

MINUTES  
ENVIRONMENTAL POLICY ADVISORY COMMITTEE  
AUGUST 4, 2016

A meeting of the Environmental Policy Advisory Committee (EPAC) was convened on Thursday, August 4, 2016, at 5:15 p.m., in the Pueblo County Department of Planning and Development Conference Room, 229 West 12th Street. Chair Kester called the meeting to order at 5:20 p.m.

ROLL CALL

Those members present were:

Susan Finzel-Aldred	Nancy Keller
Sherie Caffey	Ted Lopez
Gail Conners	Doris Kester
Becky Cortese	Chad Wolgram
Richard Hubler	

Members absent--None.

Staff present was: Sandra Smith, EPAC Recording Secretary.

APPROVAL OF MINUTES FROM JUNE 2, 2016 MEETING

Ms. Finzel-Aldred moved to approve the minutes of the June 2, 2016 meeting. Ms. Keller seconded the motion. The motion carried unanimously, noting Messrs. Lopez and Wolgram were absent during the motion.

ENVIRONMENTAL COORDINATOR (EC) REPORT – SUSAN FINZEL-ALDRED

Ms. Finzel-Aldred read her Pueblo City-County Health Department Environmental Coordinator's Report for April 2016, and May 2016, into the record, which is attached as Exhibit A.

Ms. Finzel-Aldred stated the Avondale Community Team focuses on education, safety, youth, the environment, and health. They asked her to help them with the environment portion. They have been busy with community clean-ups in June and July.

The Hyde Park/West Side community had not had a clean up in two years. City Councilman Bob Schilling attended the event.

The Solid Waste Assistance Program (SWAP) has been very popular due to good weather conditions. She stated funding for dumpsters is running out. She has two dumpsters for each area for the remainder of the year. She is working on a priority list to address code enforcement and Department of Social Services' requests.

Creek Week has been scheduled from September 24 to October 2, 2016. She distributed an informational postcard on the Third Annual event. They are currently working on sponsorship and getting packets ready for volunteers, determining the clean-up sections, and pledging for a crew from each of the high schools to have a competition, and some church groups to work on stewardship issues. A coupon packet was being created to give to volunteers to attract them to local businesses, i.e. food establishments, passes to City pools, golf courses, ice arena, and more. There is a new volunteer coordinator at the Parks and Recreation Department named Nathaniel Evans. He has been on the job for one month, noting he's getting many volunteers to work in the parks addressing weed control and beautification. Mr. Evans' focus in May was the Adopt a Trail and Adopt a Park programs. Creek Week will be a great starting point for him to get

more volunteers to adopt the Fountain Creek section. Many of the Arkansas River trail sections have already been adopted. She asked the members to let any groups they were affiliated with outside of EPAC to contact her. Registration opens online on September 1. Some of the groups that have been involved have been 4-H, Girl Scouts, Boy Scouts, CSU-Pueblo, Chamber of Commerce, Military Affairs, and Lions Club. Participants range from age eight, with a parent, to 88 years of age.

Chair Kester questioned the number of volunteers. Ms. Finzel-Aldred replied that she would have the count after next week and would forward them to her. She stated that Heaton Middle School usually has 60 participants.

Ms. Finzel-Aldred stated the Colorado 2016 Integrated Solid Waste and Materials Management Plan was published and was open for public comment through September 2016. She stated there were four levels of strategies providing recommendations and goals. The Plan addressed transfer stations, recycling processing, organics, and provided some good maps. The Colorado Department of Public Health and Environment held a meeting on August 1, 2016, at the Pueblo City and County Rawlings Library. She noted the Commission did not travel much, and it was their first time in Pueblo. She stated Messrs. Lopez and Wolgram and she were present. Ms. Cortese stated that comments would be received through August 30, 2016. Ms. Finzel-Aldred stated that the key object of the Plan was to serve as a working resource guide for the entire State of Colorado.

Ms. Conners questioned if the Plan was for implementation or public comment only. Ms. Finzel-Aldred replied it was public comment for the next three weeks. She was not sure when it would be officially adopted. She felt it needed to be assigned by the Colorado Solid and Hazardous Waste Commission.

Chair Kester questioned if the Plan had the status of law or if it was just guidelines. Ms. Finzel-Aldred replied it was guidelines. She stated that Colorado has never had a plan. Pueblo has a plan that was adopted in 2002, noting that it was old and needed to be updated. She stated there was funding to accomplish that update. It was announced today that there was a Recycling Resources Economic Opportunity (RREO) grant funding opportunity for regional planning/waste studies, noting more information could be obtained at the following link, <https://www.colorado.gov/pacific/cdphe/recycling-grants>. EPAC did an update of the Pueblo Solid Waste Management Plan in 2008, noting it was now 7 years old. Mr. Lopez stated, in 2008, Mr. Occhiato, City Councilman, requested research into the mandatory trash service ordinance. Ms. Finzel-Aldred stated City Council wanted to see all of the different options from three possible plans. Mr. Lopez questioned if there was grant money for the review and possible re-write of the Solid Waste Management Plan (SWMP). Ms. Finzel-Aldred replied yes, between \$25,000-\$50,000. Decisions would need to be made on whom would write the proposal. Mr. Lopez questioned if there were guidelines to receive the funds. Ms. Finzel-Aldred replied yes. Chair Kester questioned if Ms. Finzel-Aldred would be able to write the grant. Ms. Finzel-Aldred stated she was meeting with her supervisor on Monday, August 8, to discuss the matter. She would inform members of the guidance she received from her supervisor. She stated there were different levels to the application process, i.e., who would apply, who would manage it, where would the money go, would funds go to hire a consultant, and other details. Mr. Lopez stated he wanted her to be very cautious because he did not want EPAC to lose control of the SWMP. Ms. Finzel-Aldred replied there should be some direction from the Pueblo Area Council of Governments (PACOG).

### CHAIR'S REPORT - DORIS KESTER

Chair Kester reported she attended one of the debates for the County Commissioners' seat. She stated they spoke a lot about selenium. One of the candidates kept referring to taking the salt out of the ocean. She questioned that comment. Ms. Keller replied there were some drinking water facilities along the San Diego coast that were doing reverse osmosis to remove the salt from the ocean for drinking water. Chair Kester stated the comment was not related to what was happening in Pueblo. Ms. Finzel-Aldred questioned if the candidate was referring to the fact that the selenium issue was like trying to get the salt out of the ocean. Ms. Keller stated there was an area in California called the Salton Sea that has selenium issues. She questioned what the candidate's topic was. Chair Kester replied they were talking about the selenium issue. Mr. Lopez questioned if it was an answer to a question from a moderator. Chair Kester replied no.

### WATER QUALITY SUBCOMMITTEE – NANCY KELLER

Ms. Keller read portions of the Aquatic Life Ambient Water Quality Criterion for Selenium in Freshwater 2016--Fact Sheet published June 2016, which is attached as Exhibit B. The Environmental Protection Agency (EPA) has published the new criteria and it is available on its website. Prior to publishing this criteria, a draft document was published in 2004 and a revised draft document was published in 2014. The Fact Sheet that she handed out gives an overview of the full criteria document. She stated there were some major changes from what was currently being followed. The current water quality standard was 4.6 µg/L (micrograms per liter). The second page of the fact sheet shows a table indicating the standard has changed to 3.1 µg/L. Fish tissue standards were also established. Different ways of measuring fish include egg/ovary, whole body, or muscle. A standard was developed for each way a fish is measured. The standards are more stringent, and application of the fish tissue standards could be difficult to implement. She was not sure if the Division of Wildlife would be issuing permits to collect fish for testing. She stated her department has done some fish studies and the first couple of times they applied for a permit to collect fish they were denied. It was not until the State mandate that they were able to get a permit. At the time the document was in draft, it was stated the implementation guidelines would be included with the criteria document. She noted the guidelines were not included; therefore, they have the requirements but no implementation guidance. Mr. Hubler stated it sounded as if they were doing evaluations of the effects of aquatic life as opposed to the presence of selenium in the water itself. Ms. Keller replied no, that in some areas, it could be true; but in areas like Pueblo, where selenium was natural, noting there were also high sulfate levels, there could be very high fish tissue levels and no evidence of deformities or reproductive issues. Sulfate ameliorates toxicity. The Pierre Shale that is under Pueblo has both selenium and sulfate. They come together for good reason, which is to prevent several issues with the environment. She stated wetlands to help mitigate selenium could not be used because they attract other wildlife. The fish in the wetlands get higher amounts of selenium, then the birds eat the fish, and now the birds have problems with their offspring not being formed properly. There does not seem to be a problem if the birds eat the fish locally and move on to a different place to nest. The problem seems to lie with the birds nesting locally in high selenium areas.

Ms. Keller stated the EPA was currently writing a water quality criteria document that would address the fish and wildlife interaction. This would be another layer of complexity added to the selenium issue. Mr. Hubler questioned if extra time was given to work through the changes. Ms. Keller replied no. Once the EPA publishes the criteria document, Colorado addresses it at the next Basic Standards hearing. The next Basic Standards hearing would be in June 2021. This is when the document would be adopted into the State standards. The Arkansas basin standards hearing is prior to that in 2018; therefore, the adopted criteria would not be applied until the following hearing in 2023.

A water quality study was done in 2007, which indicated the food source for the fish, the macro invertebrates or insect larva in the water have elevated selenium levels. The selenium levels in Wildhorse Creek were very high compared to the Arkansas basin as it comes out of the Pueblo Reservoir and down Neilson Avenue just below the wastewater plant. St. Charles River was also high in selenium similar to Wildhorse Creek. The new criteria includes a whole body fish tissue standard of 8.5 mg/kg (milligrams per kilogram). All sites sampled exceeded that standard, noting that Wildhorse Creek and St. Charles River are much higher. The samples were taken in 2004, 2005, and 2006. The highest flow was in 2004 and produced the lowest selenium concentration. She stated that the average test results have been 20 mg/kg, noting the 8.5 mg/kg would not be met. Ms. Finzel-Aldred questioned the location of the CF&I discharge. Ms. Keller replied their discharge was just below the wastewater facility into the Arkansas River, noting they were actually low in selenium. Findings have shown that everything north of the Arkansas was more in the shale areas and higher in selenium than in the area to the south, which tend to be much lower. The flow from the upper area of the St. Charles River has low selenium. Mr. Hubler questioned if discharge water over golf courses would help filter out the selenium. Ms. Keller replied that plants like locoweed and mustard plants could absorb some of the selenium but turf grass does not help. One of the problems with doing something like that was the Pueblo Board of Water Works owned the water rights, not wastewater. For wastewater to discharge as a reuse, they would have to buy supplemental water rights to give to the Pueblo Board of Water Works. Mr. Hubler questioned if it would be less expensive than a treatment plant. Ms. Keller replied that water rights were expensive and not readily available. There have been some discussions with some of the farm areas downstream and trading with clean-ups upstream to receive credits. There was a concern with possible lawsuits from Kansas due to water quality at the State line. Chair Kester questioned if selenium was a problem east of Pueblo. Ms. Keller replied yes, all the way to the Kansas border. It was better bellow John Martin Lake because some of the selenium precipitates out, but sulfate and selenium exceed the standards as the Arkansas River flows across the Kansas border.

#### SOLID WASTE SUBCOMMITTEE - TED LOPEZ

The Colorado Integrated Solid Waste and Materials Management Plan was the result of several stakeholder meetings held throughout Colorado sponsored by Colorado Department of Public Health and Environment. The Pueblo meeting was held on January 21, 2016, noting that Mmes. Finzel-Aldred and Cortese, other people from the City, and he attended. The purpose of the meeting was to gather information from different communities on how waste was currently being handled within the local facilities. One of the main things he noticed was the change in terminology. Instead of calling it recycling, they were calling it materials management. The term waste diversion was the whole amount and materials management was to reduce the amount of material delivered to the landfills. By attending the meeting, he found that waste management throughout the State was not perfect, noting some localities were better than others were. The report was rather lengthy, noting he suggested concentrating on the strategies and the tables at the end of the report. The State was broken down into four regions. Pueblo was in the Front Range from south of Pueblo County to north of the Wyoming border. He stated the population density was in the Front Range. Ms. Finzel-Aldred stated it was split into the Western Slope, Mountains, Front Range, and Eastern/Southeastern. Existing waste management facilities were listed with strategies on how to handle the waste including costs. Mr. Lopez was shocked to hear that there was no previous plan for the State of Colorado. He stated discussions were also held concerning groundwater contamination. There were two landfills, one in Trinidad and one in Larimer County, which did not have liners. He noted that Trinidad was closed and Larimer County was established before liners were required. He stated he sometimes wished there would be some kind of groundwater contamination because it would force the State to take action, which is what happened in New Jersey. Ms. Finzel-Aldred stated there were six landfills, based on the Plan's map, that were inadequate in design and groundwater. Mr. Lopez stated other

topics were organics and composting. The goal was to divert recycling and organics from the landfills. Overall, he felt it was a good plan that the City of Pueblo could use as a guideline or an incentive to move forward. The meeting that was held Monday, August 1, 2016, was a working meeting for the State group, and they talked about rules and regulations that were put into affect like waste tires, end users fund, organics, and hazardous waste. He stated not many comments from the attendees were given, noting Ms. Finzel-Aldred asked some questions about potential funding to have hazardous waste collections every year rather than every two years and some drop-off recycling sites. He questioned Ms. Finzel-Aldred about the new tire fee surcharge. Ms. Finzel-Aldred replied it was currently \$1.50 and would be reduced to \$0.55. The reason for the decrease was that the Tire Management Fund market development was sun setting in 2018. Mr. Lopez stated that some of the money should be used to send staff to Las Vegas to attend a Waste Tire End Use Meeting in either August or October. He watched a webinar about using tires for road base and other things. Ms. Finzel-Aldred replied that there was a section of road built in Boulder using waste tires, and it was not working well with the freeze and thaw temperatures. Some areas of the country are too hot and the road base would melt. She stated it was difficult to manage tires in the State based on the geography and weather patterns. Mr. Lopez questioned the report about the haulers of waste tires. Ms. Finzel-Aldred replied that there was a State requirement that waste tire haulers have to keep records for three years if they are hauling more than nine tires. The haulers were skirting around the requirements by only hauling nine tires at a time. Since reporting was not taking place, data on volume is being lost. Her tire collection events draw in people transporting more than nine tires, noting her event was exempt. The requirement was for the people who were in the business of transporting waste tires. Her July 2016 event reported a collection of 200 tires.

#### NEW BUSINESS

Chair Kester announced that EPAC has a new member, Ms. Gail Conners. Ms. Conners introduced herself to the members. The members introduced themselves and welcomed Ms. Conners to the Committee.

#### AGENDA FOR OCTOBER 6, 2016 MEETING

The next regularly scheduled EPAC meeting is Thursday, October 6, 2016, at 229 West 12th Street, from 5:15 p.m. to 6:30 p.m.

#### ADJOURNMENT

There being no further business before EPAC, the meeting was adjourned at 6:43 p.m.

Respectfully submitted,



Sandra M. Smith  
EPAC Recording Secretary

SMS



# PCCHD ENVIRONMENTAL COORDINATORS' REPORT

*For EPAC Meeting 8/4/16*

**June 2016**

## **Staff Education:**

The Environmental Coordinator (EC) served on the planning committee and attended the *Colorado Association For Recycling (CAFR) Summit For Recycling Conference* in Grand Junction, CO, June 12-14. EC Susan also coordinated the scholarships program that allowed four college students to attend the Summit. Susan attended sessions on Front Range challenges, the new circular economy, and sustainable materials management efforts by four Colorado companies, and toured Grand Junctions public and private recycling facilities.

Susan attended a webinar hosted by Keep America Beautiful national office, titled "Recycling & Waste Reduction in Campus Housing" on June 23.

## **Events**

### *Blende/Salt Creek Community Clean-Up June 4*

The Blende & Salt Creek Clean-Up was held in a vacant lot of the St. Joseph Church Saturday, June 4. Flyers, a news brief in the *Chieftain* newspaper and two color ads promoted the event. Twenty-one (21) households participated, thirteen less than last year. Four roll-offs of trash and one roll-off of branches was collected, but a record 107 tires were dropped off. Three community volunteers and CDOC Youth Offender System crew worked at the event. The scrap metal collected was taken by a church volunteer to a local recycler for cash.

### *Avondale Tire Round-Up June 4*

Susan assisted the Avondale Community Team volunteers by designing, printing and mailing postcards to promote a tire round-up May 29-June 4. Volunteers picked up tires by appointment for a fee of \$1/tire, but residents were allowed to drop off their tires (limit 12) at the Avondale Water District lot at no cost. The EC program paid for the tire recycling contractor to pick-up the 700 tires at week's end. The Colorado Trust will make a cash donation to the EC program for this partnership.

### *Hyde Park/West side Community Clean-Up June 11*

This clean-up returned after a two year absence, and was held in the parking lot of Dolores Huerta High School on Saturday, June 11. Flyers, door knob hangers, *Chieftain* news brief and two color ads promoted the event. Thirty-five (35) households, double the number from 2013, brought loads of trash and yard waste. Four roll-offs of trash and two roll-offs of yard waste were filled, and 85 tires were collected. Three community volunteers and CDOC Youth Offender System crew worked at the event.

**Recycle Hotline** calls = 71 people

**Recycle Guides** mailed = 12

**Solid Waste Assistance Program (SWAP):**

The third dumpster on a Westside property was removed in late June; a municipal crew had to finish the clean-up and owner was taken to court by PPD Code Enforcement. Two open cases continue to fill dumpsters on the Eastside. Arrangements were made to have dumpster delivered to a property in far south Pueblo County, for a case referred by Dept of Social Services. No additional cases were awarded in June, due to low funds available. There are four cases on a waiting list for mid-July, depending on the monies available.

The Environmental Coordinator attended the **following meetings:** PCCHD General Staff, County Sustainable Plan Core Committee, and Regional Stormwater Education & Outreach Committee

## July 2016

**General Work**

The Environmental Coordinator did planning for Creek Week, worked on the statewide recycled poster contest, cleaned files for accreditation visit, prepared the quarterly city report, and assisted City with plans for a potential recycling drop-off site.

**Events**

*Avondale Electronic Round-Up July 9*

Susan assisted the Avondale Community Team volunteers by referring them to two local vendors who do electronics recycling and appliance freon removal and recycling. Volunteers managed the event, picked up a few curbside items, and greeted residents as they dropped off their items for a reduced fee. The event was held at the Avondale Water District lot from 8am-1pm, with financial support from The Colorado Trust.

**Creek Week**

The Steering Committee for the Fountain Creek Watershed District *Creek Week* met in Pueblo for the first time on July 13, and a large group of 15 attended. After the business meeting, Susan arranged for the group to walk from the PCCHD to the new El Centro skateboard park along the Creek. City of Pueblo Planner Scott Hobson was the guest presenter there and explained the renovation and project that enhanced the Eastside neighborhood and the creek side bike trail. *Creek Week* litter patrol is planned for September 24-October 2, 2016.

**Recycle Hotline** calls = 32 people

**Recycle Guides** mailed=2

**Solid Waste Assistance Program (SWAP)**

Two open cases in the county and two in the city finished their clean-up and the dumpsters were removed in July. Arrangements were made to have a dumpster delivered to a property in lower Bessemer, for a senior referred by Dept of Social Services. One new case in Pueblo West was awarded a 20 yard dumpster. It was determined that monies remaining will cover the placement of only 2-3 more dumpsters for 2016.

The Environmental Coordinator attended the **following meetings:** PCCHD General Staff, Sustainable Pueblo, CAFR Board of Trustees/Denver, OHP Division, and Creek Week-Pueblo Team

*EPAC MEETING  
08-04-2016*

# Aquatic Life Ambient Water Quality Criterion for Selenium in Freshwater 2016 – Fact Sheet

## Summary

EPA has published the final national chronic aquatic life criterion for the pollutant selenium in fresh water. The 2016 criterion document is the final update of EPA's 1999 recommended national chronic aquatic life criterion for selenium, developed per Clean Water Act section 304(a). The 2016 criterion reflects the latest scientific knowledge, which indicates that selenium toxicity to aquatic life is primarily based on organisms consuming selenium-contaminated food rather than by being exposed only to selenium dissolved in water. The final criterion is expressed both in terms of fish tissue concentration (egg/ovary, whole body, muscle) and water concentration (lentic, lotic).

EPA's water quality criterion for selenium provides recommendations to states and tribes authorized to establish water quality standards under the Clean Water Act. The revised criteria document includes information to help states to develop site specific criteria that account for differing local conditions. In addition, later this year EPA intends to release for public comment draft technical support materials to assist states in addressing implementation questions such as fish tissue monitoring.

## Background

EPA developed the 2016 national recommended aquatic life criterion for selenium using the best available science. In 2004, EPA published the first draft of the updated selenium criterion using fish-tissue concentrations. In 2009, EPA participated in an

expert workshop on selenium and in 2010 collaborated with the U.S. Geological Survey to develop a selenium bioaccumulation model. As a result, EPA then revised the 2004 draft criterion to include egg-ovary tissue and water column concentrations. In 2014, EPA released the draft criterion for public comment and external peer review. EPA revised the draft criterion accordingly and in 2015 released the draft for a second round of public comment. EPA has considered all public comments and peer reviewer comments in the development of the 2016 final criterion document.

## What is Selenium?

Selenium is a naturally occurring element present in sedimentary rocks, shales, coal and phosphate deposits and soils. There are around 40 known selenium-containing minerals but all are rare and generally occur together with sulfides of metals such as copper, zinc and lead.

## How Does Selenium Enter Surface Waters?

Selenium can be released into water resources by natural sources via weathering and by anthropogenic sources, such as surface mining, coal-fired power plants, and irrigated agriculture.

## How Does Selenium Affect Aquatic Life?

Selenium is a nutritionally essential element for animals in small amounts, but toxic at higher concentrations. Selenium bioaccumulates in the aquatic food chain and chronic exposure in fish and aquatic invertebrates can cause reproductive impairments (e.g., larval deformity or mortality).



Selenium can also adversely affect juvenile growth and mortality.

### What are National Recommended Aquatic Life Criteria?

Ambient water quality criteria for the protection of aquatic life are numeric concentrations of pollutants in surface waters that are protective of aquatic life designated uses, with specific recommendations on the duration and frequency of those concentrations. Under Clean Water Act section 304(a), EPA is directed to develop and publish water quality criteria that reflect the latest scientific knowledge. Water quality criteria are based on data and scientific judgments about the relationship between pollutant concentrations and potential environmental and human health effects. EPA's recommended water quality criteria are not rules, nor do they automatically become part of a state's water quality standards. States must adopt into their standards

water quality criteria that protect the designated uses of the water bodies within their area. These can include scientifically defensible site-specific criteria that are different from EPA's national recommended criteria, as long as the site-specific criteria are protective of the designated use. Water quality criteria are not effective under the Clean Water Act until they have been adopted into state water quality standards and approved by EPA.

### How does the 2016 Criterion compare to the 1999 criteria?

The 2016 selenium criterion document recommends that states and authorized tribes adopt a multi-media criterion into their water quality standards. The criterion has four elements and EPA recommends that states includes all four elements in their standards. The table below compares the 2016 criterion with the 1999 criteria.

Comparison of 2016 Selenium Criterion to 1999 Criteria.

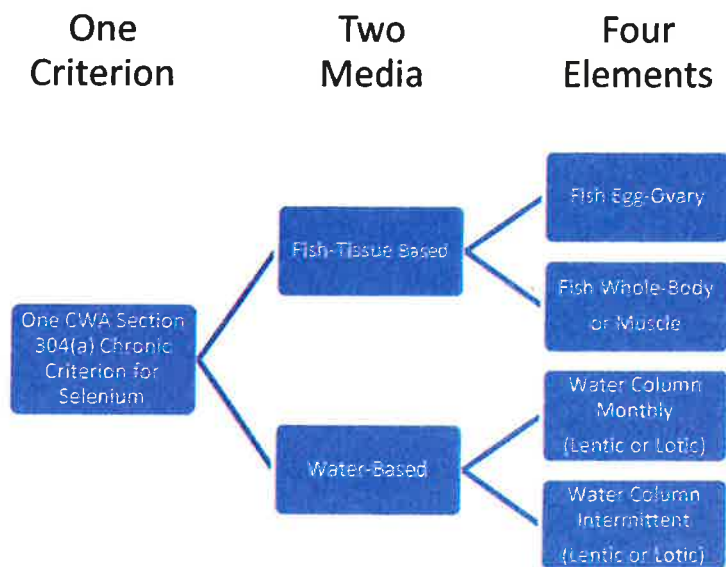
Criterion Version	Chronic					Short-term
	Egg-Ovary <sup>1</sup> [mg/kg dw]	Whole Body <sup>1</sup> [mg/kg dw]	Muscle <sup>1</sup> [mg/kg dw]	Water Lentic <sup>1</sup> [µg/L]	Water Lotic <sup>1</sup> [µg/L]	Water <sup>1</sup> [µg/L]
2016 Selenium Criterion	15.1	8.5	11.3	1.5 (30 day)	3.1 (30 day)	Intermittent exposure equation
1999 Selenium Criteria	N/A	N/A	N/A	5 (4 day)	5 (4 day)	Acute Equation based on water column concentration

<sup>1</sup> A note on hierarchy of table: when fish egg/ovary concentrations are measured, the values supersede any whole-body, muscle, or water column elements except in certain situations. Whole body or muscle measurements supersede any water column element when both fish tissue and water concentrations are measured, except in certain situations. Water column values are derived from the egg & ovary concentrations via bioaccumulation modeling. Water column values are the applicable criterion element in the absence of fish tissue measurements, such as waters where fish have been extirpated or where physical habitat and/or flow regime cannot sustain fish populations, or in waters with new discharges of selenium where steady state has not been achieved between water and fish tissue at the site.

### 2016 Criterion expression:

EPA is recommending a national selenium criterion expressed as four elements (Figure 1). EPA recommends that when implementing the criterion, the fish tissue elements take precedence over the water column elements, except in certain circumstances. All elements are protective against chronic selenium effects, and account for both short term and longer term exposure to selenium. Two elements are based on the concentration of selenium in fish tissue (eggs and ovaries, and whole-body or muscle) and two elements are based on the concentration of selenium in the water-column (two 30-day chronic values and an intermittent value). Aquatic communities are expected to be protected by this chronic criterion from any potential acute effects of selenium.

**Figure 1**



### How to View the Criteria Document and Supporting Information

EPA has established an official public docket for this action under Docket ID No. EPA-HQ-OW-2004-0019, accessed at [www.regulations.gov](http://www.regulations.gov). You may also download the document and supporting information from EPA's aquatic life criteria website at:

[www.epa.gov/wqc/aquatic-life-criterion-selenium](http://www.epa.gov/wqc/aquatic-life-criterion-selenium)

For more information, please contact Joe Beaman by email at [beaman.joe@epa.gov](mailto:beaman.joe@epa.gov)