

Presented to
Idaho Washington Aquifer Collaborative
February 11, 2014



Spokane River Project License

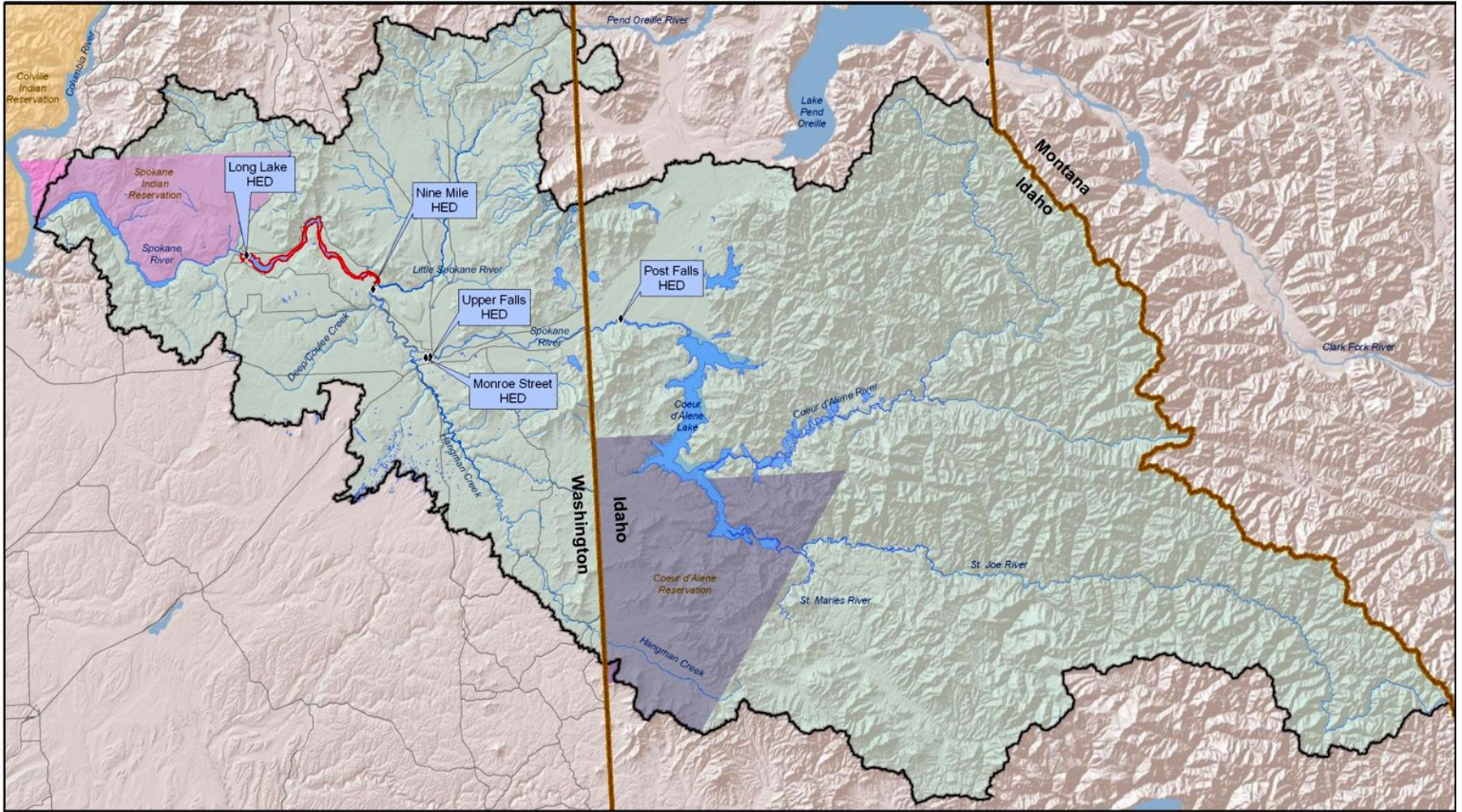
Contact

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Spokane River Project



Spokane River Project Developments

Construction & Average MW

- Post Falls HED: 1906, 15MW
- Upper Falls HED: 1922, 10MW
- Monroe Street HED: 1890, 15MW
- Nine Mile HED: 1908, 18MW
- Long Lake HED: 1915, 72MW



Relicensing Process

Used the Alternative (Collaborative) Relicensing Process between 2002 and 2009. The process consisted of:



- Five Technical Work Groups
 - Water Resources, fisheries, terrestrial, cultural, and recreation, land use, and aesthetics
- Draft Environmental Impact Statement
- Final Environmental Impact Statement
- Spokane River Project License

Spokane River Project License

- The Federal Energy Regulatory Commission (FERC) issued a fifty-year License to operate the Project in 2009. The License included mandatory conditions from the following, as well as a host of other FERC requirements:
 - Idaho 401 Water Quality Certification
 - Washington 401 Water Quality Certification
 - US Department of Interior 4(e) Mandatory Conditions (Settlement Agreement with Interior and the Coeur d'Alene Tribe)



Coeur d'Alene Lake Level and Upper Spokane River Flow Requirements

- Coeur d'Alene Lake
 - Maintain at or near 2128' as early as practicable until the Tuesday after Labor Day
- Spokane River at Post Falls
 - Maintain 600 / 500 cfs minimum flows between June 7th and the Tuesday after Labor Day
 - Spill 46 cfs for aesthetics between noon and 6:00 p.m. on Saturday and Sunday from Memorial Day to Labor Day



Upper Spokane River Flow Requirements

- Spring Spawning and Fry Emergence Flows to be calculated each spring
- Down Ramping Rates (4" per hour maximum)



Spokane River Flow Requirements

- Upper Falls
 - Spill 320 cfs for aesthetics during the day
 - Spill 100 cfs at night
- Monroe Street
 - Spill 200 cfs for aesthetics during the day
 - Spill 100 cfs at night
- Minimum Flows for Upper Falls and Monroe Street
 - June 16th – September 30th - 850 cfs
 - October 1st – March 31st - 1,100 cfs





Spokane River and CDA Lake Operation

Contacts and Information

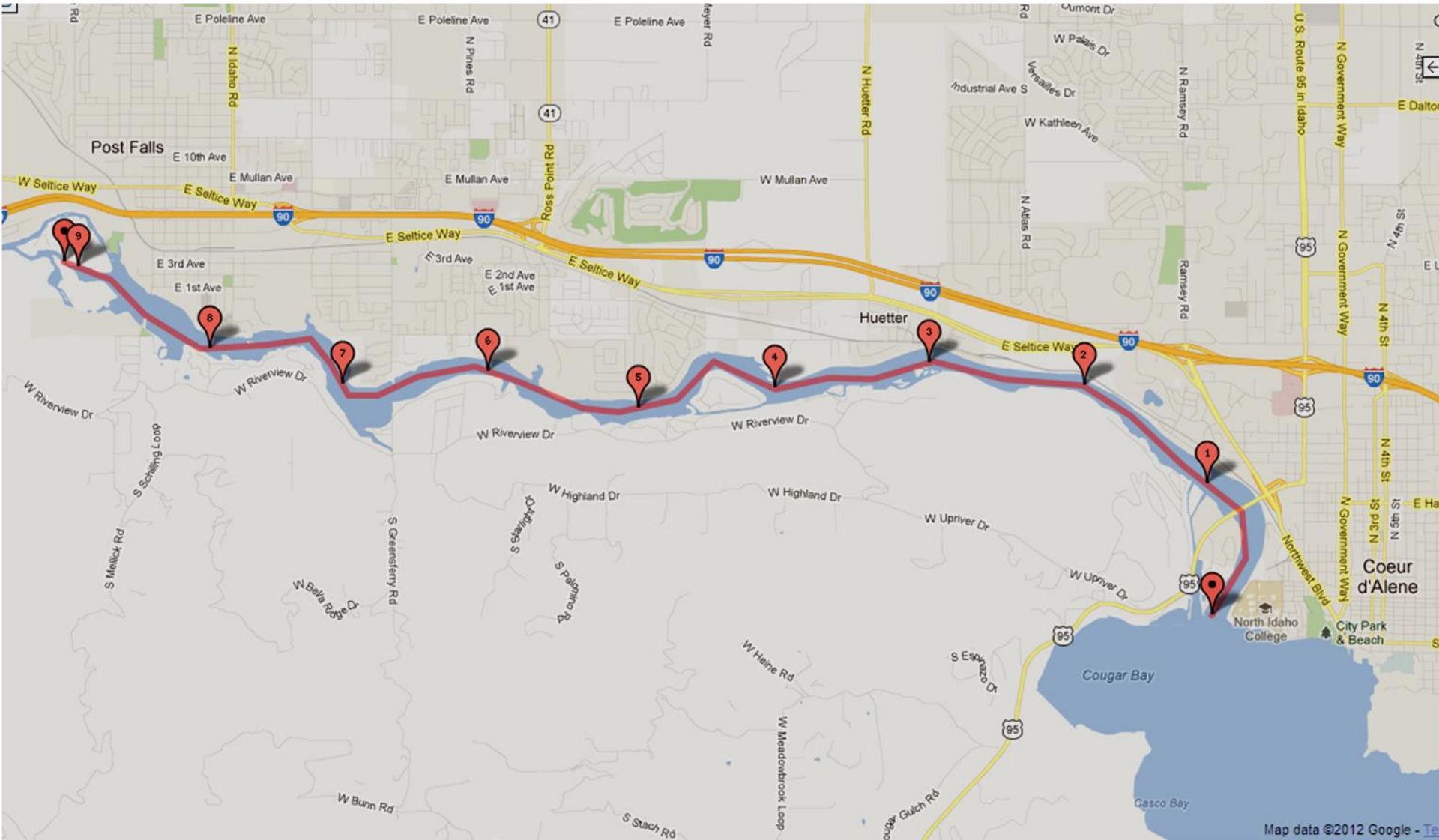
- Pat Maher, Sr. Hydro Operations Engineer
509-495-4283, patrick.maher@avistacorp.com
- Steve Esch, Sr. Operations Engineer
509-495-4196, steve.esch@avistacorp.com
- Water Information Recording, Idaho: 208-769-1357
- Water Information Recording, Washington: 509-495-8043
- National Weather Service Forecasts:
<http://www.weather.gov/spokane>
- Under “Current Conditions” click on “Rivers and Lakes AHPS”

Give us a call !!!

3 Rivers Flow into the Lake, 1 River Flows Out



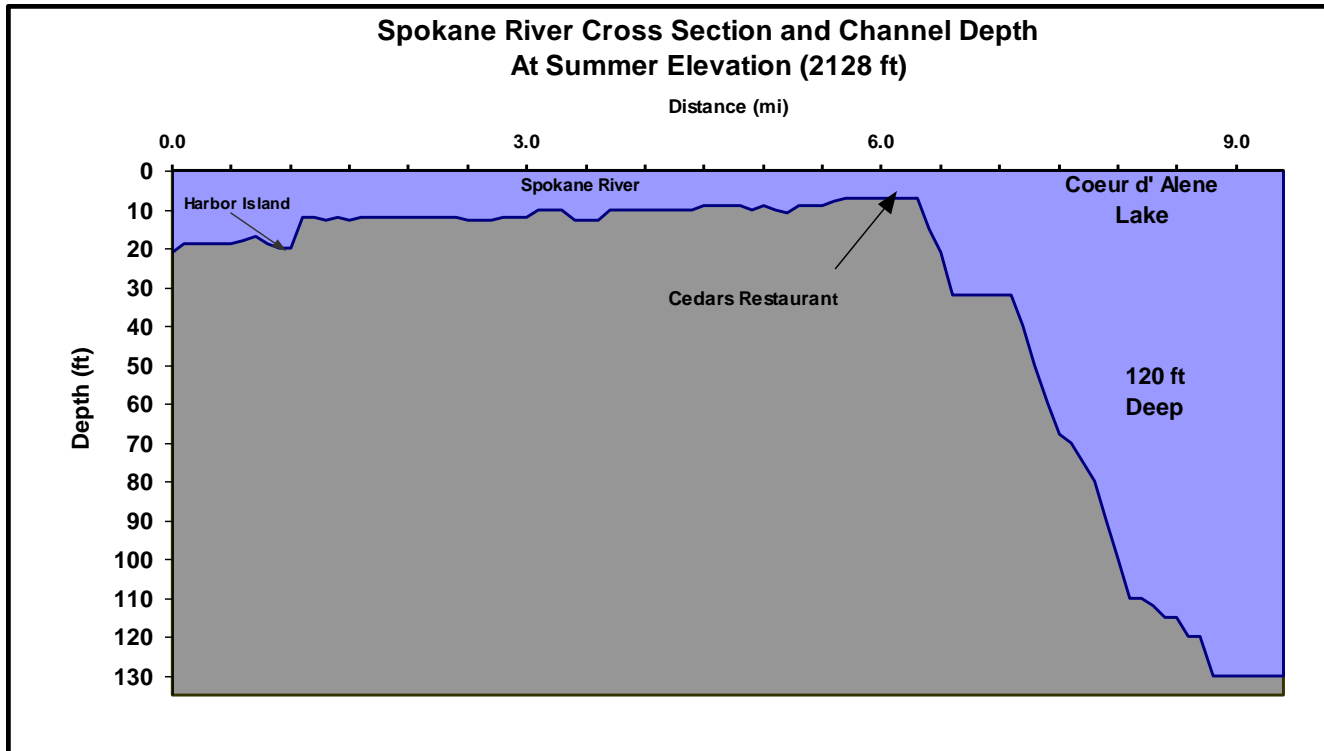
Post Falls Dam is 9 Miles Down The Spokane River From the Coeur d'Alene Lake Outlet



Map data ©2012 Google - Te

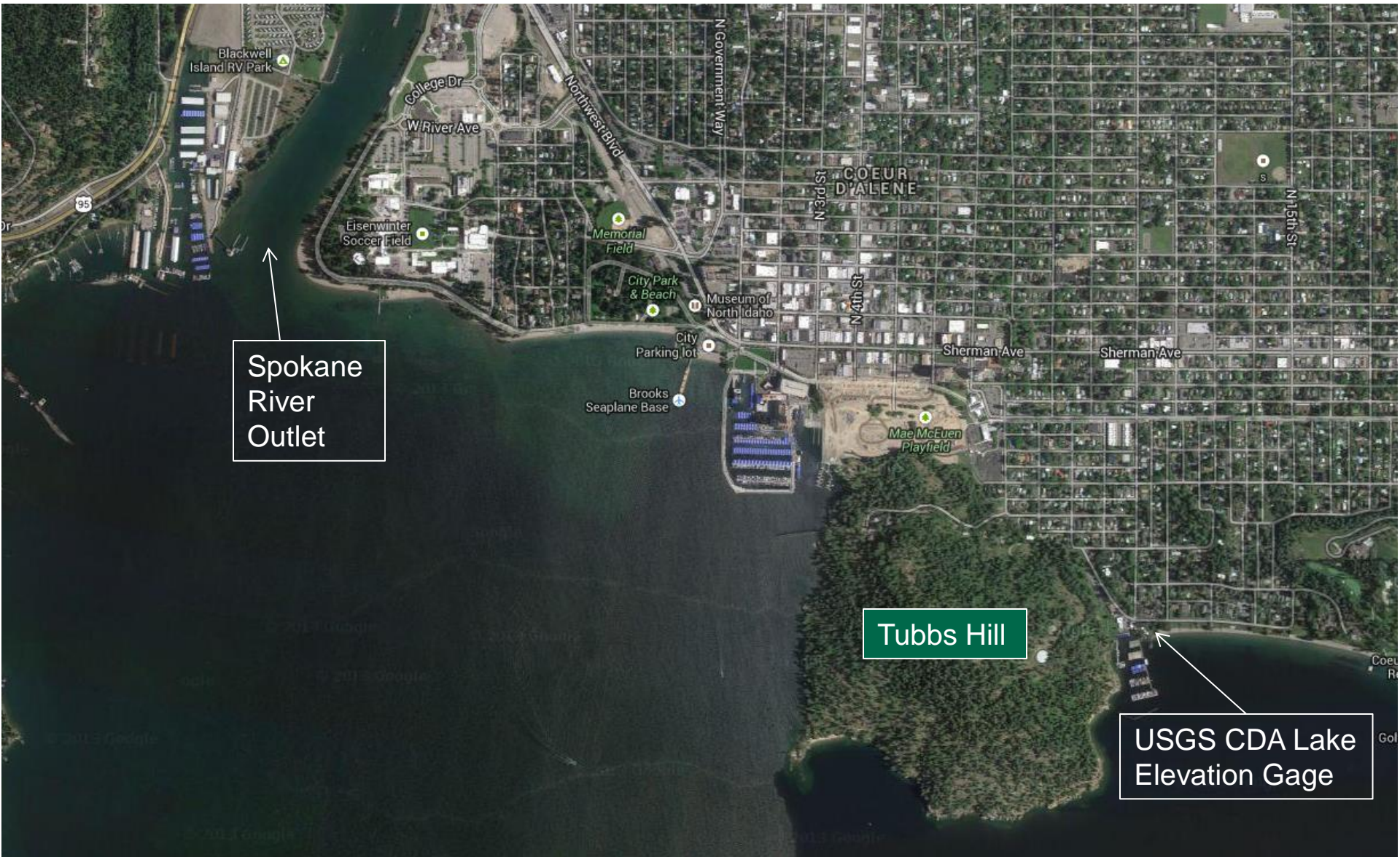


Coeur d'Alene Is A Natural Lake, Not A Reservoir



- Outlet channel capacity at summer level = 17,500 CFS
- Outlet channel capacity at 2131.5 (average high) = 28,500 CFS
- Outlet channel capacity at 2122.5 (average low) = 3,950 CFS
- Outlet channel capacity at 2121.3 (current elevation) = 2000 CFS





Spokane
River
Outlet

Tubbs Hill

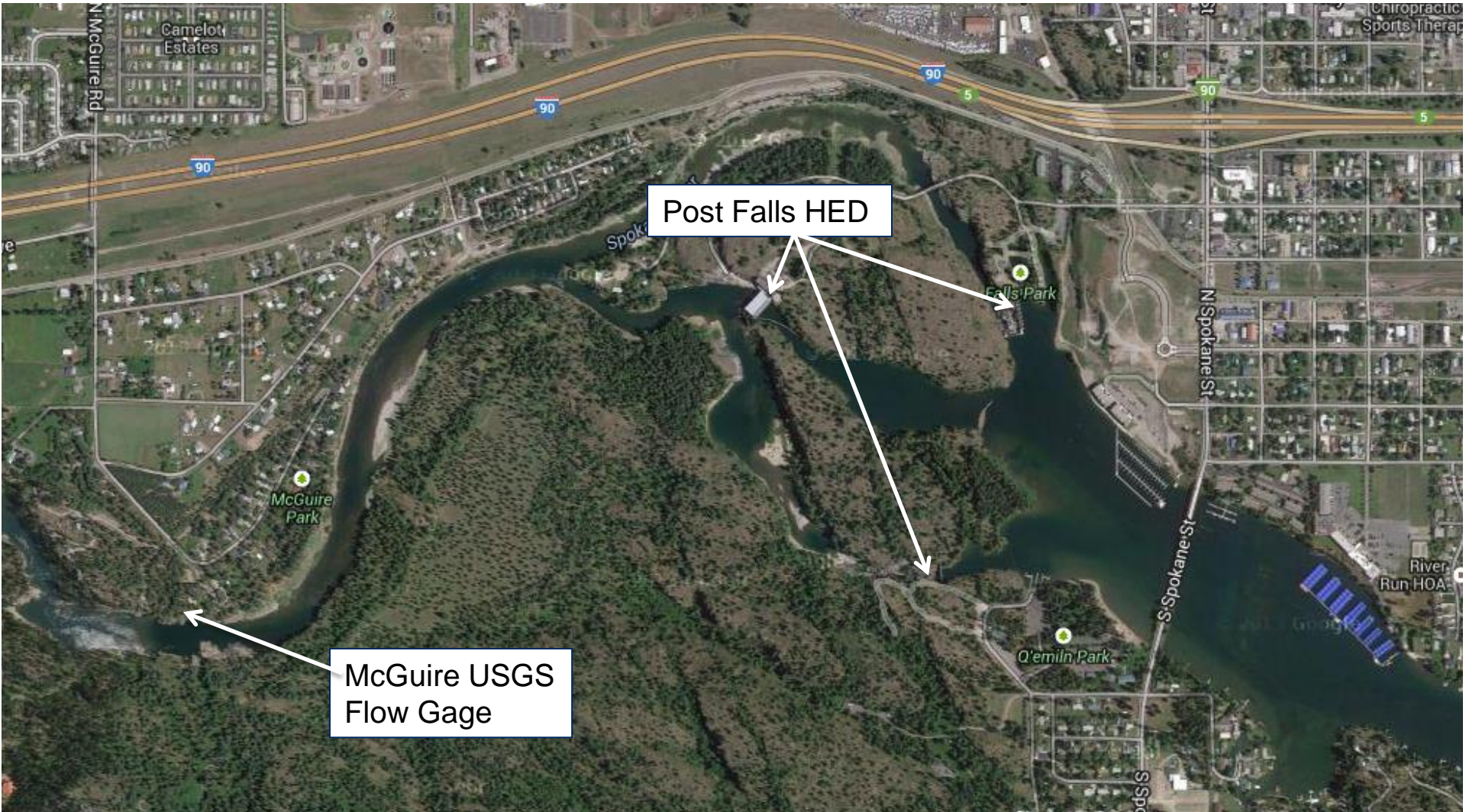
USGS CDA Lake
Elevation Gage

By Ordinance, Boating Below Spokane St. Bridge Prohibited Whenever Spill Gates Are Open



Aerial View of Post Falls Dam from West





Post Falls City Ordinance on River Access

Chapter 8.44 SPOKANE RIVER USE RESTRICTIONS

8.44.010: RESTRICTIONS ON USE OF SPOKANE RIVER AND ACCESS:

8.44.010: RESTRICTIONS ON USE OF SPOKANE RIVER AND ACCESS:

It shall be unlawful for any person to enter the waters of the Spokane River located within the boundaries of the city, or to enter the Spokane River from any lands located within the city which are west of the Spokane Street Bridge across the Spokane River at any time a sign or message is posted on either side of the Spokane Street Bridge across the Spokane River or on public park and boat launch property indicating that entry to, or use of, the Spokane River is then prohibited. For purposes of this chapter, the term "entry" shall include launching a boat or other flotation device; piloting, floating on or riding in a boat or on a flotation device; or swimming, wading, diving or otherwise subjecting oneself or others to the hazards of the Spokane River as a result of conduct occurring within the city when prohibitory signs are posted. These limitations shall not apply to public safety or law enforcement personnel in the course of performance of their assigned duties. It shall constitute a violation of this code to engage in the proscribed conduct or to disregard any sign posted pursuant to the restrictions established hereby. The penalty for any such violation shall be as provided in [chapter 1.24](#) of this code. (Ord. 875 § 1, 1997)

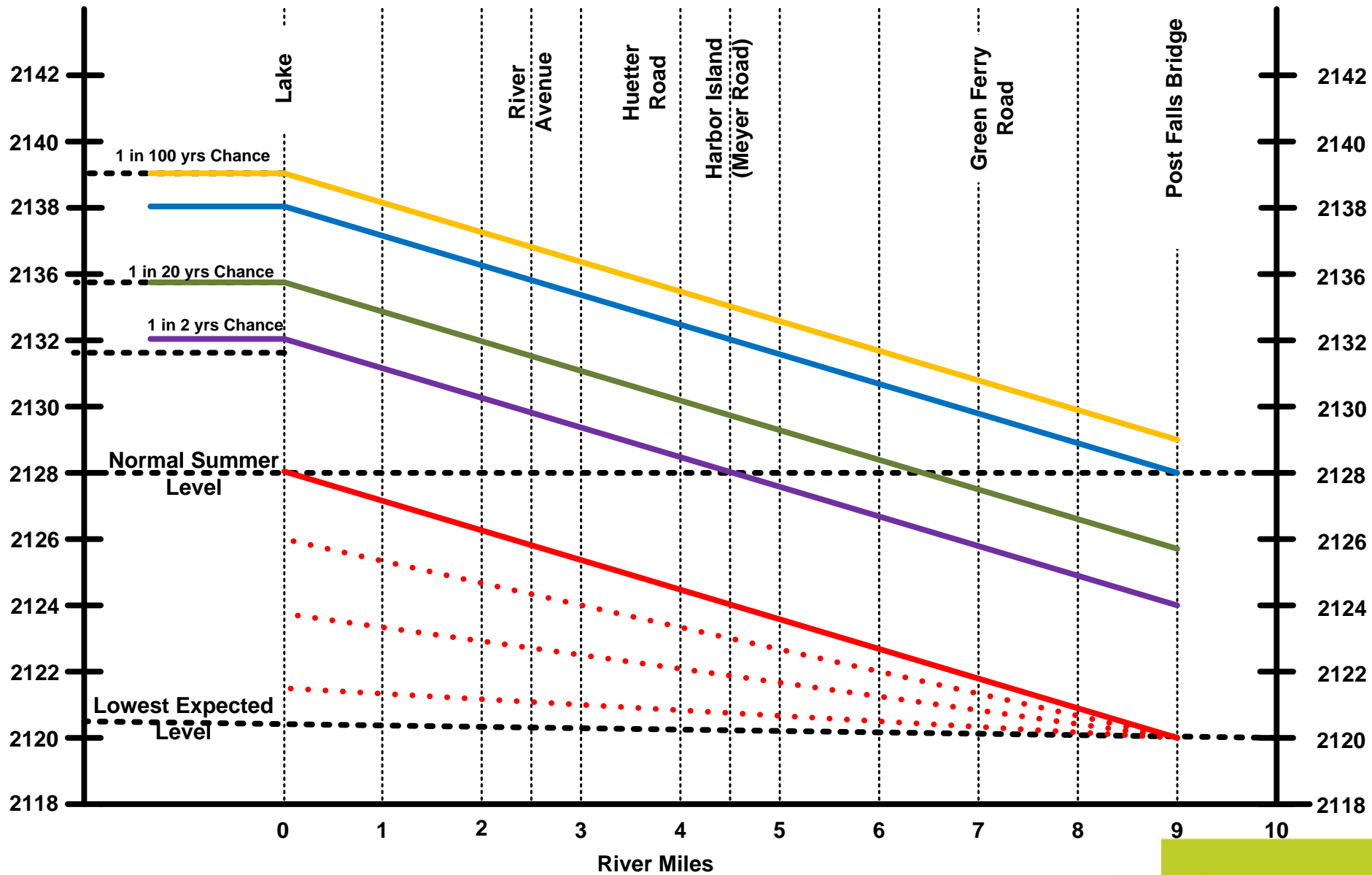
River Operations Overview

Summer – Avista holds the Level of CDA Lake at 2128 for recreation and public use. Because the dam spill gates are closed, the river above the dam looks like a lake.

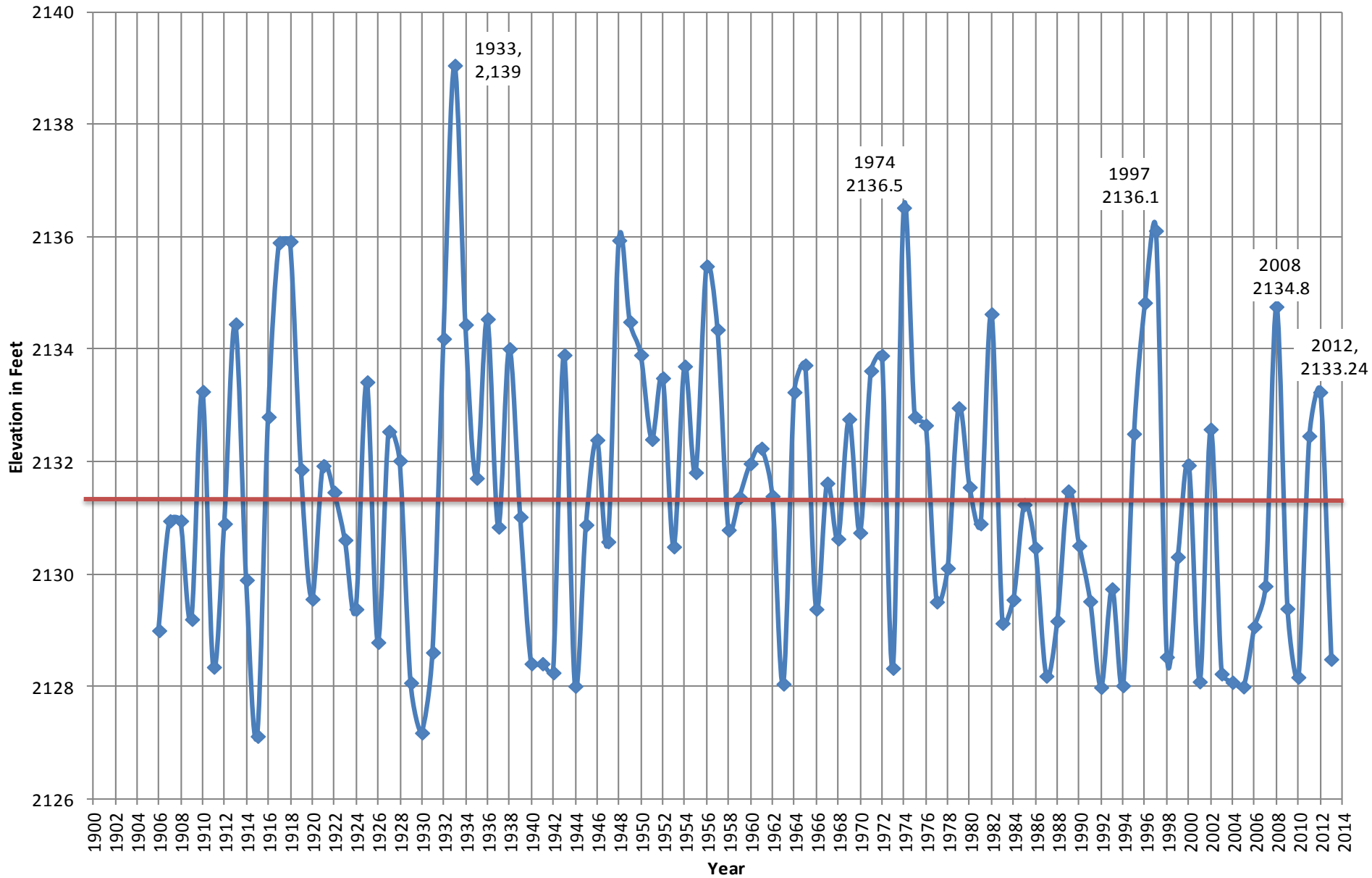
Fall – The Tuesday after labor day Avista starts to let water out of CDA Lake, drawing the lake down about 1 ½ feet per month until the river is in a natural state.

Winter -At some point in December or January the outlet restriction at the river outlet becomes the determining factor of how much water will flow down the Spokane River. From then until we close the spill gates in June, the Post Falls dam has little or no effect on river flows or lake levels.

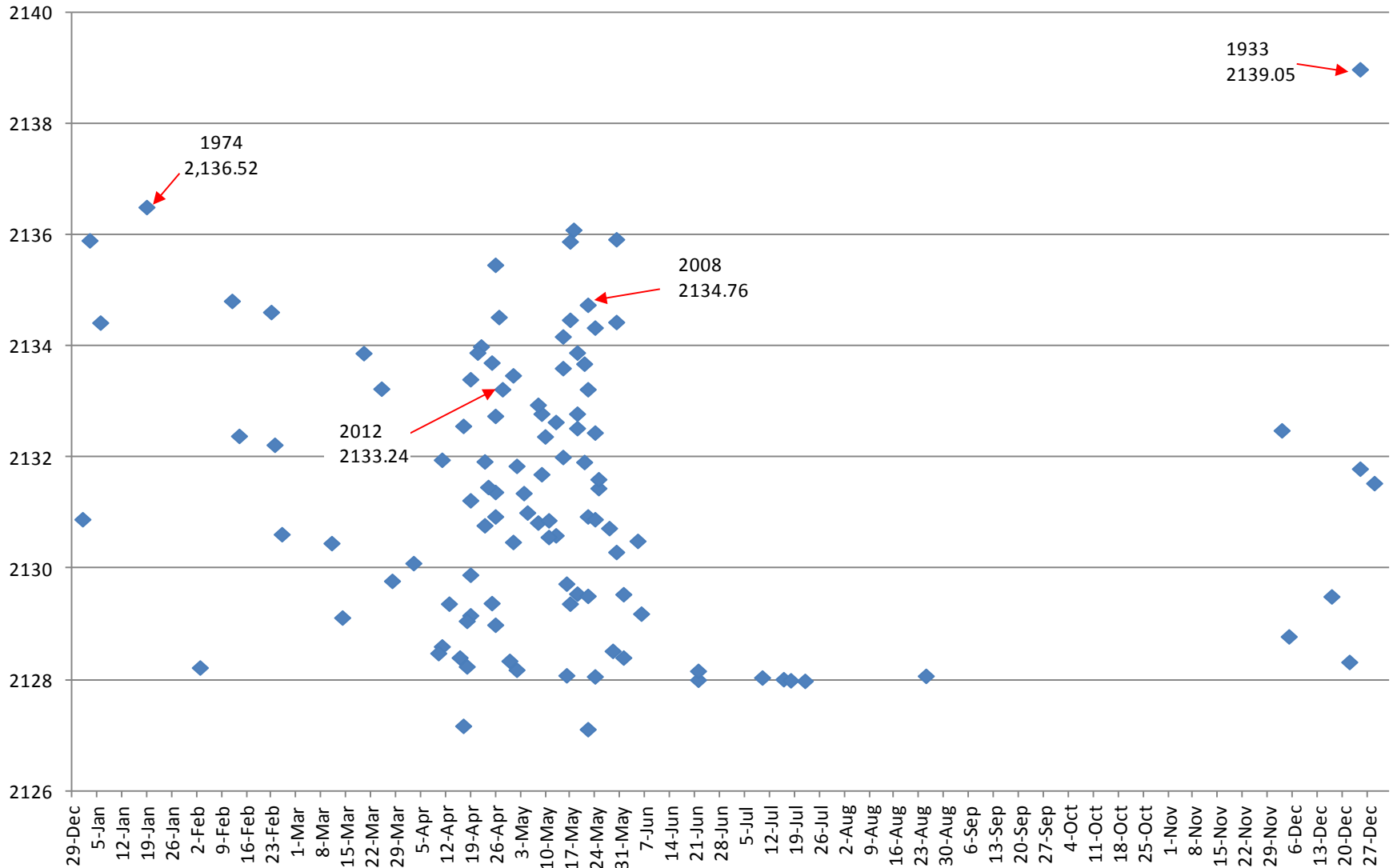
Spring- The Spokane river behaves like a river, not a lake, above the dam, until the snow has melted and we start to close spill gates. If the river flows are very high, river elevations will increase.



Lake Coeur d'Alene Maximum Elevation by Year



Dates for Annual Maximum's Coeur d'Alene Lake Elevations



POST FALLS

LAST SPILLGATE CLOSURES, 1997-2013

1997:	June 27	(1997 April - July CDA Lake inflow as a percent of median: 171%)
1998:	June 8	(1998 April - July CDA Lake inflow as a percent of median: 75%)
1999:	July 2	(1999 April - July CDA Lake inflow as a percent of median: 110%)
2000:	June 22	(2000 April - July CDA Lake inflow as a percent of median: 106%)
2001:	June 5	(2001 April - July CDA Lake inflow as a percent of median: 54%)
2002:	July 3	(2002 April - July CDA Lake inflow as a percent of median: 140%)
2003:	June 6	(2003 April - July CDA Lake inflow as a percent of median: 56%)
2004:	June 14	(2004 April - July CDA Lake inflow as a percent of median: 70%)
2005:	May 27	(2005 April - July CDA Lake inflow as a percent of median: 52%)
2006:	June 22	(2006 April - July CDA Lake inflow as a percent of median: 92%)
2007:	May 29	(2007 April - July CDA Lake inflow as a percent of median: 57%)
2008:	July 8	(2008 April - July CDA Lake inflow as a percent of median: 150%)
2009:	June 23	(2009 April - July CDA Lake inflow as a percent of median: 108%)
2010:	July 6	(2010 April - July CDA Lake inflow as a percent of median: 81%)
2011:	July 18	(2011 April - July CDA Lake inflow as a percent of median: 170%)
2012:	July 14	(2012 April - July CDA Lake inflow as a percent of median: 152%)
2013:	June 7	(2013 April - July CDA Lake inflow as a percent of median: 97%)

Median date for the opening of the boat launch during the past 17 years (since the passage of the two Kootenai County and City of Post Falls swimmer/boater ordinances) has been June 22.

The boat launch is typically closed in November, usually right after the Veterans' Day weekend.



Post Falls South Channel Spillgate Rehab Project

South Channel Spillgate Rehab Project

Project Details

This project will preserve the life of an important hydroelectric resource that provides clean, renewable, low-cost power for Avista customers, while also providing recreational benefits to Spokane River and Q'emiln Park users.

- The original 1906 facing concrete and gate frames, along with manual rack and pinion hoists will be removed. New facing concrete, spillway gates and hoists will be installed.
- New electrical and controls will be added to automate the opening and closing of spillway gates, increasing efficiencies and reducing costs.
- Other structural and operating upgrades are also included in the project.

South Channel Spillgate Rehab Project

Project Timeline

- Construction is scheduled to take place between spring 2014 and December 2014.
- Access to some areas of Q'emiln Park, including the boat launch, trailhead and pavilion, as well as the Spokane River will be impacted during construction to maintain the safety of the public, recreationalists and workers. The west entrance road and adjacent portion of the park will be an active construction site with material, equipment and vehicles in the area. More information on the impact will be better understood after a contractor is selected, which is expected to be in January 2014.

For information and project updates, visit www.avistautilities.com/postfalls where you can sign-up to receive an e-newsletter with timely information on the project.

Summary

- Avista holds Coeur d'Alene Lake at or near 2128' (summer level) after the spring freshet on through the first part of September.
- Beginning after Labor Day, Avista attempts to lower the lake to elevation 2120.5'. The desire is to have it there by the first of January, but the actual elevation reached depends entirely upon the weather.
- Avista is truly only in control of the outflow from Coeur d'Alene Lake 5 to 7 months of the year – the rest of the time the natural outlet restriction controls the outflow.
- Due to required flood control operation, the elevation of the Spokane River at Post Falls is only at summer level 2 to 3 months of the year.