

AVISTA CORPORATION

UPPER SPOKANE RIVER RAINBOW TROUT SPAWNING AND FRY EMERGENCE PROTECTION 2014 ANNUAL REPORT

Spokane River Hydroelectric Project
FERC Project No. 2545

Prepared By:
Avista Corporation

October 24, 2014

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1.0 Introduction and Background

On June 18, 2009, the Federal Energy Regulatory Commission (FERC) issued a new 50-year license for Avista Corporation's Spokane River Project, FERC Project No. 2545. The new FERC License (License) became effective on June 1, 2009 and includes operation of the Post Falls Hydroelectric Development (HED) in Idaho. Ordering Paragraph D of the License incorporated the Idaho Department of Environmental Quality (IDEQ) Certification under Section 401 of the Federal Clean Water Act (Certification). The Certification is included in Appendix A of the License. The Certification states in Section V that Avista will comply with the Post Falls HED discharge levels as outlined in the *Upper Spokane River Rainbow Trout Spawning and Fry Emergence Protection Plan* (Plan) (Avista 2014). This report provides the annual results of the spawning period flow, the forecasted stream flows, the target Post Falls HED discharge for effective incubation flow, agency consultation, and other relevant information and/or circumstances.

2.0 Annual Report

Section 4 of the Plan requires Avista to summarize the annual results of the spawning period flow, the forecasted stream flows, the targeted Post Falls HED discharge for effective incubation flow, and any pertinent and relevant information by September 30 of each year.

Summary information for 2014 includes:

- Spawning Period Flow for April 1 – April 15¹ was 17,400 cubic feet per second (cfs).
- Forecasted Stream Flows for April – July² was 115% of average.
- Target Post Falls HED discharge for April 16 – June 7³ was 5,034 cfs.

The mean daily discharge from the Post Falls HED for the period of April 1 – June 7 recorded at the USGS gage near Post Falls (gage number 12419000) is available in Appendix A. The lowest daily mean discharge recorded was 9,210 cfs on June 7, 2014. Therefore, the target Post Falls

¹ The highest five-day running average of the mean daily discharge at the USGS gage near Post Falls.

² Determined from the April 1, NRCS report (web site), Idaho State Basin Outlook.

³ Determined from Table 1 of the Plan

HED discharge was maintained in 2014 and the effective incubation flow was maintained above the established target.

3.0 Previous Two Years Target Discharge Results

According to Section 3.2 of the Plan, if the target Post Falls HED discharge for effective incubation flow that preserves 50 percent of the combined index spawning sites wetted through June 7 is not achieved during any two consecutive years, then the following year's flows will be prioritized to preserve 70 percent or greater of the combined index spawning site wetted through June 7 of that year. Effective incubation flows were maintained above the established target in both 2012 and 2013 so no prioritization of flow was required in 2014.

4.0 Agency Consultation

Agency consultation is included in Appendix B. Section 3 of the Plan requires Avista to communicate the spawning period flow and the forecasted stream flows for the Spokane River near Post Falls to the Idaho Department of Fish and Game (IDFG) and the Washington Department of Fish and Wildlife (WDFW) by April 30 of each year. The spawning period flow and the Idaho stream flow forecast was communicated via email to IDFG and WDFW on April 16, 2014. This report was distributed to the IDFG and WDFW, and retained at Avista in accordance with Section 3 of the Plan.

5.0 Comments

Section 3.2 of the Plan describes actions that will be taken if the target Post Falls HED discharge for effective incubation flow that preserves 50 percent of the combined index spawning sites wetted through June 7 will not be maintained. No alternative target flow or prioritized incubation flow was required in 2014. No other notable circumstances occurred in 2014.

6.0 References

Avista. 2014. Upper Spokane River Rainbow Trout Spawning and Fry Emergence Protection Plan. Avista Corporation. Spokane, WA.

Avista. 2013. Upper Spokane River Rainbow Trout Spawning and Fry Emergence Protection 2013 Annual Summary. Avista Corporation. Spokane, WA.

Avista. 2012. Upper Spokane River Spawning and Fry Emergence Protection 2012 Annual Summary. Avista Corporation. Spokane, WA.

FERC. 2009. Order Issuing New License and Approving Annual Charges For Use Of Reservation Lands. FERC Project No. 2545-091. Federal Energy Regulatory Commission, Washington DC.

NRCS 2014. Idaho Water Supply Outlook Report April 1, 2014. Natural Resources Conservation Service Snow Surveys, Boise, Idaho. Web Site:
<http://www.wcc.nrcs.usda.gov/cgibin/bor2.pl?state=id&year=2010&month=4&format=text>

USGS Daily Water Data for USGS 124190000 Spokane River NR Post Falls ID. U.S. Geological Survey web site:
http://waterdata.usgs.gov/nwis/dv/?site_no=12419000&agency_cd=USGS&referred_module=sw

APPENDIX A
USGS Daily Mean Discharge near Post Falls, ID

USGS Daily Mean Discharge near Post Falls, ID

(http://waterdata.usgs.gov/nwis/dv/?site_no=12419000&agency_cd=USGS&referred_module=sw)

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# ----- WARNING -----
#
# The data you have obtained from this automated U.S. Geological Survey
# database
# have not received Director's approval and as such are provisional and
# subject to
# revision. The data are released on the condition that neither the USGS nor
# the
# United States Government may be held liable for any damages resulting from
# its use.
# Additional info: http://waterdata.usgs.gov/id/nwis/?provisional
#
# File-format description:
# http://waterdata.usgs.gov/nwis/?tab\_delimited\_format\_info
# Automated-retrieval info: http://help.waterdata.usgs.gov/faq/automated-
# retrievals
#
# Contact: gs-w\_support\_nwisweb@usgs.gov
# retrieved: 2014-06-16 11:04:20 EDT (caww02)
#
# Data for the following 1 site(s) are contained in this file
# USGS 12419000 SPOKANE RIVER NR POST FALLS ID
# -----
#
# Data provided for site 12419000
# DD parameter statistic Description
# 01 00060 00003 Discharge, cubic feet per second (Mean)
# 05 00010 00001 Temperature, water, degrees Celsius (Maximum)
# 05 00010 00002 Temperature, water, degrees Celsius (Minimum)
# 05 00010 00003 Temperature, water, degrees Celsius (Mean)
#
# Data-value qualification codes included in this output:
# P Provisional data subject to revision.
#
agency_cd      site_no  datetime      01_00060_00003  01_00060_00003_cd
5s      15s      20d      14n      10s
USGS     12419000      2014-04-01      15100      P
USGS     12419000      2014-04-02      15200      P
USGS     12419000      2014-04-03      15000      P
USGS     12419000      2014-04-04      14800      P
USGS     12419000      2014-04-05      14600      P
USGS     12419000      2014-04-06      14500      P
USGS     12419000      2014-04-07      14500      P
USGS     12419000      2014-04-08      14700      P
USGS     12419000      2014-04-09      15100      P
USGS     12419000      2014-04-10      16000      P
USGS     12419000      2014-04-11      17000      P
USGS     12419000      2014-04-12      17500      P
USGS     12419000      2014-04-13      17600      P
USGS     12419000      2014-04-14      17600      P
USGS     12419000      2014-04-15      17300      P
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USGS	12419000	2014-04-16	16800	P
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USGS	12419000	2014-04-18	16300	P
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USGS	12419000	2014-04-20	16700	P
USGS	12419000	2014-04-21	16800	P
USGS	12419000	2014-04-22	16900	P
USGS	12419000	2014-04-23	17000	P
USGS	12419000	2014-04-24	17300	P
USGS	12419000	2014-04-25	17700	P
USGS	12419000	2014-04-26	18100	P
USGS	12419000	2014-04-27	18500	P
USGS	12419000	2014-04-28	18900	P
USGS	12419000	2014-04-29	18900	P
USGS	12419000	2014-04-30	18700	P
USGS	12419000	2014-05-01	18300	P
USGS	12419000	2014-05-02	18100	P
USGS	12419000	2014-05-03	18100	P
USGS	12419000	2014-05-04	18700	P
USGS	12419000	2014-05-05	19400	P
USGS	12419000	2014-05-06	19800	P
USGS	12419000	2014-05-07	20100	P
USGS	12419000	2014-05-08	20100	P
USGS	12419000	2014-05-09	19900	P
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USGS	12419000	2014-05-14	18400	P
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USGS	12419000	2014-05-17	18000	P
USGS	12419000	2014-05-18	18500	P
USGS	12419000	2014-05-19	18700	P
USGS	12419000	2014-05-20	18700	P
USGS	12419000	2014-05-21	18600	P
USGS	12419000	2014-05-22	18300	P
USGS	12419000	2014-05-23	18200	P
USGS	12419000	2014-05-24	18200	P
USGS	12419000	2014-05-25	18300	P
USGS	12419000	2014-05-26	18400	P
USGS	12419000	2014-05-27	18200	P
USGS	12419000	2014-05-28	18000	P
USGS	12419000	2014-05-29	17700	P
USGS	12419000	2014-05-30	17000	P
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USGS	12419000	2014-06-01	11600	P
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APPENDIX B
Consultation Record

Avista, IDFG, and WDFW Correspondence Regarding the Plan

From: Vore, Tim
Sent: Wednesday, April 16, 2014 10:57 AM
To: 'Divens, Karin A (DFW)'; 'Fredericks,Jim'
Cc: Esch, Steve; Maher, Patrick; Fitzhugh, Speed (Elvin);
'Robert.Steed@deq.idaho.gov'; Goloborodko, Yelena
Subject: Spokane River Spawning Period Flow and Discharge Forecast, 2014

Good morning-

Implementing Appendix A, Section V of the FERC license requires us to comply with the Post Falls Project discharge levels as outlined in the "Upper Spokane River Rainbow Trout Spawning and Fry Emergence Protection Plan." This email is to communicate the spawning period flow and the forecasted stream flow for the Spokane River near Post Falls to WDFW and IDFG by April 30 each year, as required in section 3.1 of the Plan.

The Spawning period flow for April 1 – April 15 is the highest 5-day running average daily discharge (Q) from the USGS gage near Post Falls. This year the spawning period flow is 17,400 cfs.

The Idaho 2014 April streamflow forecast for the Spokane River near Post Falls is 115% of average.

This information, along with any other circumstances that occur during the season, will be provided to you in the 2014 annual summary due out later this year.

If you have any questions I can be reached at telephone number 509.495.8612.

Thank you and have a good week!

Tim Vore
Environmental Specialist



1411 E. Mission Avenue MSC-1
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Avista's Letter to the Idaho Department of Fish and Game



July 14, 2014

Jim Fredericks
Panhandle Region Fishery Manager
Idaho Department of Fish and Game
2885 W. Kathleen Ave.
Coeur d'Alene, Idaho 83815

Subject: Spokane River Hydroelectric Project, FERC Project No. 2545, Appendix A, Section V, Revised Upper Spokane River Rainbow Trout Spawning and Fry Emergence Protection Plan and Upper Spokane River Rainbow Trout Spawning and Fry Emergence Protection 2014 Annual Summary

Dear Mr. Fredericks,

The Spokane River Project License (License) Appendix A, Section V of the Idaho Section 401 Water Quality Certification requires Avista to comply with the Post Falls Hydroelectric Development (HED) discharge levels as outlined in the "Upper Spokane River Rainbow Trout Spawning and Fry Emergence Protection Plan" (Plan). Avista has implemented the Plan to determine and maintain target flows from the Post Falls HED between April 16 and June 7 each year.

Section 5 of the Plan states that it will be reviewed in consultation with Idaho Department of Fish and Game and the Washington Department of Fish and Wildlife at least once every five years, and revised if necessary. Avista has implemented the Plan since 2010 and in each year since then we have maintained discharge flows above the established effective incubation target flow. Avista believes that the goal of the Plan, to help protect rainbow trout spawning and fry emergence in the Upper Spokane River, is being met and recommends no substantive changes. Avista has made minor editorial revisions to update the Plan since the License was issued and is providing a copy of the redlined revisions and the Revised Plan for your review. Please provide any comments that you may have by August 14, 2014.

In regard to this year, Avista was able to maintain the discharge flow from the Post Falls HED above the established effective incubation target flow level. Please find enclosed for your records the "Upper Spokane River Rainbow Trout Spawning and Fry Emergence Protection 2014 Annual Summary."

If you have any questions about these documents, please feel free to call me at (509) 495-8612.

Sincerely,

A handwritten signature in black ink that reads "Tim Vore". The signature is written in a cursive, slightly slanted style.

Tim Vore
Environmental Specialist

Enclosure

cc: Robert Steed, IDEQ
Speed Fitzhugh, Avista

1411 East Mission Avenue
PO Box 3727 MSC-25
Spokane, Washington 99220-3727

800.727.9170
Facsimile 509.777.9516
www.avistautilities.com

No comments were received from the Idaho Department of Fish and Game.

Avista's Letter to the Washington Department of Fish and Wildlife



July 14, 2014

Karin Divens
Habitat Program
2315 N Discovery Place
Spokane Valley, WA 99216

Subject: Spokane River Hydroelectric Project, FERC Project No. 2545, Appendix A, Section V, Revised Upper Spokane River Rainbow Trout Spawning and Fry Emergence Protection Plan and Upper Spokane River Rainbow Trout Spawning and Fry Emergence Protection 2014 Annual Summary

Dear Ms. Divens,

The Spokane River Project License (License) Appendix A, Section V of the Idaho Section 401 Water Quality Certification requires Avista to comply with the Post Falls Hydroelectric Development (HED) discharge levels as outlined in the "Upper Spokane River Rainbow Trout Spawning and Fry Emergence Protection Plan" (Plan). Avista has implemented the Plan to determine and maintain target flows from the Post Falls HED between April 16 and June 7 each year.

Section 5 of the Plan states that it will be reviewed in consultation with Idaho Department of Fish and Game and the Washington Department of Fish and Wildlife at least once every five years, and revised if necessary. Avista has implemented the Plan since 2010 and in each year since then we have maintained discharge flows above the established effective incubation target flow. Avista believes that the goal of the Plan, to help protect rainbow trout spawning and fry emergence in the Upper Spokane River, is being met and recommends no substantive changes. Avista has made minor editorial revisions to update the Plan since the License was issued and is providing a copy of the redlined revisions and the Revised Plan for your review. Please provide any comments that you may have by August 14, 2014.

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Environmental Specialist

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