples Below Criterion	# of Samples >1 mg/L Below Criterion	% of Samples >1 mg/L Below Criterion	# of Samples <2 mg/L
2006	3943	1468	37%	760	19%	96
2007	8760	2074	24%	933	11%	114
2008	8784	825	9%	130	1%	1
2009	8760	637	7%	68	1%	0
2010	8760	766	9%	303	3%	0
2011	8760	892	10%	60	1%	0
2012	8784	103	1%	13	0%	0
2013	8760	940	11%	92	1%	16*
2014	8760	58	1%	0	0%	0
2015	8760	1051	12%	297	3%	0
2016	8784	331	4%	74	1%	0
2017	8760	551	6%	77	1%	0
2018	8760	353	4%	126	1%	7
2019	8760	1719	20%	697	8%	5
2020	8784	51	1%	8	0%	0
2021	8375	673	8%	105	1%	3
2022	8633	254	3%	51	1%	2

Table 3 Langley Bridge Yearly DO Data Compared to OWQS (*See Page 30)

	# of Samples	% of Samples
Total	43314	
Below Criterion	3350	7.73%
>1 mg/L Below Criterion	1016	2.35%
<2 mg/L	15	0.03%

Table 4 Langley Bridge 5-Year 303d Reporting Data (May1, 2017 - April 30, 2022)

Langley Bridge
Number of DO Samples Below Criterion per Sample Year
April 2, 2006 - October 14, 2022

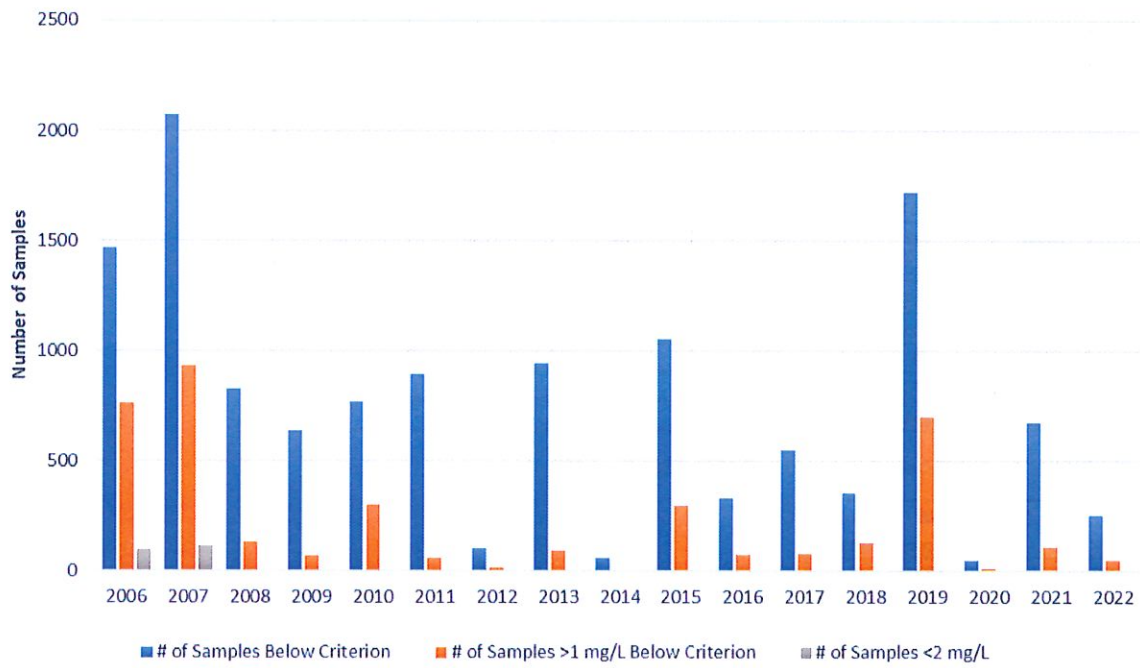


Figure 3 Langley Bridge Number of DO Samples Below Criterion per Sample Year

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Wagner, R.J., Boulger, R.W., Jr., Oblinger, C.J., and Smith, B.A., 2006, Guidelines and standard procedures for continuous water-quality monitors—Station operation, record computation, and data reporting: U.S. Geological Survey Techniques and Methods 1-D3, 51 p. + 8 attachments; accessed April 10, 2006, at <http://pubs.water.usgs.gov/tm1d3>.

APPENDIX A- MONTHLY DISSOLVED OXYGEN AND TEMPERATURE GRAPHS

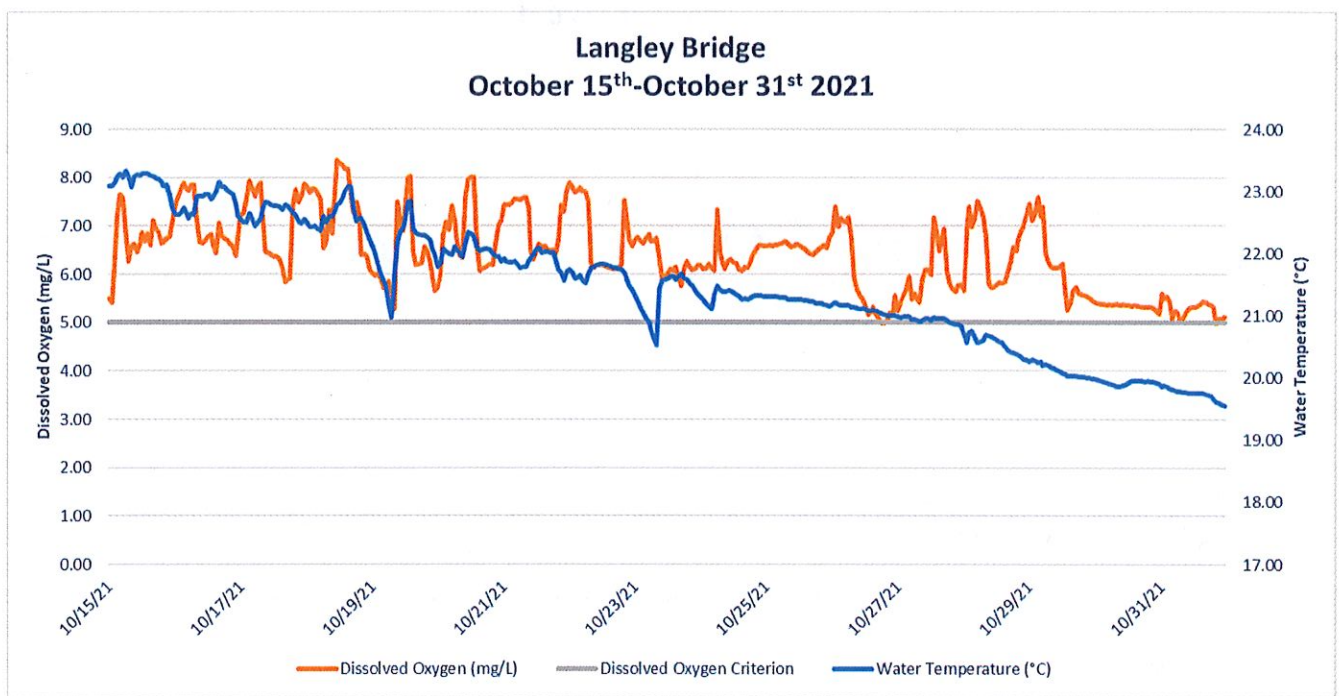


Figure 4 Langley Bridge Data October 2021

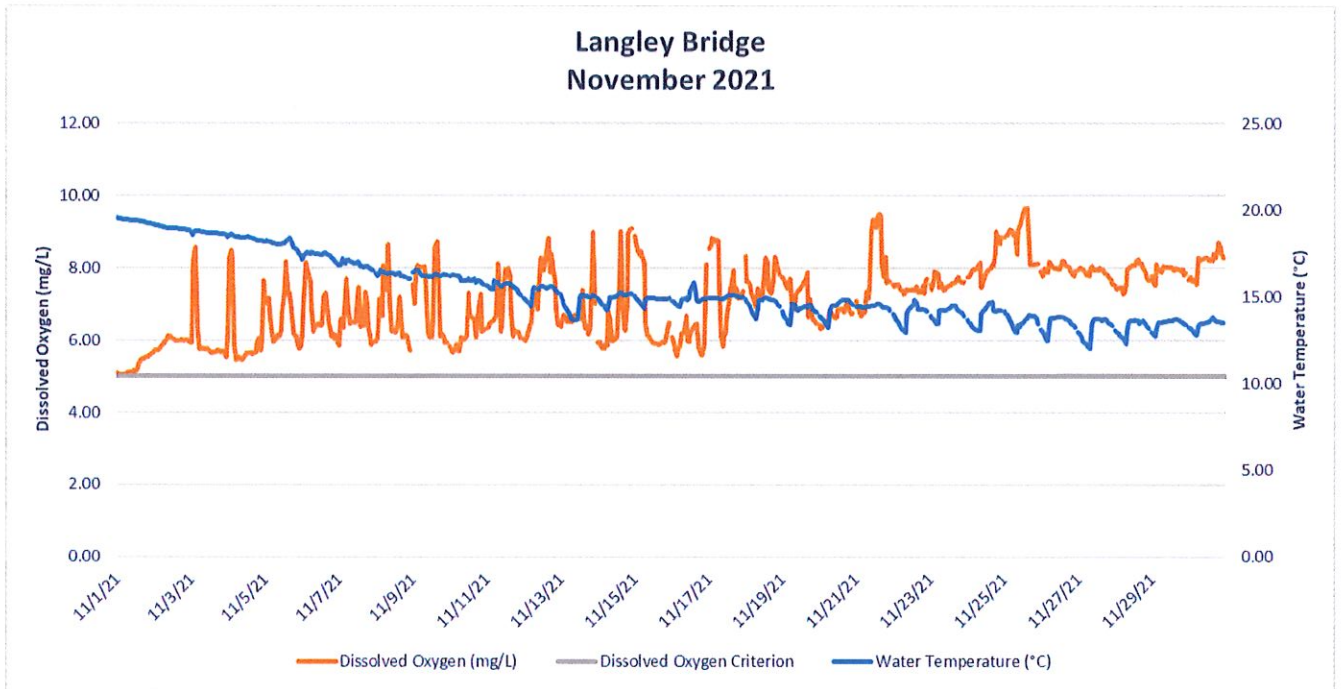


Figure 5 Langley Bridge Data November 2021

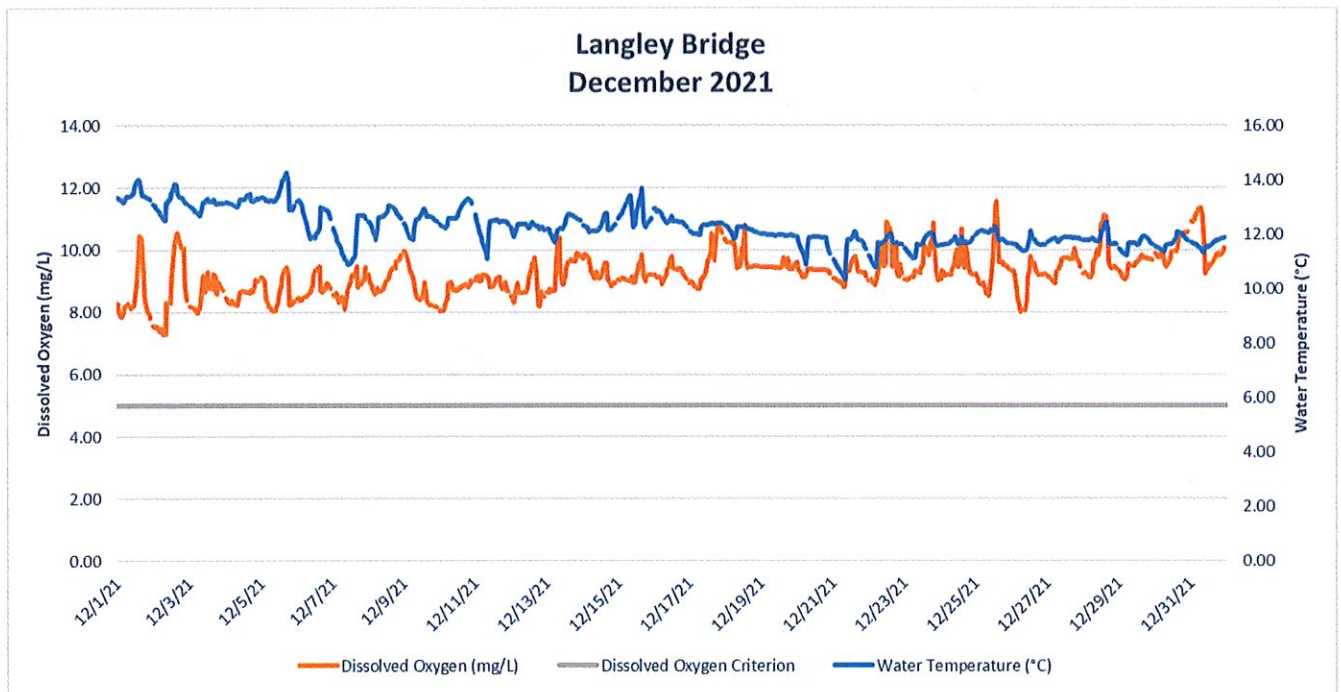


Figure 6 Langley Bridge Data December 2021

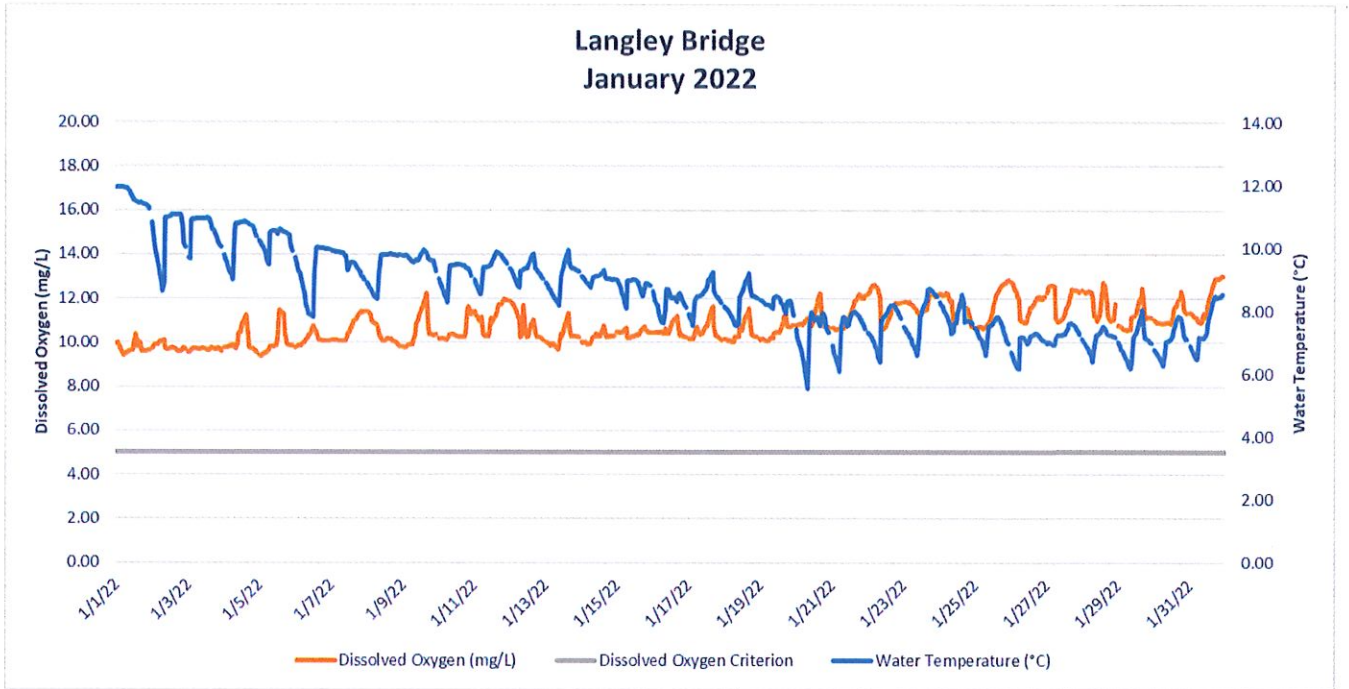


Figure 7 Langley Bridge Data January 2022

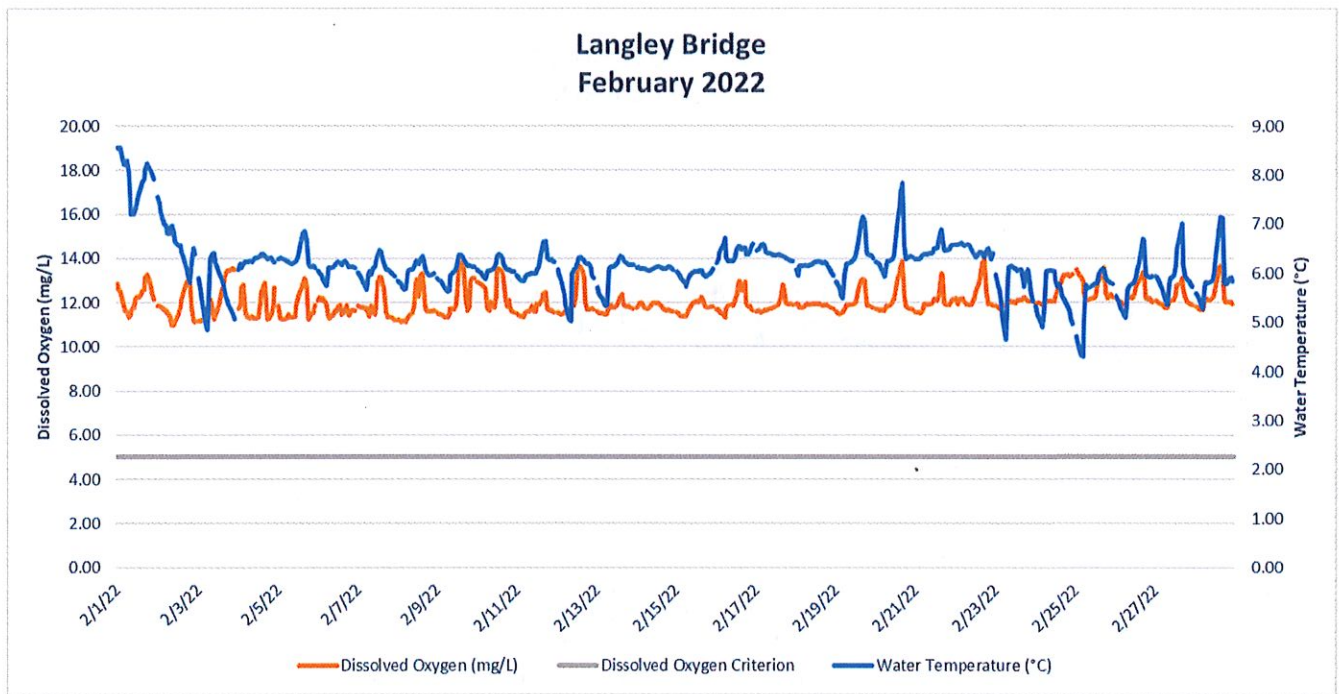


Figure 8 Langley Bridge Data February 2022

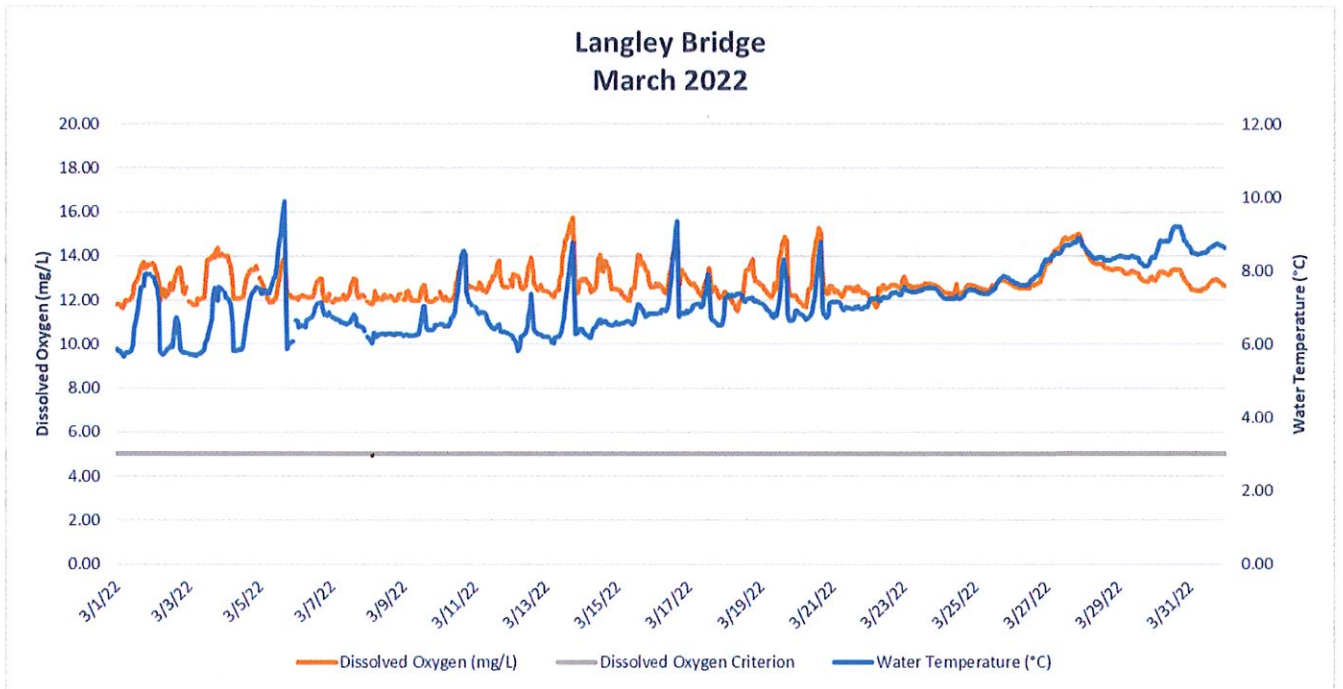


Figure 9 Langley Bridge Data March 2022

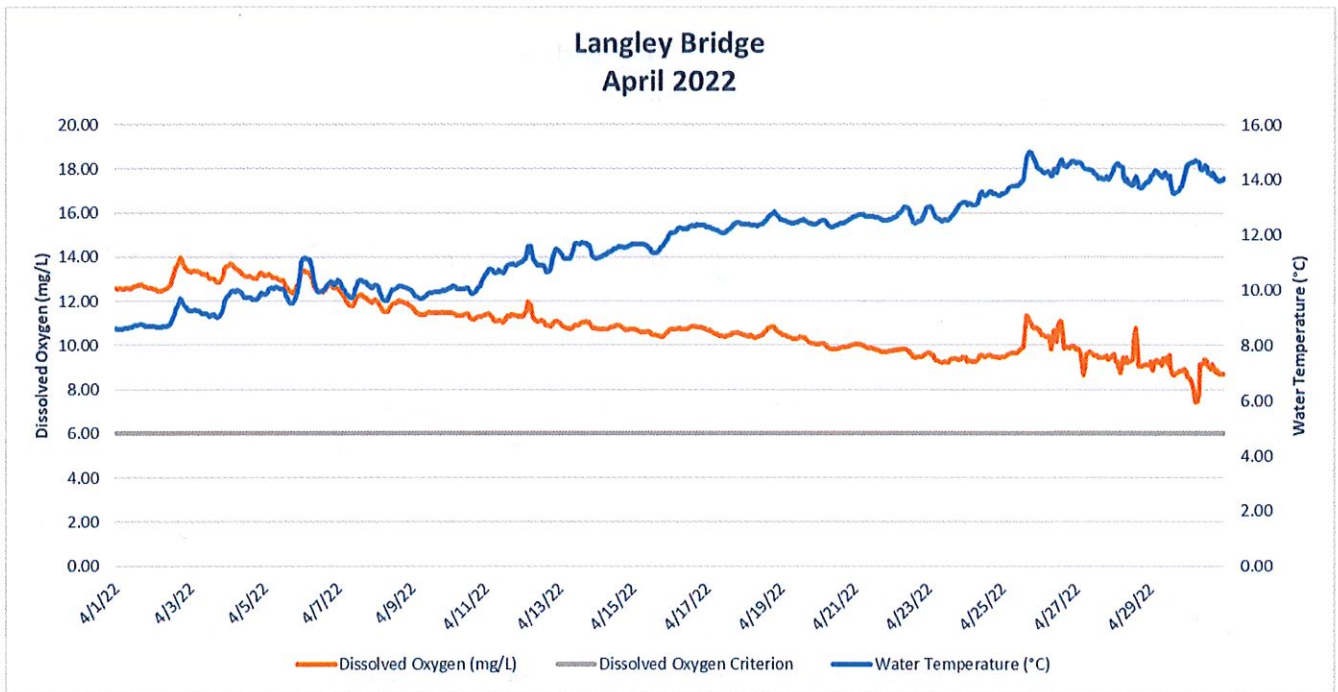


Figure 10 Langley Bridge Data April 2022

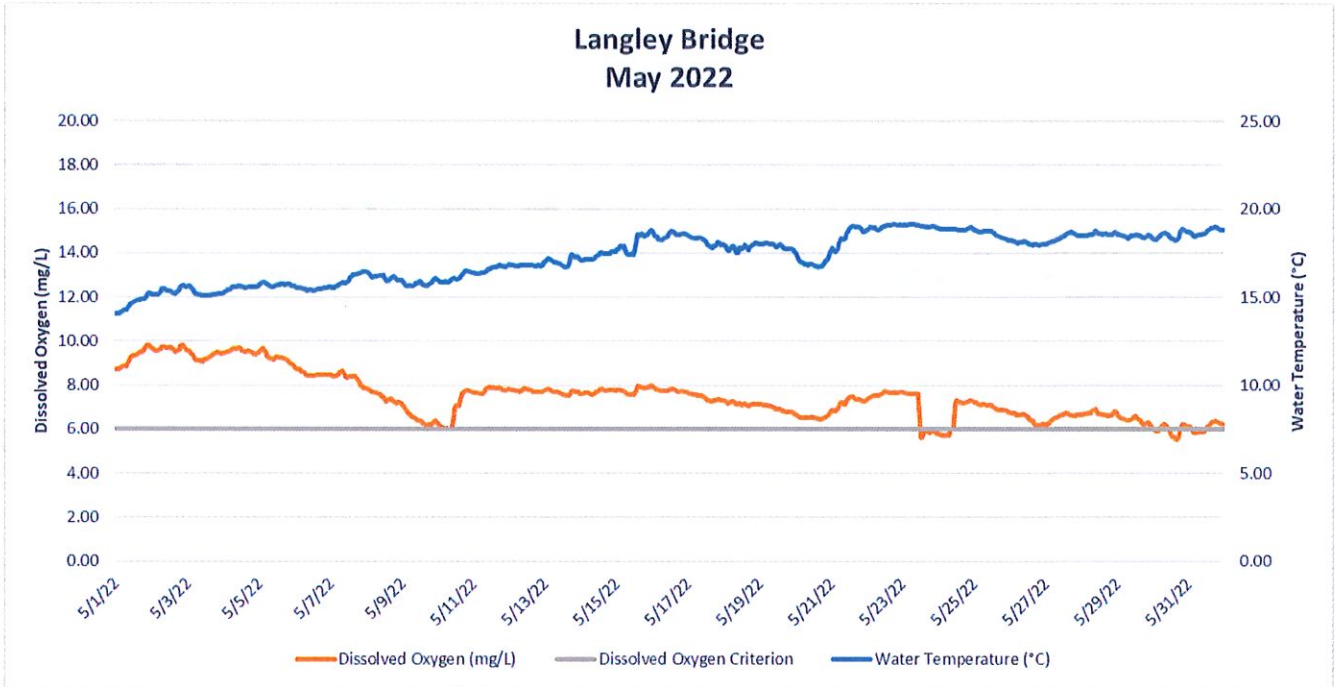


Figure 11 Langley Bridge Data May 2022

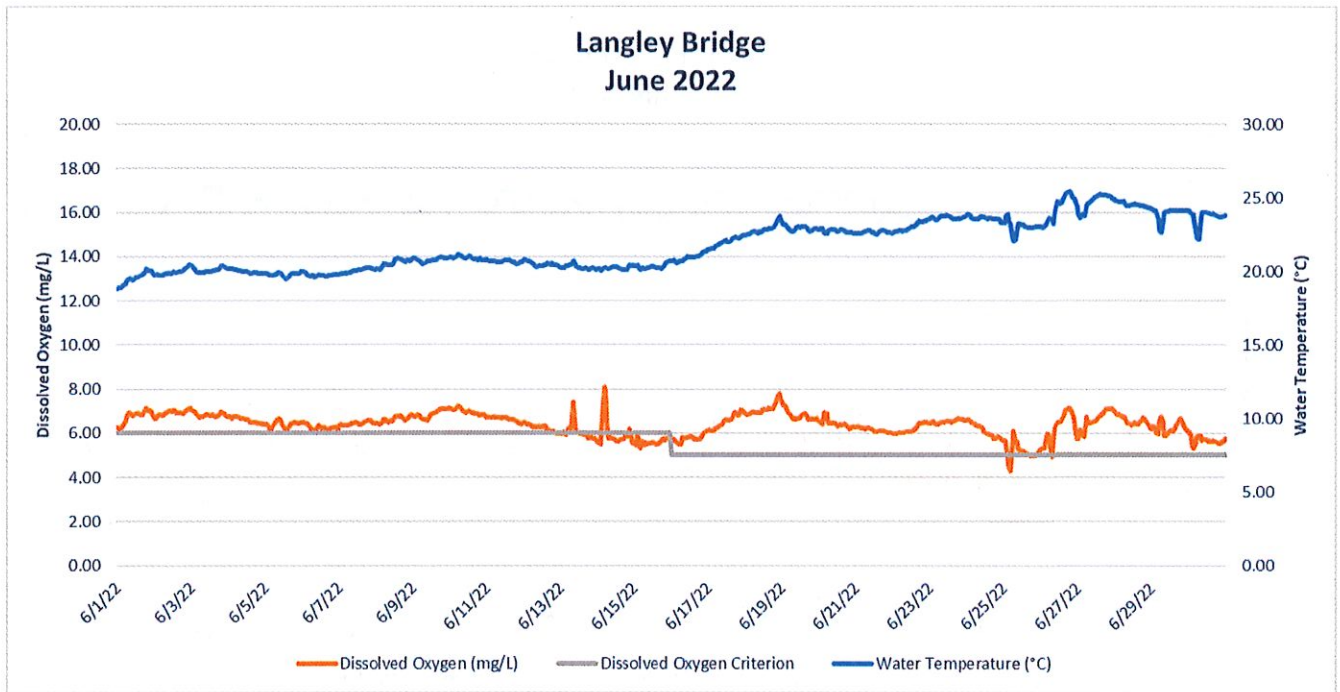


Figure 12 Langley Bridge Data June 2022

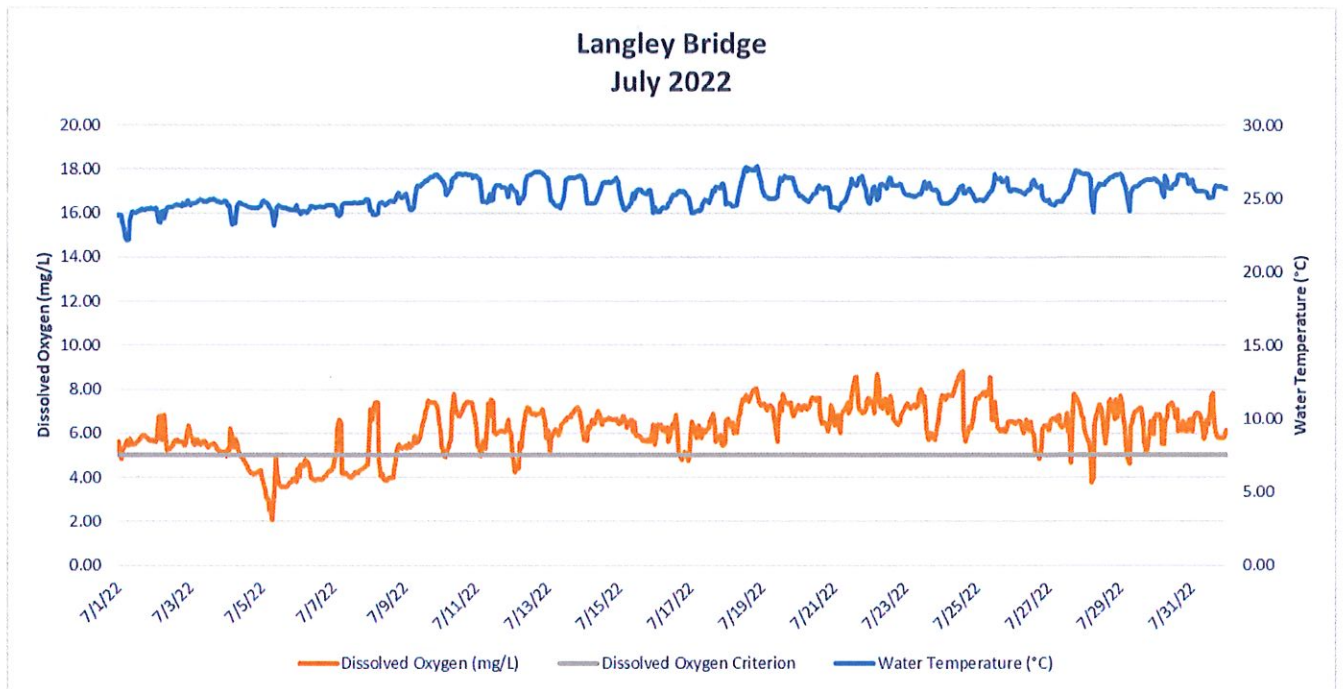


Figure 13 Langley Bridge Data July 2022

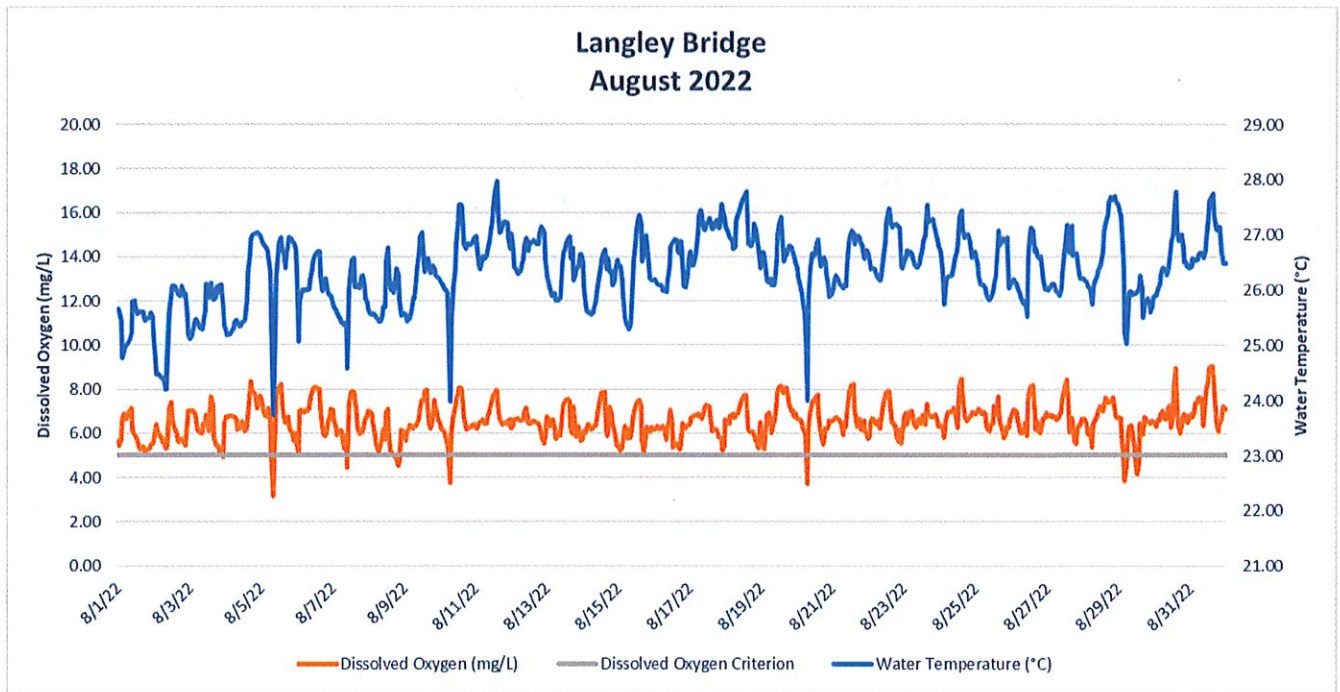


Figure 14 Langley Bridge Data August 2022

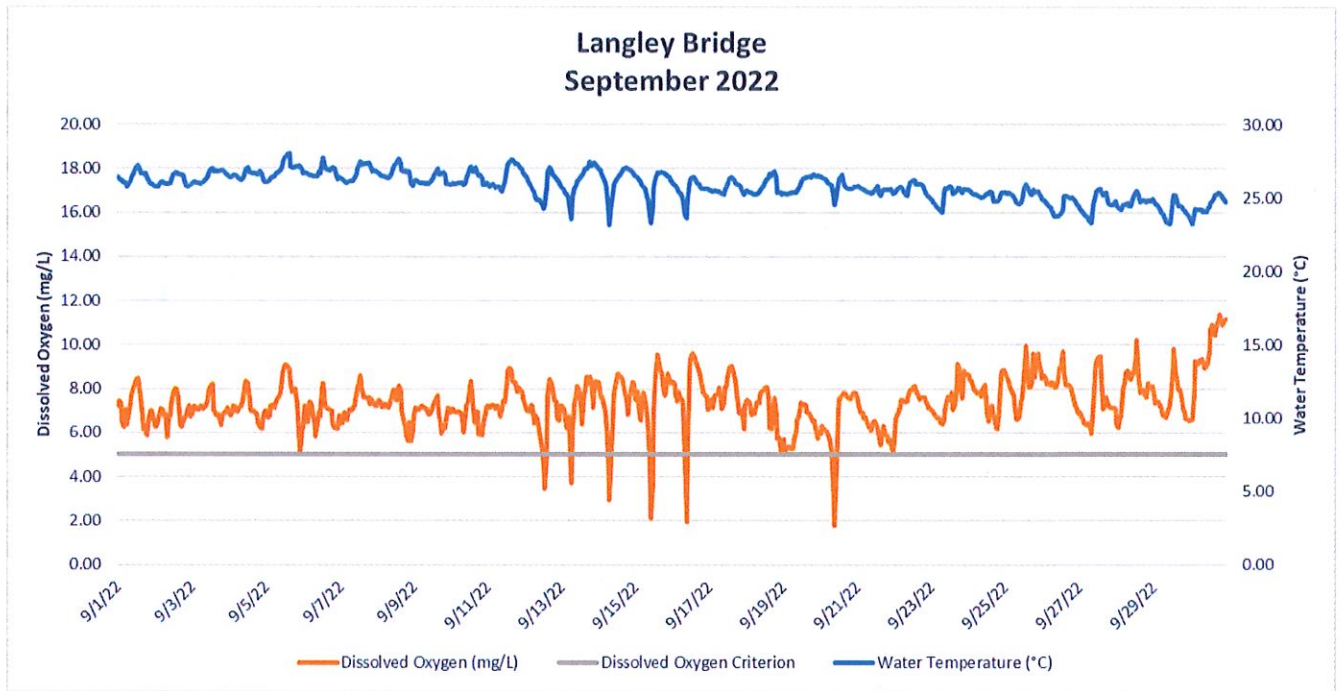


Figure 15 Langley Bridge Data September 2022

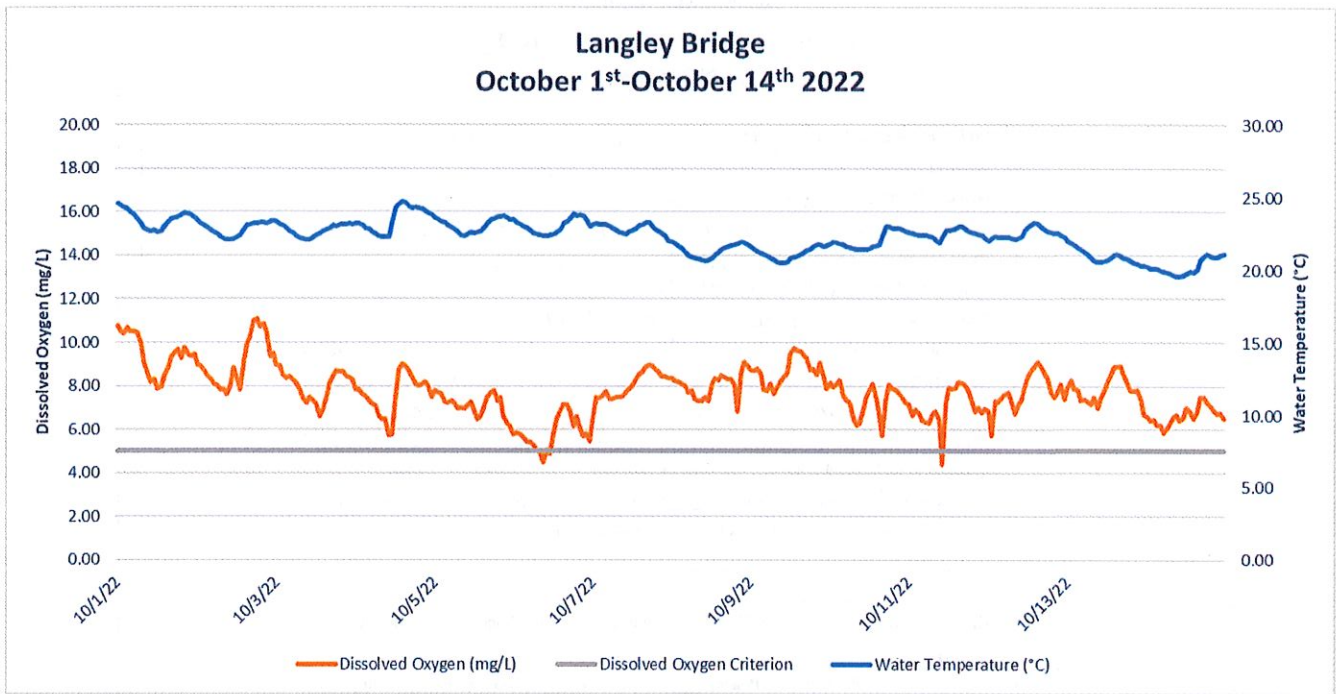


Figure 16 Langley Bridge Data October 2022

APPENDIX B- SUPPLEMENTAL DATA AND REPORTS

Atlanta Regional Office
Federal Energy Regulatory Commission
Public Safety Database

1. Project Number-State 01494 -01-01 - OKLAHOMA

2. Name of Project PENNSACOLA DAM
 Name of Development GRAND RIVER

3. Licensee or Exemptor GRAND RIVER DAM AUTHORITY

4. River or Stream GRAND RIVER

5. Date of Incident 9/6/13 Time of Incident 15:10

6. Licensee Report Dates: 9/9/13 Written 9/9/13

7. Description of Incident (20 words or less): 2 YEAR OLD CHILD REPORTEDLY WALKED AWAY FROM GRANDPARENTS HOUSE ON RIVER UNNOTICED, SHOES & SHIRT FOUND AT RIVER BANK. RECOVERED VICTIM 1 (ONE) MILE DOWNSTREAM 9-7-13

Location of Incident (check one): Reservoir or Upstream ; Tailrace ; Intake ; Downstream ; Canal ; Conduit ; Penstock ; Powerhouse ; Substation ; Spillway or Dam ; Project Land ; Other (describe) _____

8. Number of people involved in incident 1; Injured ; Fatalities 1; No Injury or Fatality

10. Type of Activity (check one): Boating ; Swimming ; Auto/Vehicle ; Fall ; Inspection/Maintenance ; Bank Fishing ; Boat Fishing ; Suicide ; Natural Causes ; Homicide ; Construction ; Unknown ; Other UNDER INVESTIGATION

11. Result from Incident: Drowning ; Electrocuton

This Form Prepared by: CHRIS CARLSON 9-9-13
 Name Date
SUPR. OF HOMELAND SECURITY
 Title
 Phone No. (918) 256-0676

Figure 17 Rescue and Recovery Incident Report

ATTACHMENT B

Documentation of GRDA Request for Pre-Filing Meeting with ODEQ

Smittle, Jacklyn

From: Jacklyn.Smittle@grda.com
Subject: FW: EXTERNAL: RE: 401 Water Quality Certification for the Pensacola Project

From: Elena Jigoulina <Elena.Jigoulina@deq.ok.gov>
Sent: Monday, August 7, 2023 4:37 PM
To: Townsend, Darrell <darrell.townsend@grda.com>
Cc: Joe Long <Joe.Long@deq.ok.gov>
Subject: EXTERNAL: RE: 401 Water Quality Certification for the Pensacola Project

Dear Mr. Townsend,

Based on our review of the application for the renewal of FERC License No. 1494 for Pensacola Hydroelectric Project, no pre-filing meeting is necessary. Please submit a certification request for the project. The items that by 40 CFR are required in the request are listed below. The request should be addressed to:

Mr. Joe Long, Environmental Programs Manager
Water Quality Division
Oklahoma Department of Environmental Quality
PO Box 1677 Oklahoma City, OK 73101-1677

You can send the letter and necessary attachments via e-mail to Joe Long, copied in this e-mail, and me.

40 CFR Part 121.5 Certification request.

(a) A certification request shall be submitted to the certifying authority and to the Federal agency concurrently.

(b) A certification request for an individual license or permit shall:

- (1) Identify the project proponent(s) and a point of contact;
- (2) Identify the proposed project;
- (3) Identify the applicable federal license or permit;
- (4) Identify the location and nature of any potential discharge that may result from the proposed project and the location of receiving waters;
- (5) Include a description of any methods and means proposed to monitor the discharge and the equipment or measures planned to treat, control, or manage the discharge;
- (6) Include a list of all other federal, interstate, tribal, state, territorial, or local agency authorizations required for the proposed project, including all approvals or denials already received;

- (7) Include documentation that a pre-filing meeting request was submitted to the certifying authority at least 30 days prior to submitting the certification request;
- (8) Contain the following statement: 'The project proponent hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief'; and
- (9) Contain the following statement: 'The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.'

From: Townsend, Darrell <Darrell.Townsend@grda.com>
Sent: Tuesday, June 20, 2023 2:48 PM
To: Elena Jigoulina <Elena.Jigoulina@deq.ok.gov>
Subject: [EXTERNAL] FW: 401 Water Quality Certification for the Pensacola Project

Good evening Ms. Jigoulina,

GRDA has recently filed it's application to the Federal Energy Regulatory Commission to relicense the Pensacola Dam. As part of that effort we would also like to request a pre-filing meeting request for the Section 401 Water Quality Certification.

Please advise how you would like to proceed with our request for the pre-filing meeting.

Sincerely,

Darrell

Darrell E. Townsend II, Ph.D.
Vice President
Ecosystems and Watershed Management
Grand River Dam Authority