



State of Nevada

Dept. of Conservation & Natural Resources

State Environmental Commission SEC.nv.gov

901 South Stewart Street, Suite 4001, Carson City, Nevada 89701

**Summary Minutes of the
STATE ENVIRONMENTAL COMMISSION (SEC)**

Meeting of February 10, 2016 9:00 AM

Bryan Building
901 S Stewart St., 2nd Floor
Carson City, NV

Members Present:

E. Jim Gans, Chairman
Tom Porta, Vice Chairman
Mark Turner
Cary Richardson
Kathryn Landreth
Bob Roper
Rich Perry
Tony Wasley
Jason King

Members Absent:

Jim Barbee

SEC Staff Present:

Jennifer Chisel, SEC/DAG
Valerie King, Executive Secretary
Misti Gower, Recording Secretary

**Members of the Public that addressed
the Commission:**

Allen Biaggi
Andy Cole
Derek Hueber

BEGIN SUMMARY MINUTES

1) Call to order, Roll Call, Establish Quorum: (Discussion) The meeting was called to order at 9:10 am by Chairman Jim Gans. Ms. King, the Executive Secretary, confirmed the hearing was properly noticed and that a quorum was present.

2) Public Comments: (Discussion) Chairman Gans called for public comment. Hearing none, he moved to the next agenda item.

3) Approval of Agenda: (Action Item) Chairman Gans asked if there were any changes or comments regarding the agenda. Hearing none, he asked for a motion.

Commissioner Landreth moved to approve the agenda and Commissioner King seconded. The agenda was unanimously approved.

Agenda Item #

4) Approval of the minutes for the October 14, 2015 SEC meetings: (Action Item) Chairman Gans requested comments from the Commission on the October meeting minutes. Hearing none, he asked for a motion.

Commissioner Perry moved to approve the minutes from October 14, 2015 and Commissioner Roper seconded. The minutes were unanimously approved.

5) Penalty Assessments for Air Quality Violations: (Action Item) Mr. Jeff Kinder, Bureau Chief of Air Pollution, and Mr. Travis Osterhout, supervisor of the Compliance and Enforcement Branch, presented the violations to the Commission. The handouts provided during the meeting are included as attachments to the meeting minutes.

A. Barrick Goldstrike Mines, Inc. – NOAV Nos. 2561 and 2562 for alleged failure to comply with source testing on two occasions. The recommended penalty amount is \$46,942.50.

Barrick Goldstrike Mines, Inc.: (Attachment 1) Mr. Kinder, Air Pollution Control Bureau Chief, informed the Commission that Barrick Goldstrike Mines operates a gold ore mining and processing facility north of Carlin under the requirements of a Class I Air Quality Permit.

On March 26, 2015, Barrick conducted permit required source testing on the exhaust stack of system 15. After BAPC had reviewed the final report it was discovered that test run #3 was stopped prior to completion and the results were deemed invalid. Consequently, test run #1 and #2 were used to calculate the emissions from system 15, yielding emissions in exceedance of permit limits for the unit.

On July 7, 2015, Barrick conducted permit required source testing on the system 11 exhaust stack. Upon review of the final report it was discovered that emissions were in exceedance of permit limits for the unit.

On September 15, 2015, an enforcement conference was held with Barrick to review the finding and give Barrick an opportunity to provide evidence. Prior to the enforcement conference Barrick contacted BAPC to present findings of an internal investigation they conducted to determine why systems 11 and 15 failed to comply with permitted emission limits during the testing. Based on the information provided by Barrick it was determined that poor bag handling and lack of oversight of the bag change-out program was a major factor in the failed source tests.

Two notices of alleged violations (NOAV) were issued on November 5, 2015. Both NOAV #2561 and #2562 were issued for a failed source test (exceeded emissions limit during compliance source testing).

Mr. Travis Osterhout, supervisor of the compliance branch, explained to the Commission the penalty matrix for each of the violations. The BAPC recommended penalty amounts of \$8,250.00 for NOAV #2561 and \$38,692.50 for NOAV #2562. The penalties take into consideration the base penalty, extent of deviation, and adjustment factors for recent violation history. These NOAV's represent Barrick's third and fourth violations in the past sixty months.

Commissioner Richardson questioned the math used to calculate the penalty. Mr. Osterhout could not verify what was used by his predecessor. It was decided to delay this agenda item to a later time in the meeting to give staff an opportunity to evaluate the calculation.

6) Permanent Regulation R130-15 Bureau of Water Quality Planning - Lower Humboldt Class Waters, Water Quality Standards Revision: (Action Item) Mr. John Heggeness, Water Quality Standards Program supervisor, provided the Commissioners with a handout for their presentation ([Attachment 2](#)). Mr. Blumberg, an environmental scientist for the Bureau of Water Quality Planning, presented the proposed changes to the Commissioners. Mr. Bloomberg stated the changes proposed are for the former “Class Waters” located in the Lower Humboldt River Basin (LHRB). The LHRB includes the main stem of the Humboldt River and its tributaries downstream from Palisade, Nevada. In 1973 the “Class Waters” were created in the NAC and waterbodies were categorized by classes based on the degree of anthropogenic impact on the watershed. Each class category has a separate table of standards.

In 2008, the SEC adopted revisions to the NAC which eliminated the “Class Waters” structure and designated specific water quality standards for each waterbody. At that time, no changes were made to the beneficial uses and the only numeric criteria added were for Escherichia coli and total ammonia. NDEP is now proposing to update the beneficial uses and numeric criteria for specific waters in the LHRB to be consistent with EPA recommended criteria for other similar types of waters throughout Nevada. Equivalent updates for the Upper Humboldt River Basin were adopted by the SEC in October 2014.

Mr. Blumberg then explained the proposed revisions by parameter, criterion, applicability and beneficial use.

Commissioner King asked if there had been public comment opposing the changes. Mr. Blumberg stated they did not receive any comments at the workshops or in written comments. Commissioner King questioned the time it had taken to bring the changes to the Commission when the upper Humboldt was adopted in 2014. Mr. Heggeness stated that there were many water stretches that needed to be tested in a very large basin. It would have been too costly and taken too much time to test all the waters simultaneously so the basin had to be split.

Chairman Gans asked if there are more basins that will have to be addressed. Mr. Heggeness stated they are now working on the northwest and Black Rock basin. These changes will be brought before the Commission in two to three years for adoption.

Chairman Gans asked if NDEP did not sample, would EPA apply its standard to these waters and asked if there are EPA standards for these waters. Mr. Heggeness stated there are not EPA standards on these waters now. NDEP has the authority to set standards on waters in the state. EPA could engage if they felt it was important enough. He stated that NDEP has a good relationship with EPA and we work well together.

Vice Chairman Porta asked if the new standards will place these waters on the Impaired Waters list. Mr. Blumberg stated there would be six waters added to the 303D Impaired Waters list. He then listed each of the six and explained which parameters triggered the listing. He stated that four of the waters are already on the list but now have new parameters added.

Chairman Gans asked for any public comment regard these changes. Mr. Allen Biaggi came forward, representing the Nevada Mining Association. Mr. Biaggi commended the agency for its diligence and communication with the Mining Association. He stated the information from the workshops had been passed on to the members and that they had no comments or input. He stated that the Mining Association accepts the changes and he again thanked the agency for its efforts on the regulation changes.

Motion: Commissioner Perry moved to adopt regulation R130-15 Vice Chairman Porta seconded the motion and it passed unanimously.

7) R101-14 Bureau of Water Quality Planning - Lahontan Reservoir, Water Quality Standards Revised: (Action Item) Mr. Randy Pahl, Special Project Coordinator, presented the Commissioners with a handout regarding the requested changes (**Attachment 3**). Mr. Pahl stated that the standards are driven by EPA recommendations and EPA has new standards regarding recreational use. One of the main goals at NDEP is to set appropriate standards for all waters that protect all designated uses. He stated that Water Quality Planning also held public workshops and accepted public comments. No changes to the proposal were made in response to workshop discussions or comments.

Mr. Pahl stated that the existing standards for the Lahontan Reservoir were established in 1984. The update is a result of improved understanding of the reservoir water quality due to additional monitoring by NDEP and others as well as EPA's recommendation for numeric criteria.

The key element of the proposed standards revision is to separate the Lahontan Reservoir from the Carson River and establish appropriate water quality criteria for a reservoir. Currently the Carson River/Lahontan Reservoir reach extends from highway 95A to the Lahontan Dam, combining the reservoir and the Carson River. Physical and hydrologic characteristics differ between a river and a reservoir so different water quality criteria are needed.

Mr. Pahl explained the proposed water quality criteria changes in detail, explaining that the current water quality conditions meet proposed criteria except for the phosphorus parameters. He stated that Phosphorus is high in Nevada soils. He explained the different ways the standard could have been set and why NDEP chose these standards. These numbers are coming straight from EPA and EPA supports NDEP's recommendations. He stated that the changes will have no effect on the businesses that have discharge permits in this waterway.

Motion: Commissioner King moved to adopt regulation R101-14. Commissioner Perry seconded the motion and it passed unanimously.

Return to Agenda Item 5: Mr. Kinder addressed the Commissioners, explaining the penalty matrix and the math used to calculate the penalty. He verified that the penalty before the Commission was calculated consistently with respect to previous penalties.

Chairman Gans asked if there was anyone from Barrick that wanted to make a statement. Andy Cole, Executive Director and Derik Hueber, Environmental Scientist with Barrick came forward. Mr. Cole expressed his appreciation for the Commission's direction to ensure the penalty was calculated consistent with past penalties. He stated he has been very happy working with BAPC had no comments regarding the penalty.

Motion: Commissioner King moved to approve the recommended penalty of \$46,942.50 for Air Quality Violations No. 2561 and 25262. Commissioner Landreth seconded the motion and it passed unanimously.

8) Administrator's Briefing to the Commission: (Discussion) NDEP Administrator, Dave Emme, briefed the Commission on a number of topics, starting with staff changes. Mr. Emme explained that the Division has three new bureau chiefs and provided a brief background and experience for each chief.

Mr. Emme stated that the state owns a hazardous waste disposal site outside of Beatty that consists of two parts. One part closed in 1992 and is managed by the Health Department. The rest is managed by NDEP and is an active waste disposal site. In October there was a fire at the low

level closed portion of the site. Officials have been able to determine there were some cracks in the cover which allowed rain to enter and come in contact with metallic sodium. This created pressure that vented, causing a cloud and creating a concern of radioactive fallout. The area was tested for radioactive levels, none was found. It was ultimately determined that there was no release of radioactive substances.

Mr. Emme then informed the Commissioners about the Anaconda Yerington copper mine site that was operated in the 1950's and is now owned by Atlanta Richfield. Several companies have operated the site since Anaconda, the last being Airmetco, who built some leach pads and buildings. Airmetco went bankrupt, leaving the question of who is responsible to clean up that portion of the site. EPA's ruling is that Atlanta Richfield is not responsible for the Airmetco portion of the site. The cleanup of the site has been under EPA's jurisdiction for about 10 years. At this time the primary concern is off-site ground water contamination. There is a uranium plume just north of the mine site that was an irrigation well has caused to migrate. There was a class action law suit file by homeowners in the area that was settled last year. Atlantic Richfield is paying to extend the Yerington water system to homeowners on domestic wells and providing each a compensation for the resulting water bills.

Mr. Emme stated that the main concern is the question of who will be responsible for cleaning up the Airmetco portion of the site. EPA contacted the Governor's office to place the site on the Superfund Site Cleanup list. Placing the site on the superfund list will cost the state over three million dollars and the property could be on the list for years without any results. The Governor responded to EPA, explaining that Nevada is looking for alternative funding for the cleanup and is negotiating with parties involved. He stated that NDEP is currently working with the community to come up with an alternative.

Mr. Emme talked about Flint Michigan and how NDEP has handled lead issues in Nevada. He also updated the Commission on the Clean Power Plan, explaining the rule is on hold until litigation is resolved.

9) Public Comment: (Discussion) Chairman Gans asked for public comments hearing none he asked when the next SEC meeting would be held. Ms. King stated the next meeting is scheduled for June 1, 2016.

10) Adjournment: (Discussion) Meeting was adjourned at 11:58 am.

ATTACHMENTS

ATTACHMENT 1: Barrick Goldstrike Mines, Inc. Penalty Information

ATTACHMENT 2: R130-15 Handout

ATTACHMENT 3: R101-14 Handout

ATTACHMENT 1

Barrick Goldstrike Mines, Inc. Penalty Information

TAB A: Penalty Presentation

Barrick Goldstrike Mines, Inc., Eureka County

NOAV's #2561, and 2562 with total proposed penalty of \$46,942.50

Barrick Goldstrike Mines, Inc. (Barrick) operates a gold ore mining and processing facility 27 miles north of Carlin, Eureka County, Nevada under the requirements of Class I Air Quality Operating Permit AP1041-0739.02 last revised by the Nevada Division of Environmental Protection, Bureau of Air Pollution Control (BAPC) on April 30, 2014.

On March 26, 2015, Barrick conducted permit required source testing on the exhaust stack of System 15 – Roaster Mill Circuit: Mill #1 (System 15). A final report of the testing results was received by the BAPC on May 18, 2015. Upon review of the final report it was discovered that Test Run #3 was stopped prior to completion, and as a result was deemed invalid by the BAPC. Consequently, Test Runs #1 & #2 were used to calculate the emissions from System 15, yielding emissions in exceedance of permit limits for the unit. Class I Air Quality Operating Permit AP1041-0739.02 limits the emissions of PM/PM₁₀ to 12.60 pounds per hour. During testing, PM/PM₁₀ emissions from System 15 were measured at 13.77 pounds per hour (109%).

On July 7, 2015, Barrick conducted permit required source testing on the exhaust stack of System 11 – Roaster Secondary Crushing and Conveyance (System 11). A final report of the testing results was received by the BAPC on August 14, 2015. Upon review of the final report it was discovered that emissions were in exceedance of permit limits for the unit. Class I Air Quality Operating Permit AP1041-0739.02 limits the emissions of PM/PM₁₀ to 1.29 pounds per hour. During testing, PM/PM₁₀ emissions from System 11 were measured at 6.05 pounds per hour (469%).

On September 15, 2015, an enforcement conference was held with Barrick to review the findings, afford Barrick an opportunity to provide evidence of extenuating facts relative to the findings, and to determine whether the issuance of Notice of Alleged Violation Orders (NOAV) were or were not warranted. Prior to the enforcement conference Barrick contacted the BAPC to present findings of an internal investigation they conducted to determine why System 11 and System 15 failed to comply with permitted emission limits during testing. Based on the information provided by Barrick, and review of the data submitted, the BAPC determined that poor bag handling and lack of oversight of the bag change-out program for the baghouse controls was a major factor in the failed source tests. On November 5, 2015, two (2) NOAV's were issued as follows:

- **NOAV #2561:** Failed Source Test (exceeded emissions limit during compliance source testing).
- **NOAV #2562:** Failed Source Test (exceeded emissions limit during compliance source testing).

The BAPC reviewed the penalty matrix and provided the recommended penalty amounts of **\$8,250.00** for NOAV#2561, and **\$38,692.50** for NOAV #2562 considering the base penalty, extent of deviation, and adjustment factors for recent violation history. These represent Barrick's third and fourth violations in the past 60 months. No appeals were filed related to NOAV's #2561, and 2562.

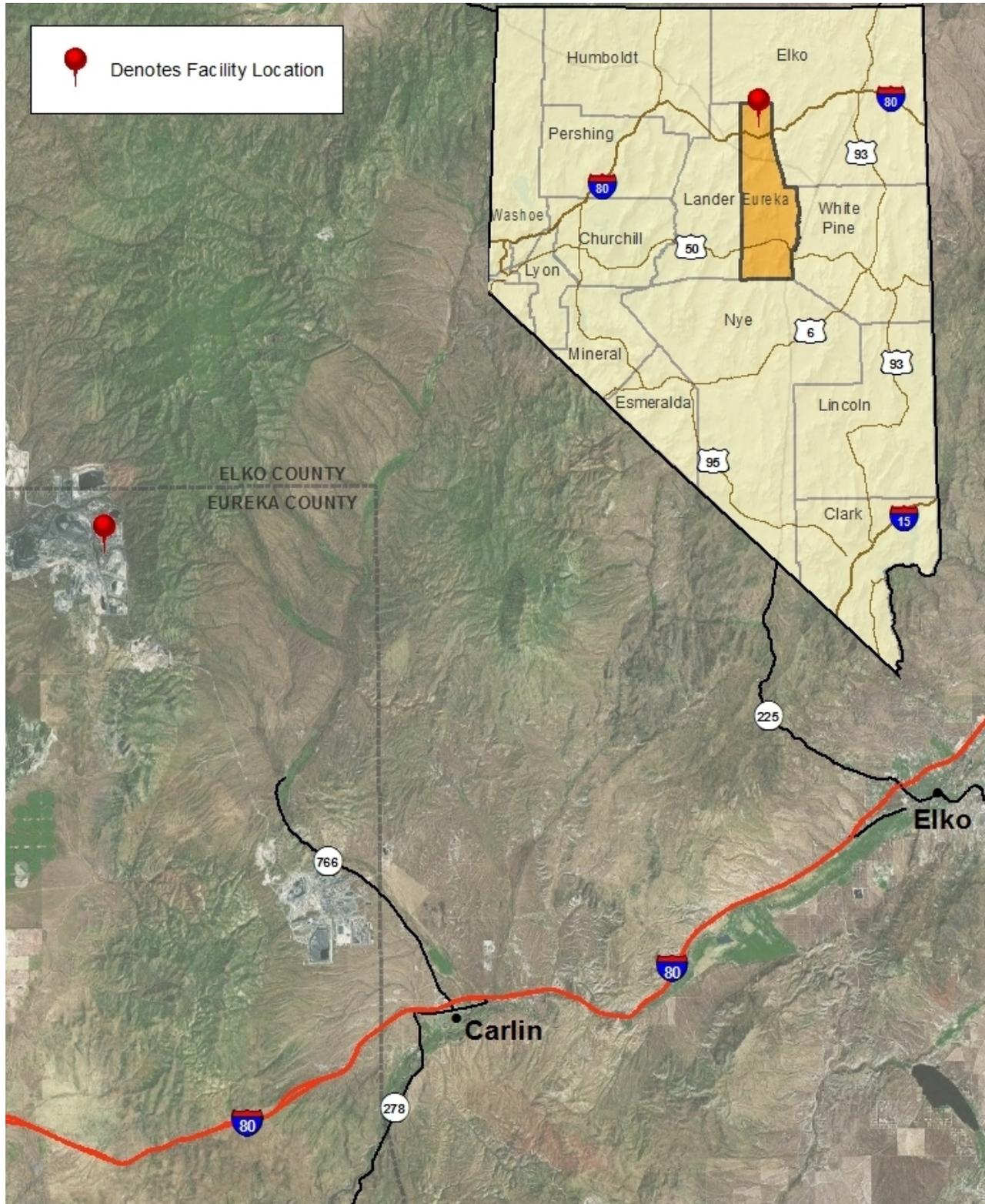
The BAPC total recommended penalty for both NOAV's is **\$46,942.50**.

TAB A: Vicinity Map

Barrick Goldstrike Mines, Inc., Eureka County

Physical Address: 27 Miles North of Carlin, Nevada off State Route 766

Coordinates: North 4,538.50 KM, East 552.10 KM – UTM Zone 11 (NAD 83)



TAB A: Photo Documentation

Barrick Goldstrike Mines, Inc., Eureka County



Photo 1: System 15 – Roaster Mill Circuit Mill #1 (NOAV #2561).



Photo 2: System 11 – Roaster Secondary Crushing and Conveyance (NOAV #2562).



NEVADA DIVISION OF
**ENVIRONMENTAL
PROTECTION**

STATE OF NEVADA
Department of Conservation & Natural Resources

Brian Sandoval, Governor
Leo M. Drozdoff, P.E., Director
David Emme, Administrator

November 5, 2015

Andy Cole
General Manager
Barrick Goldstrike Mines, Inc.
PO Box 29
Elko, Nevada 89803

**RE: Notice of Alleged Air Quality Violation and Order Nos. 2561 and 2562
Class I Air Quality Operating Permit AP1041-0739.02 (FIN A0005)**

Dear Mr. Cole:

The Nevada Division of Environmental Protection – Bureau of Air Pollution Control (BAPC) alleges that Barrick Goldstrike Mines, Inc. (Barrick) has violated conditions of Class I Air Quality Operating Permit AP1041-0739.02 (FIN A0005).

The attached Notice of Alleged Air Quality Violation and Order (NOAV) Nos. 2561 and 2562 allege that Barrick has violated conditions of Class I Air Quality Operating Permit AP1041-0739.02. Specifically, it is alleged that Barrick failed to comply with permitted emission limits during two compliance source test programs required by the air permit. As defined by Section 1 (c) of **NAC 445B.275 Violations: Acts constituting; notice.**, NOAV Nos. 2561 and 2562 constitute major violations.

As was discussed during the enforcement conference held on September 15, 2015, the BAPC makes recommendations to the Nevada State Environmental Commission (SEC) as to what an appropriate penalty may be for an air quality violation. The BAPC will be recommending penalties of **\$8,250.00** related to NOAV No. 2561 and **\$46,942.50** related to NOAV No. 2562, for a total penalty recommendation of **\$55,192.50** to the SEC. The penalty recommendation is based on use of the Administrative Penalty Table for emission violations related to source tests and adjusted by the Penalty Matrix.

An appeal of NOAV Nos. 2561 and 2562 may be requested pursuant to **NRS 445B.360 Appeals to Commission: Appealable matters; action by Commission; regulations.** and SEC administrative rules. A copy of SEC Appeal Form #3 is enclosed. Appeals must be received within 10 days of receipt of this notice, pursuant to **NRS 445B.340 Appeals to Commission: Notice of appeal.** Appeals are processed through Valerie King, the Executive Secretary for the SEC, at 901 South Stewart Street, Suite 4001, Carson City, Nevada, 89701-5249. Mrs. King can be reached at 775-687-9374, or by fax at 775-687-5856. Please provide me with a copy of any correspondence your company may have with the SEC.

Barrick Goldstrike Mines, Inc.
November 5, 2015
Page 2

If you have any questions regarding the violations, please call Ryan Fahey at (775) 687-9546 or myself at (775) 687-9530.

Sincerely,



Travis Osterhout, P.E.
Supervisor, Compliance and Enforcement Branch
Bureau of Air Pollution Control

TO/rf

Enc. 1. Notice of Alleged Air Quality Violations and Order Nos. 2561 and 2562
2. SEC Appeal Form #3

cc (w/enc. 1): Valerie King, SEC
Eureka County Board of Commissioners
Travis Osterhout, BAPC
FIN A0005 (Certified Copy)

E-copy: Jeffrey Kinder, Chief, BAPC (via email)
Lisa Kremer, BAPC (via email)
Ryan Fahey, BAPC (via email)

Certified Mail No.: 9171 9690 0935 0037 8614 73

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR POLLUTION CONTROL
901 SOUTH STEWART ST., SUITE 4001
CARSON CITY, NEVADA 89701-5249

NO. 2561

NOTICE OF ALLEGED AIR QUALITY VIOLATION AND ORDER

NOTICE OF ALLEGED AIR QUALITY VIOLATION

Person(s) to Whom Served: Andy Cole, General Manager

Company Name: Barrick Goldstrike Mines, Inc.

Address: PO Box 29, Elko, Nevada 89803

Permit Number: AP1041-0739.02

FIN: A0005

Site of Alleged Violation: Barrick Goldstrike Mine, 27 miles north of Carlin, Nevada

Date of Observation: 6/15/15

Arrival: N/A

Departure: N/A

Ambient Temperature: N/A

°F Clear: N/A

Cloudy:

Rain:

Snow:

Wind Speed:

N/A

mph

Wind Direction:

N/A

It is alleged that the following regulation was violated by the person named in this notice:

NAC 445B.275 Violations: Acts constituting; notice. 1. Failure to comply with any requirement of NAC 445B.001 to 445B.3689, inclusive, any applicable requirement or any condition of an operating permit constitutes a violation. As required by NRS 445B.450, the Director shall issue a written notice of an alleged violation to any owner or operator for any violation, including, but not limited to:

(c) Failure to construct or operate a stationary source in accordance with any condition of an operating permit;

It is alleged that the following act or practice constitutes the violation:

Exceeded permitted emissions limit during compliance source testing.

Evidence:

On March 26, 2015 Barrick Goldstrike Mines, Inc. (Barrick) conducted permit required source testing on the exhaust stack of System 15 – Roaster Mill Circuit Mill #1. Test runs number 1 and 2 were conducted as required by state and federal regulations. Test run number 3 was stopped prior to the completion of the required time and volume collection to be accepted as a valid test run and has been deemed invalid by the Nevada Division of Environmental Protection, Bureau of Air Pollution Control (BAPC). Test runs number 1 and 2 were used to calculate emissions from System 15 and were found to exceed the permit limit for this unit. Class I Air Quality Operating Permit AP1041-0739.02 limits the emissions of PM/PM10 to 12.60 pounds per hour. During testing, emissions from System 15 were measured at 13.77 pounds per hour of PM/PM10.

On September 15, 2015 the BAPC and Barrick held an enforcement conference to determine whether this violation was or was not warranted. Prior to this conference Barrick also contacted the BAPC to present their findings of the internal investigation as to why this system failed to comply with permitted emission limits during testing. Based on the information provided by Barrick at both meetings, and the data that was submitted, the BAPC determined that poor bag handling and lack of oversight of the bag change-out program was a major factor in the failed source tests. The BAPC is issuing Notice of Alleged Air Quality Violation and Order (NOAV) No. 2561 as a major violation.

NOTICE OF ALLEGED AIR QUALITY VIOLATION AND ORDER NO. 2561

Evidence (cont.)

In accordance with NAC 445B.281 Violations: Classification; administrative fines., failing to meet permit limits for emissions during source testing constitutes a major violation. This NOAV and NOAV No. 2562 mailed under the same cover represent Barrick's third and fourth air quality violations in the past 60 months.

ORDER

Under the authority of NRS 445B.100 to 445B.640, inclusive, the person named in this notice is ordered:

_____ To pay the following administrative fine in accordance with 445B.281.1: \$ _____

To take corrective action: Ensure that baghouses are properly maintained at all times to limit possible excess emissions during testing.

_____ To appear for an enforcement conference at:
Date: _____ Time: _____

_____ To conduct a Supplemental Environmental Project specified by the NDEP-BAPC

_____ This notice is a warning.

Signature 
Issued by: Travis Osterhout P.E.
Supervisor, Compliance and Enforcement Branch
Bureau of Air Pollution Control

Phone: 775-687-9530 Date: November 5, 2015

TO/rf

Certified Mail No.: 9171 9690 0935 0037 8614 73

This order becomes final unless appealed within ten (10) days after receipt of this notice or ten (10) days after a required enforcement conference. The person named in this order may appeal this notice by submitting a written request for a hearing to the Chairman of the Environmental Commission, 901 South Stewart Street, Suite 4001, Carson City, Nevada 89701-5249. An administrative fine may be levied by the Environmental Commission of not more than \$10,000 per day of violation.

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR POLLUTION CONTROL
901 SOUTH STEWART ST., SUITE 4001
CARSON CITY, NEVADA 89701-5249

NO. 2562

NOTICE OF ALLEGED AIR QUALITY VIOLATION AND ORDER

NOTICE OF ALLEGED AIR QUALITY VIOLATION

Person(s) to Whom Served: Andy Cole, General Manager

Company Name: Barrick Goldstrike Mines, Inc.

Address: PO Box 29, Elko, Nevada 89803

Permit Number: AP1041-0739.02 **FIN:** A0005

Site of Alleged Violation: Barrick Goldstrike Mine, 27 miles north of Carlin, Nevada

Date of Observation: 8/31/15 **Arrival:** N/A **Departure:** N/A

Ambient Temperature: N/A °F **Clear:** N/A **Cloudy:** **Rain:** **Snow:**

Wind Speed: N/A mph **Wind Direction:** N/A

It is alleged that the following regulation was violated by the person named in this notice:

NAC 445B.275 Violations: Acts constituting; notice. 1. Failure to comply with any requirement of NAC 445B.001 to 445B.3689, inclusive, any applicable requirement or any condition of an operating permit constitutes a violation. As required by NRS 445B.450, the Director shall issue a written notice of an alleged violation to any owner or operator for any violation, including, but not limited to:

(c) Failure to construct or operate a stationary source in accordance with any condition of an operating permit;

It is alleged that the following act or practice constitutes the violation:

Exceeded permitted emissions limit during compliance source testing.

Evidence:

On July 7, 2015 Barrick Goldstrike Mines, Inc. (Barrick) conducted permit required source testing on the exhaust stack of System 11 – Roaster Secondary Crushing and Conveyance. Class I Air Quality Operating Permit AP1041-0739.02 limits the emissions of PM/PM10 to 1.29 pounds per hour for System 11. During testing emissions from System 11 were measured at 6.05 pounds per hour of PM/PM10.

On September 15, 2015 the BAPC and Barrick held an enforcement conference to determine whether this violation was or was not warranted. Prior to this conference Barrick also contacted the BAPC to present their findings of the internal investigation as to why this system failed to comply with permitted emission limits during testing. Based on the information provided by Barrick at both meetings, and the data that was submitted, the BAPC determined that poor bag handling and lack of oversight of the bag change-out program was a major factor in the failed source tests. The BAPC is issuing Notice of Alleged Air Quality Violation and Order (NOAV) No. 2562 as a major violation.

In accordance with **NAC 445B.281 Violations: Classification; administrative fines.**, failing to meet permit limits for emissions during source testing constitutes a major violation. This NOAV and NOAV 2561 mailed under the same cover represent Barrick's third and fourth air quality violations in the past 60 months.

NOTICE OF ALLEGED AIR QUALITY VIOLATION AND ORDER NO. 2562

ORDER

Under the authority of NRS 445B.100 to 445B.640, inclusive, the person named in this notice is ordered:

_____ To pay the following administrative fine in accordance with 445B.281.1: \$ _____

To take corrective action: Ensure that baghouses are properly maintained at all times to limit possible excess emissions during testing.

_____ To appear for an enforcement conference at:
Date: _____ Time: _____

_____ To conduct a Supplemental Environmental Project specified by the NDEP-BAPC

_____ This notice is a warning.

Signature 
Issued by: Travis Osterhout P.E.
Supervisor, Compliance and Enforcement Branch
Bureau of Air Pollution Control

Phone: 775-687-9530 Date: November 5, 2015

TO/rf

Certified Mail No.: 9171 9690 0935 0037 8614 73

This order becomes final unless appealed within ten (10) days after receipt of this notice or ten (10) days after a required enforcement conference. The person named in this order may appeal this notice by submitting a written request for a hearing to the Chairman of the Environmental Commission, 901 South Stewart Street, Suite 4001, Carson City, Nevada 89701-5249. An administrative fine may be levied by the Environmental Commission of not more than \$10,000 per day of violation.



NEVADA DIVISION OF
**ENVIRONMENTAL
PROTECTION**

STATE OF NEVADA
Department of Conservation & Natural Resources
Brian Sandoval, Governor
Leo M. Drozdoff, P.E., Director
David Emme, Administrator

January 20, 2016

Andy Cole
General Manager
Barrick Goldstrike Mines, Inc.
PO Box 29
Elko, Nevada 89803

**RE: Adjustment to Recommended Penalty for:
Notice of Alleged Air Quality Violation and Order No. 2562
Class I Air Quality Operating Permit AP1041-0739.02 (FIN A0005)**

Dear Mr. Cole:

The Nevada Division of Environmental Protection – Bureau of Air Pollution Control (BAPC) conducted a review of the penalty that was assessed and recommended for Notice of Alleged Air Quality Violation and Order (NOAV) No. 2562 and found a calculation error on the part of the BAPC.

The BAPC has revised the calculation for the penalty recommendation with the use of the Administrative Penalty Table for emissions violations and adjusted by the Penalty Matrix. Previously the BAPC had recommended a penalty of **\$46,942.50** for NOAV No. 2562. After identifying the error and recalculating the BAPC will be revising the penalty recommended to the State Environmental Commission (SEC) to **\$38,692.50** for NOAV No. 2562.

If you have any questions regarding the violations, please call Ryan Fahey at (775) 687-9546 or me at (775) 687-9530.

Sincerely,

Travis Osterhout, P.E.
Supervisor, Compliance and Enforcement Branch
Bureau of Air Pollution Control

TO/rf

Barrick Goldstrike Mines, Inc.

January 20, 2016

Page 2

cc: Valerie King, SEC
Eureka County Board of Commissioners
FIN A0005 (Certified Copy)

E-copy: Jeffrey Kinder, Chief, BAPC (via email)
Lisa Kremer, BAPC (via email)
Ryan Fahey, BAPC (via email)

Certified Mail No.: 9171 9690 0935 0039 9539 09

**Nevada Division of Environmental Protection
Bureau of Air Pollution Control
Administrative Fine Calculation Worksheet for Emissions Violations**

For: Barrick Goldstrike Mines, Inc., AP1041-0739.02 (FIN A0005)

Violation: Failed Source Test (exceeded emissions limit during compliance source testing)

NOAV: 2562

I. Gravity Component

A. Base Penalty: \$1,000 or as specified in the Penalty Table = **\$7,500.00**

B. Extent of Deviation – Deviation Factors:

1. Volume of Release:

A. For CEMS or source testing, see *Guidelines* on page 3.

**Adjustment to Base Penalty = 469% above permit limit
Adjustment = 4.69**

B. For opacity, see *Guidelines* on page 3 and refer to table below.

| | | | | |
|-------------------|-----------------------|---------------|------------------------|-----------------------|
| 1 | 1.5 | 2.5 | 4 | 6 |
| Negligible amount | Relatively low amount | Medium amount | Relatively high amount | Extremely high amount |

Adjustment to Base Penalty = _____

2. Toxicity of Release: Hazardous Air Pollutant (if applicable)

3. Special Environmental/Public Health Risk (proximity to sensitive receptor):

| | | | |
|-------------------|---------------|------------------------|-----------------------|
| 1 | 2 | 3 | 4 |
| Negligible amount | Medium amount | Relatively high amount | Extremely high amount |

Deviation Factors 1 x 2 x 3:

**C. Adjusted Base Penalty: Base Penalty (A) x Deviation Factors (B) = \$7,500.00 X 4.69
= \$35,175.00**

D. Multiple Emission Unit Violations or Recurring Events:

| | | | | |
|--------------------|----------|-----------------|----------|--------------------|
| \$35,175.00 | X | 1 | = | \$35,175.00 |
| Dollar Amount | | Number of Units | | Total Gravity Fine |

**Nevada Division of Environmental Protection
Bureau of Air Pollution Control
Administrative Fine Calculation Worksheet for Emissions Violations**

II. Economic Benefit

| | | | | | |
|-----------------|--------------------|---|------------------|---|-------------------------|
| A. | _____ | + | _____ | = | _____ |
| | Delayed Costs | | Avoided Costs | | Economic Benefit |
| Subtotal | \$35,175.00 | + | \$0.00 | = | \$35,175.00 |
| | Total Gravity Fine | | Economic Benefit | | Fine Subtotal |

III. Penalty Adjustment Factors

A. Mitigating Factors _____ %

B. History of Non-compliance

1. Similar Violations (NOAVs) in previous 5 years:
 - Within previous year (12 months) = 3X (+300%)
 - Within previous three years (36 months) = 2X (+200%)
 - Occurring over three years before = 1.5X (+150%) _____ %

2. All Recent Violations (NOAVs) in previous 5 years:
 (+5%) X (Number of recent Violations) = 5% X 2 = 10 %

Total Penalty Adjustment Factors - Sum of A & B: **10 %**

IV. Total Penalty

| | | | | |
|------------------------------------|---|---------------------------------|---|-----------------------------|
| \$35,175.00 | X | 10% | = | \$3,517.50 |
| Penalty Subtotal (from Part II) | | Total Adjustment Factors | | Total Adjustment |
| \$35,175.00 | + | \$3,517.50 | = | \$38,692.50 |
| Penalty Subtotal (from Part II) | | Penalty Increase or Decrease | | Total Penalty |

Assessed by: _____ **Ryan Fahey** **Date:** _____ **9/14/15**

**Nevada Division of Environmental Protection
Bureau of Air Pollution Control
Administrative Fine Calculation Worksheet for Emissions Violations**

Guidelines for I.A.1, Gravity Component: Potential for Harm, Volume of Release

Determining Volume of Release based on opacity:

| 1 | 1.5 | 2.5 | 4 | 6 |
|-------------------|-----------------------|---------------|------------------------|-----------------------|
| Negligible amount | Relatively low amount | Medium amount | Relatively high amount | Extremely high amount |

Opacity: < 20% or $\geq 20\%$ or $\geq 30\%$ $\geq 40\%$ $\geq 50\%$
 NSPS limit NSPS limit
 (where NSPS opacity limit is < 20%)

Determining Volume of Release based on CEMS or source testing:

Use excess emission ratio: Ratio of Emissions to Permitted Emission Limit, r

| <u>Source & pollutant info</u> | <u>Emissions/(Permit limit)</u> | <u>Adjustment to Base Penalty</u> |
|------------------------------------|---------------------------------|-----------------------------------|
| Minor sources: | $r < 1.2$ | (none) |
| <i>(all pollutants are minor)</i> | $r \geq 1.2$ | proportional to r |
| Major & SM sources: | | |
| Minor pollutant | $r < 1.2$ | (none) |
| | $r \geq 1.2$ | proportional to r |
| “Threshold” pollutant* | $r < 1.2$ | (none) |
| | $r \geq 1.2$ | proportional to r |
| Major pollutant | $r < 1.2$ | (none) |
| | $r \geq 1.2$ | proportional to r |

Hazardous Air Pollutant (HAP) – see Part I.B.2 Toxicity of Release (2X multiplier)

**Nevada Division of Environmental Protection
Bureau of Air Pollution Control
Administrative Fine Calculation Worksheet for Emissions Violations**

For: Barrick Goldstrike Mines, Inc., AP1041-0739.02 (FIN A0005)

Violation: Failed Source Test (exceeded emissions limit during compliance source testing)

NOAV: 2561

I. Gravity Component

A. Base Penalty: \$1,000 or as specified in the Penalty Table = **\$7,500.00**

B. Extent of Deviation – Deviation Factors:

1. Volume of Release:

A. For CEMS or source testing, see *Guidelines* on page 3.

**Adjustment to Base Penalty = 9% above permit limit
No adjustment applied**

B. For opacity, see *Guidelines* on page 3 and refer to table below.

| | | | | |
|-------------------|-----------------------|---------------|------------------------|-----------------------|
| 1 | 1.5 | 2.5 | 4 | 6 |
| Negligible amount | Relatively low amount | Medium amount | Relatively high amount | Extremely high amount |

Adjustment to Base Penalty = _____

2. Toxicity of Release: Hazardous Air Pollutant (if applicable)

3. Special Environmental/Public Health Risk (proximity to sensitive receptor):

| | | | |
|-------------------|---------------|------------------------|-----------------------|
| 1 | 2 | 3 | 4 |
| Negligible amount | Medium amount | Relatively high amount | Extremely high amount |

Deviation Factors 1 x 2 x 3:

C. Adjusted Base Penalty: Base Penalty (A) x Deviation Factors (B) = **\$7,500.00 X 0 = \$0.00**

D. Multiple Emission Unit Violations or Recurring Events:

| | | | | |
|-------------------|----------|-----------------|----------|--------------------|
| \$7,500.00 | X | 1 | = | \$7,500.00 |
| Dollar Amount | | Number of Units | | Total Gravity Fine |

**Nevada Division of Environmental Protection
Bureau of Air Pollution Control
Administrative Fine Calculation Worksheet for Emissions Violations**

Guidelines for I.A.1, Gravity Component: Potential for Harm, Volume of Release

Determining Volume of Release based on opacity:

| 1 | 1.5 | 2.5 | 4 | 6 |
|-------------------|-----------------------|---------------|------------------------|-----------------------|
| Negligible amount | Relatively low amount | Medium amount | Relatively high amount | Extremely high amount |

Opacity: < 20% or $\geq 20\%$ or $\geq 30\%$ $\geq 40\%$ $\geq 50\%$
 NSPS limit NSPS limit
 (where NSPS opacity limit is < 20%)

Determining Volume of Release based on CEMS or source testing:

Use excess emission ratio: Ratio of Emissions to Permitted Emission Limit, r

| <u>Source & pollutant info</u> | <u>Emissions/(Permit limit)</u> | <u>Adjustment to Base Penalty</u> |
|------------------------------------|---------------------------------|-----------------------------------|
| Minor sources: | $r < 1.2$ | (none) |
| <i>(all pollutants are minor)</i> | $r \geq 1.2$ | proportional to r |
| Major & SM sources: | | |
| Minor pollutant | $r < 1.2$ | (none) |
| | $r \geq 1.2$ | proportional to r |
| “Threshold” pollutant* | $r < 1.2$ | (none) |
| | $r \geq 1.2$ | proportional to r |
| Major pollutant | $r < 1.2$ | (none) |
| | $r \geq 1.2$ | proportional to r |

Hazardous Air Pollutant (HAP) – see Part I.B.2 Toxicity of Release (2X multiplier)

ATTACHMENT 2:

R130-15 Handout

State Environmental Commission
February 10, 2016

Petition R130-15 (Tab # 6)

**Revisions to the
Lower Humboldt River Basin Class Waters**

Zack Blumberg, Environmental Scientist
775-687-9446

zblumberg@ndep.nv.gov

Nevada Division of Environmental Protection
Bureau of Water Quality Planning
Water Quality Standards Program

Public Workshops

- Carson City – November 2, 2015
- Winnemucca – November 3, 2015

Public Comments accepted through November 18, 2015

- No substantive comments received

Overview of Water Quality Standards

Key Elements

- 1) Designated beneficial uses
- 2) Criteria to protect beneficial use
 - Generally use EPA recommendations
 - Can develop regional or site specific
- 3) Antidegradation provision
 - Requirements to maintain high quality (RMHQ)
 - Not proposing RMHQs

Beneficial Uses, NAC 445A.122

- Watering livestock
- Irrigation
- Aquatic life (cold water species, warm water species)
- Recreation involving contact with the water (swimming)
- Recreation not involving contact with the water (boating)
- Municipal or domestic supply
- Industrial supply
- Propagation of wildlife

Background

- Changes are proposed to the Nevada Administrative Code (NAC) revising the Nevada water quality regulations for the former “Class Waters” located in the Lower Humboldt River Basin (LHRB) (NAC 445A.1432 – 1578).
- The LHRB includes the main stem of the Humboldt River and its tributaries downstream from Palisade, Nevada.

“Class Waters”

- In 1973 the “Class Waters” were created in the NAC and waterbodies were categorized by classes (A, B, C, and D) based on the degree of anthropogenic impact on the watershed. Each class category had its own table of standards.

Class A Waters - watershed is relatively undisturbed by man’s activity.

Class B Waters - watershed is only moderately influenced by man’s activity.

Class C Waters - where the watershed is considerably altered by man’s activity.

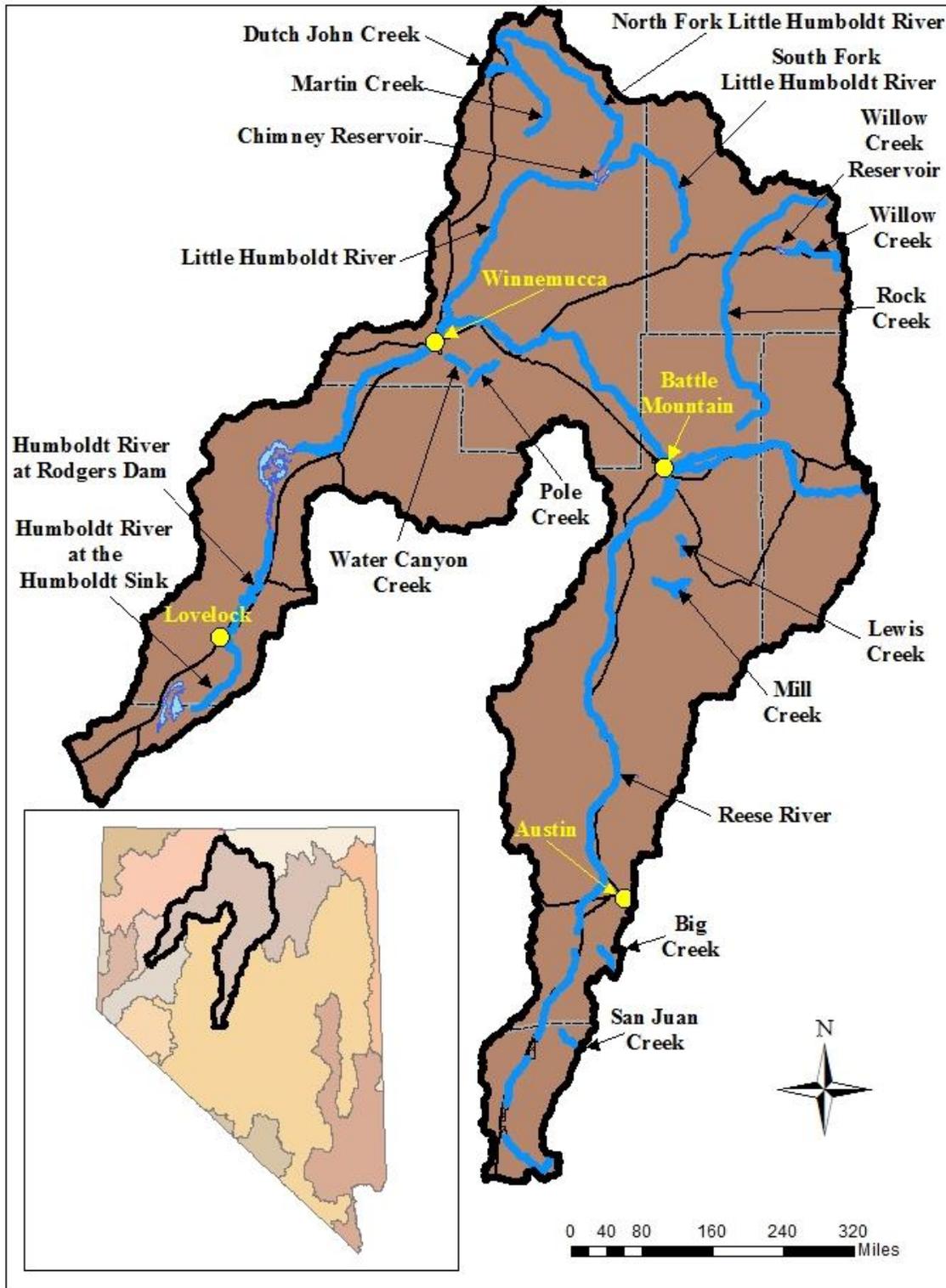
Class D Waters – in areas of urban development, highly industrialized or intensively used for agriculture...

- The LHRB contains former Class A, B, C, and D waters

“Class Waters” continued:

- Parameters
 - Temperature
 - pH
 - Dissolved Oxygen
 - Total Phosphorus
 - Total Dissolved Solids
 - Fecal Coliform
- In 2008, the State Environmental Commission adopted revisions to the NAC which eliminated the “Class Waters” structure and designated specific water quality standards for each waterbody. At that time, no changes were made to the beneficial uses and the only numeric criteria added were for *Escherichia coli* and Total Ammonia (as N).
- NDEP is now proposing to update the beneficial uses and numeric criteria for specific waters in the LHRB for consistency with EPA recommended criteria other similar types of waters throughout Nevada.
- At the October 8, 2014 meeting, the State Environmental Commission approved an equivalent set of updates for former Class Waters in the Upper Humboldt River Basin.

Lower Humboldt Basin Class Waters



Proposed Revisions

- Add Industrial Supply as a beneficial use to the waters that were formerly categorized as Class A.
- Add Trout as an Aquatic Life Species of Concern to the waters that were formerly categorized as Class A.
- Add numeric criteria to the former LHRB Class waters for the following parameters:

Table 1: Proposed Revisions to Numeric Criteria

| Parameter | Criterion | Applicability | Most Restrictive Beneficial Use |
|------------------------------------|---|----------------------------|---------------------------------|
| Nitrate (as N) | S.V. \leq 10.0 mg/l | Trout and Non-Trout Waters | Municipal or domestic supply |
| Nitrite (as N) | S.V. \leq 0.06 mg/l | Trout Waters | Aquatic life |
| | S.V. \leq 1.0 mg/l | Non-Trout Waters | |
| Total Suspended Solids | S.V. \leq 25 mg/l | Trout Waters | Aquatic life |
| | S.V. \leq 80 mg/l | Non-Trout Waters | |
| Turbidity | S.V. \leq 10 NTU | Trout Waters | Aquatic life |
| | S.V. \leq 50 NTU | Non-Trout Waters | |
| Color | S.V. \leq 75 PCU | Trout and Non-Trout Waters | Municipal or domestic supply |
| Chloride | 1-hour avg. \leq 860 mg/l 96-hour avg. \leq 230 mg/l | Trout and Non-Trout Waters | Aquatic life |
| Sulfate | S.V. \leq 250 mg/l | Trout and Non-Trout Waters | Municipal or domestic supply |
| Alkalinity (as CaCO ₃) | S.V. \geq 20 mg/l | Trout and Non-Trout Waters | Aquatic life |

Waterbodies Addressed in Petition R130-15

Table 2: Specific Waterbodies Addressed in Petition R130-15

| Water Body Name | NAC | Former Class Designation ¹ |
|--|-----------|---------------------------------------|
| Humboldt River at Rodgers Dam | 445A.1452 | C – Non-Trout |
| Humboldt River at the Humboldt Sink | 445A.1454 | D – Non-Trout |
| Little Humboldt River | 445A.1468 | C – Non-Trout |
| Little Humboldt River, North Fork at the national forest boundary | 445A.1472 | A – Trout |
| Little Humboldt River, North Fork at the South Fork of the Little Humboldt River | 445A.1474 | B – Non-Trout |
| Little Humboldt River, South Fork at the Elko-Humboldt county line | 445A.1476 | A – Trout |
| Little Humboldt River, South Fork at the North Fork of the Little Humboldt River | 445A.1478 | B – Non-Trout |
| Rock Creek at Squaw Valley Ranch | 445A.1518 | A – Trout |
| Rock Creek below Squaw Valley Ranch | 445A.1522 | C – Non-Trout |
| Willow Creek at Willow Creek Reservoir | 445A.1524 | A – Trout |
| Willow Creek Reservoir | 445A.1526 | B – Trout |
| Pole Creek | 445A.1528 | A – Trout |
| Water Canyon Creek | 445A.1532 | A – Trout |
| Martin Creek at the national forest boundary | 445A.1534 | A – Trout |
| Martin Creek below the national forest boundary | 445A.1536 | B – Trout |
| Dutch John Creek | 445A.1538 | A – Trout |
| Reese River at Indian Creek | 445A.1556 | A – Trout |
| Reese River at State Route 722 | 445A.1558 | B – Trout |
| Reese River below State Route 722 | 445A.1562 | C – Non-Trout |
| San Juan Creek | 445A.1564 | A – Trout |
| Big Creek at the forest service campground | 445A.1566 | A – Trout |
| Big Creek below the forest service campground | 445A.1568 | B – Trout |
| Mill Creek | 445A.1572 | A – Trout |
| Lewis Creek | 445A.1574 | A – Trout |

Questions?

¹ Former Class A Waters are shaded.

ATTACHMENT 3:

R101-14 Handout

State Environmental Commission
February 10, 2016

Petition R101-14 (Tab # 7)

**Lahontan Reservoir Water Quality
Standards**

Randy Pahl, Special Projects Coordinator

775-687-9453

rpahl@ndep.nv.gov

Nevada Division of Environmental Protection

Bureau of Water Quality Planning

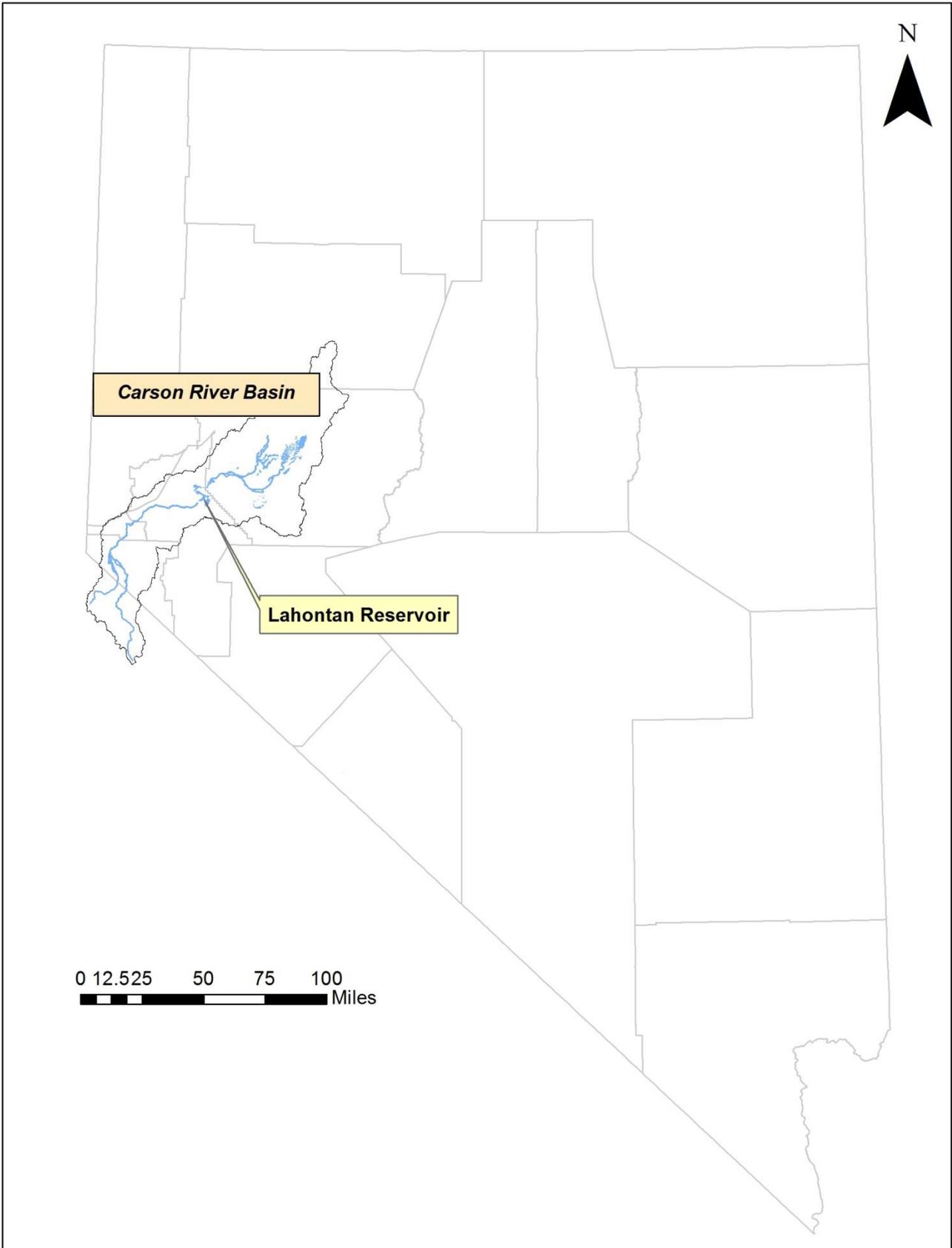


Figure 1. Location Map

Introduction

- Existing standards were set over 30 years ago (1984)
- Updates to these standards based upon
 - Improved understanding of reservoir water quality due to additional monitoring by NDEP and others
 - EPA recommendations for numeric criteria

Public Workshops

- Carson City – November 2, 2015
- Silver Springs – November 4, 2015

Public comments accepted through November 18, 2015. No written comments were received. No changes to proposal made in response to workshop discussions.

Key Elements of Proposed Water Quality Standards Revisions

- Separate out Lahontan Reservoir from the Carson River
- Establish appropriate water quality criteria for a reservoir

Separate out Lahontan Reservoir

- Current Carson River/Lahontan Reservoir reach extends from Highway 95A to Lahontan Dam
- Reservoir is combined with a reach of Carson River (**Figure 2**)
- Physical/hydrologic characteristics of reservoir differ from river – as a result, some different water quality criteria are needed
- **Figure 3** – depicts proposed reaches – create 3 new reaches

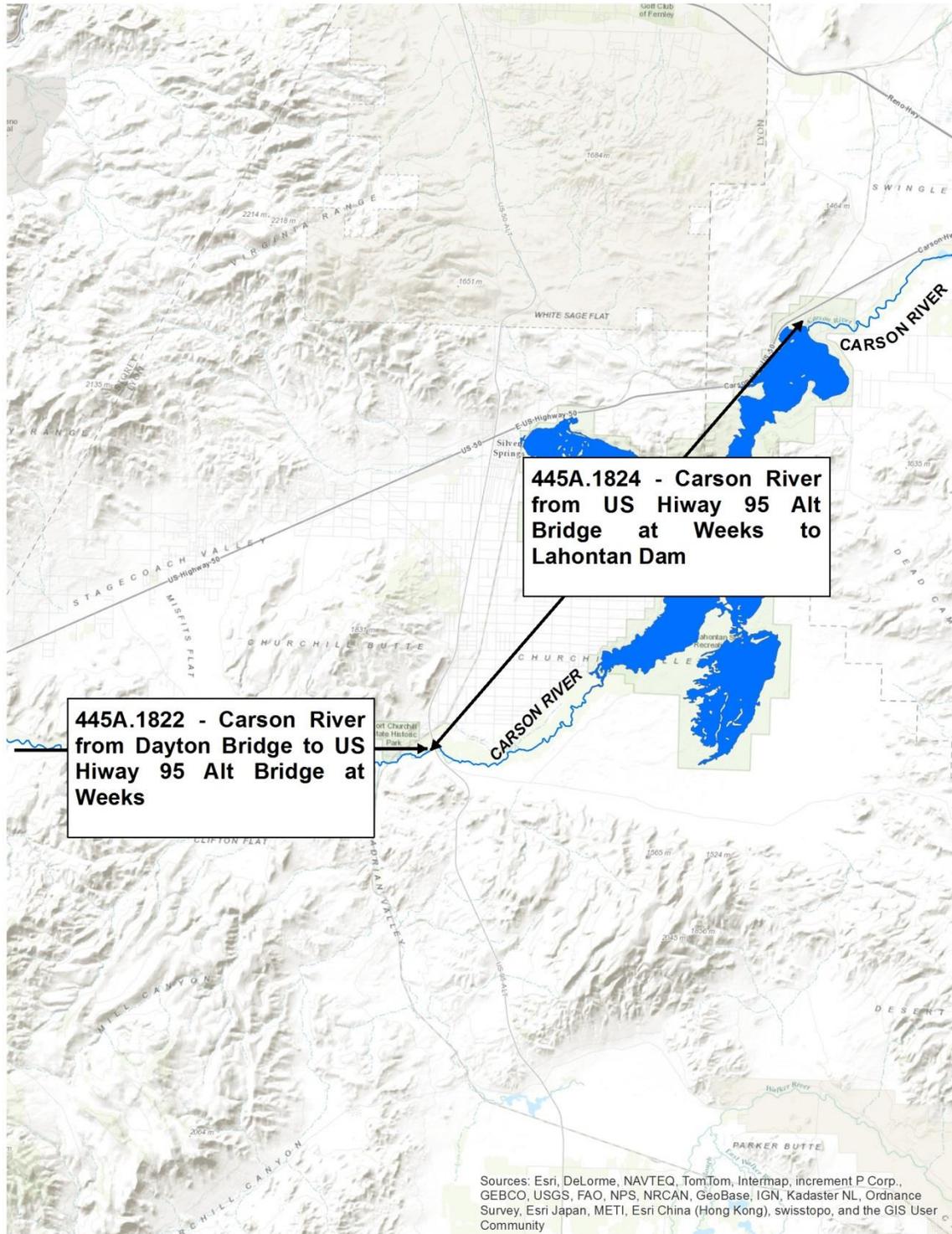


Figure 2. Existing Carson River Reaches in Lahontan Reservoir Vicinity

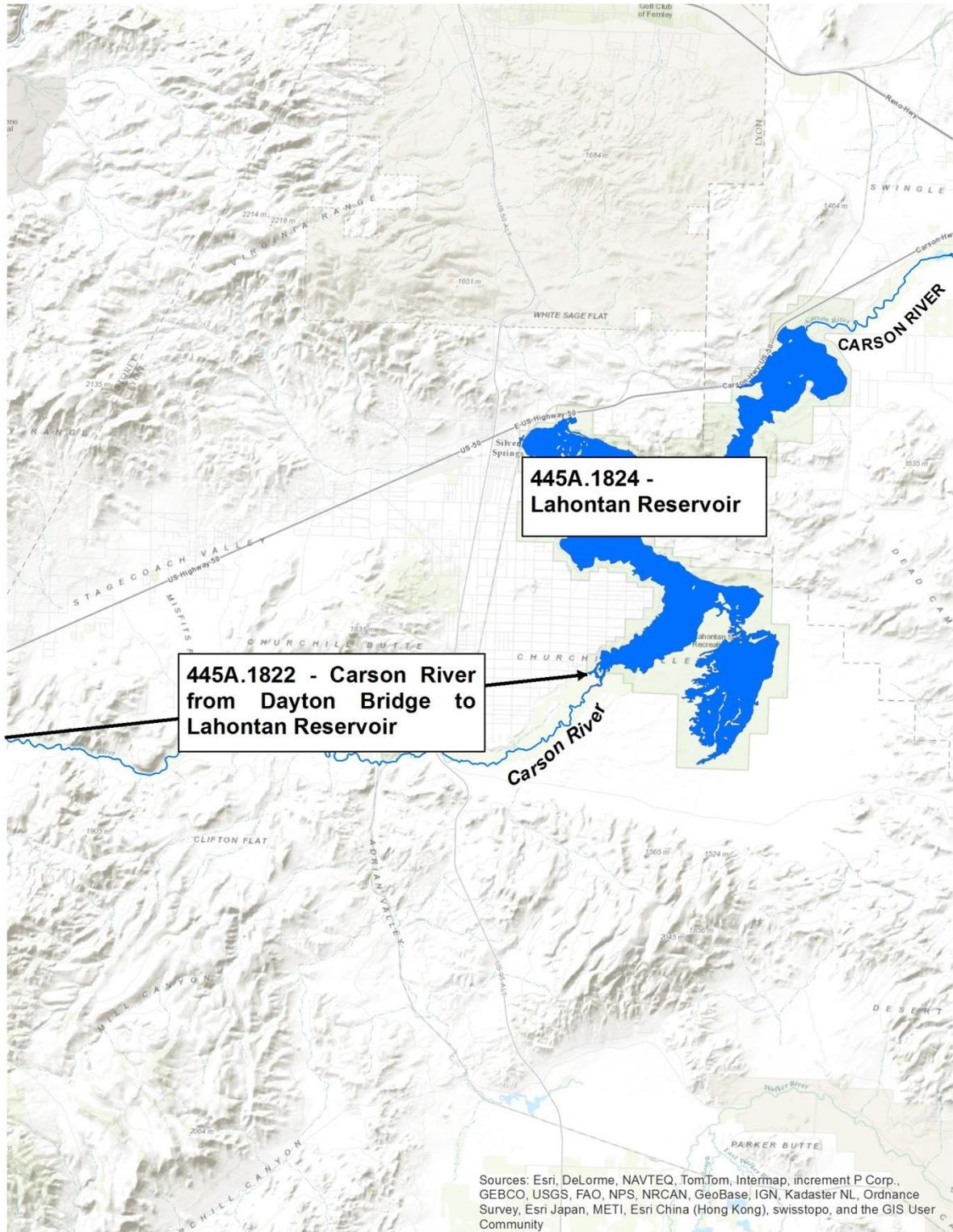


Figure 3. Proposed Reaches

Revised Water Quality Criteria for Lahontan Reservoir

- Some existing water quality criteria are proposed to be revised
- Criteria based upon EPA guidance, and NDEP research and determinations
- Proposed changes include:
 - Revise parameter name “Total Phosphates” to “Total Phosphorus”
 - Revise Total Phosphorus criterion from “S.V. < 0.06 mg/l” to “Jun.-Sep. Avg. < 0.09 mg/l”. The proposed criterion is based upon a June-September average within each of the 3 basins as measured in the upper 1 meter of the water column.
 - Revise Dissolved Oxygen criterion (5 mg/l) to include following footnote – “When lake is stratified, the dissolved oxygen standard applies only to the epilimnion.”
 - Revise Chloride criterion from “S.V. < 250 mg/l” to “1-hour avg. < 860 mg/l; 96-hour avg. < 230 mg/l”.
 - Revise Alkalinity criterion from “<25% change from natural conditions” to “S.V. > 20 mg/l”.

Development of Nutrient Criteria

- Existing Total Phosphorus standard (S.V. 0.06 mg/l) set in the 1980s based upon a relationship between Chlorophyll-a (algal biomass, Target = 10 µg/l) and Total Phosphorus
 - Based upon relationship developed by others for lakes in southeastern U.S.
 - Relationship based upon summer average values; however standard set as “Single Value”
 - Seasonal average criteria are more appropriate for reservoirs
 - Limited Lahontan Reservoir data available to verify appropriateness of the relationship

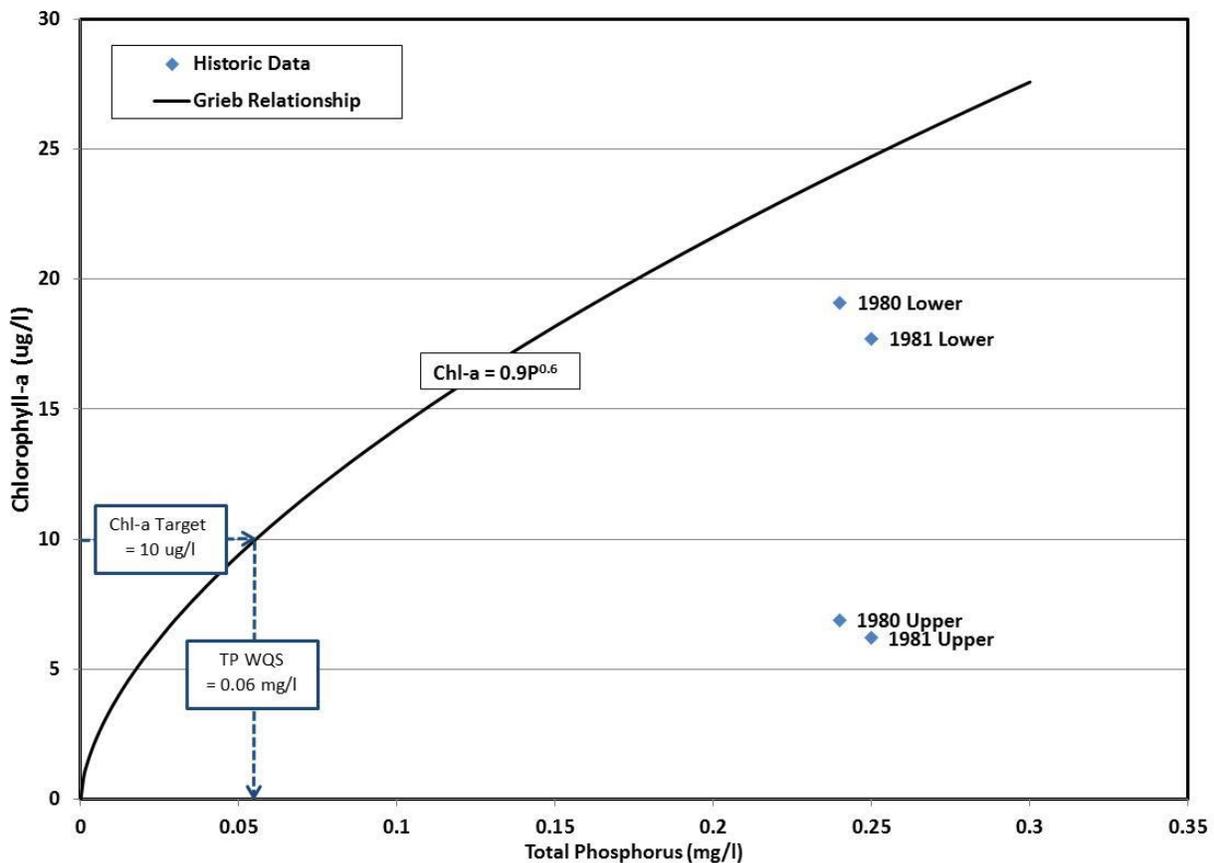


Figure 4. Total Phosphorus – Chlorophyll-a Relationship for Current Criteria

- Proposed Total Phosphorus standard (S.V. 0.09 mg/l) based upon a relationship between Chlorophyll-a (algal biomass, Target = 10 $\mu\text{g/l}$) and Total Phosphorus using significantly more data (8 years: 1980-81, 1983, 2003-05, 2012-13)

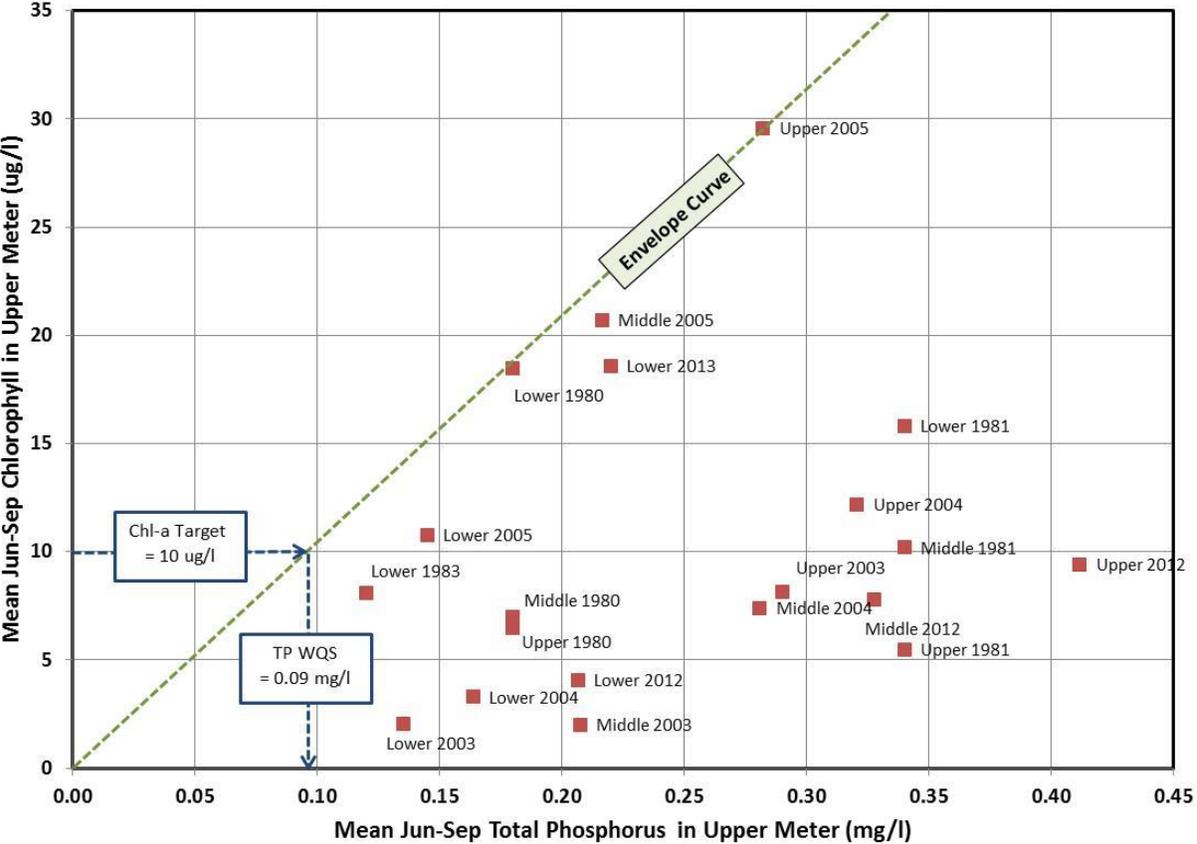


Figure 5. Total Phosphorus – Chlorophyll-a Relationship for Proposed Criteria

Compliance with All Proposed Criteria

- Water quality conditions meet proposed criteria except for the following parameters:
 - Total Phosphorus

QUESTIONS?