



"Protect Our Land, Preserve Our Heritage"

STOP B2H Coalition

60366 Marvin Road
La Grande, Oregon 97850
info@stopb2h.org

February 25, 2022

Re: UM 2209 Idaho Power Wildfire Protection Plan

Greetings docket members,

The STOP B2H Coalition appreciates the opportunity to provide input to Idaho Power's (IPC) 2022 Wildfire Protection Plan. Our comments will focus on the Boardman to Hemingway transmission line (B2H) through eastern Oregon.

As mentioned in the January 31, 2022 Evaluation of Wildfire Mitigation Plans Workshop we thought IPC was just looking at their service territory and not the entire B2H route per AR 860-300-0002(B). IPC did not identify any Wildfire Risk zones in eastern Oregon. STOP knows that the B2H goes through several Wildfire Risk zones in Union county. When IPC was asked if they included B2H in their Wildfire Protection Plan they indicated they did and this was surprising because of the Wildfire Risk zones in Union county that are known. There may be other unidentified Wildfire risk zones along the B2H route as well, namely in Morrow and Umatilla counties, due to commonly occurring and excessive winds.

After conferring with Union County Commissioner Matt Scarfo and Union County Emergency Manager Director Nick Vora, STOP can confirm and document with county and state data that *there are clearly identified Wildfire Risk zones along the B2H and alternative routes in Union county*. Rather than try to explain what is in the reports STOP provides links to the following reports:

[Union County Community Wildfire Protection Plan \(8-10-05\)](#)
[Communities at Risk and WUI Zone Priority Setting \(Chapter 7 June 2016\)](#);
[Full Index to Union County Wildfire Protection Plan \(June 2016\)](#)
[Greater Morgan Lake Area Fire Risk Report Wildfire Report 2-18-22](#)

In addition, STOP entered into a dialog with IPC asking clarifying questions in relation to sections: 3.2 Identifying Areas of Elevated Wildfire Risk, 3.2.1. Wildfire Risk Modeling Process, 3.2.2. Wildfire Risk Areas, and general questions of IPC's 2022 Wildfire Protection Plan. STOP wished to have a better understanding of what information was gathered, how it was gathered and from who, how the data sets were created, and how those data sets derived the final numbers. STOP wanted to understand how these inputs were plugged into the formula, Wildfire Risk = Fire Probability x Consequence, to develop the two-tier risk map.

As with most inquires the first set of questions and answers lead to a second set of questions. Appendix A contains the question and answer sessions thus far with IPC. STOP would like to see and examine all data and formulas to understand why IPC found no high risk wildfire areas when the county and state have documented high wildfire risk areas in Union county for decades. A similar analysis should be done along the entire route as STOP believes other counties in eastern Oregon have similar Wildfire Risk zones.

With respect,

/s/Jim Kreider
STOP B2H Coalition

Appendix A

Subject:Re: [EXTERNAL]Contact info for new Wildland Fire person

Date:Thu, 3 Feb 2022 15:59:59 -0800

From:jim kreider <jkreider@campblackdog.org>

To:Williams, Alison <AWilliams@idahopower.com>

Hey Alison,

Thanks for getting back to me. My questions below are based on the companies 2022 Wildfire Mitigation Plan (WMP) and the B2H route through eastern Oregon.

3.2 Identifying Areas of Elevated Wildfire Risk

I would like to understand 1) the underlying information that was used and how it was combined to derive the 4 data inputs used in the fire spread model to determine the fire volume (Fire Probability); and 2) how the grouping/density of structures is formulated into a score for consequences.

3.2.1. Wildfire Risk Modeling Process

In this section I'd like to know 1) has the 20 year fire weather climatology has been adjusted (weighted) for climate change that has occurred in the later half of the 20 year modeling period; 2) what historical fuel measurements and/or weather station observations were used to develop the estimates of seasonal variation in live fuel moisture.

3.2.2. Wildfire Risk Areas

How were the necessary adjustments to account for unique aspects of certain areas, including factors that may increase or decrease risk, which would not be accounted for in the computer modeling made? There are 6 factors that were considered and I'd like to understand what information went into those 6 factors and how the results from each factor were combined to be manually input into the model.

I'd also like to see the results/outputs of this Wildfire Risk Modeling.

Thanks – jim

Subject:RE: [EXTERNAL]Contact info for new Wildland Fire person

Date: Fri, 18 Feb 2022 22:20:04 +0000

From: Williams, Alison <AWilliams@idahopower.com>

To: jim kreider <jkreider@campblackdog.org>

Dear Jim,

Please find attached responses to your questions on Idaho Power's Wildfire Mitigation Plan. Many thanks for your patience.

Don't hesitate to follow up with me if you have additional questions or comments.

My best and have a lovely weekend,

Alison

Attachment below

IDAHO POWER RESPONSES TO QUESTIONS FROM MR. JIM KREIDER

February 18, 2022

Jim Kreider Question: *I would like to understand 1) the underlying information that was used and how it was combined to derive the 4 data inputs used in the fire spread model to determine the fire volume (Fire Probability); and 2) how the grouping/density of structures is formulated into a score for consequences.*

Idaho Power's Response:

This question relates to Idaho Power's Wildfire Mitigation Plan, Section 3.2: Identifying Areas of Elevated Wildfire Risk.

- 1) The four data inputs are used to develop the fundamental physical and environmental features that lead to an elevated likelihood of wildfires. The data inputs were derived from the following sources:
 - a. Historical weather was created using the Weather Research and Forecasting model, a widely used numerical weather prediction model.
 - b. Topography information was derived from the LANDFIRE database which provides geo-spatial information.
 - c. Fuel inputs were also obtained from the LANDFIRE database.
 - d. Fuel moisture content was calculated from the Weather Research and Forecasting model using Standard National Fire Danger Rating System (NFDRS) methodology.

Weather conditions, topography, fuel types, and moisture content were used to determine the fire spread, flame lengths, and spotting that hinders control operations. Monte Carlo analysis was performed using these inputs to simulate fire progression based on millions of separate ignition locations near Idaho Power's distribution and transmission lines under a range of weather conditions.

- 2) The Monte Carlo analysis includes structure density as an input so that impacts to people or improved property can be quantified. Census data was used to determine structure density and each fire simulation determined the number of structures affected by a given fire. The number of structures affected is the consequence used in the risk calculation.

Jim Kreider Question: *In this section I'd like to know 1) has the 20 year fire weather climatology has been adjusted (weighted) for climate change that has occurred in the later half of the 20*

year modeling period; 2) what historical fuel measurements and/or weather station observations were used to develop the estimates of seasonal variation in live fuel moisture.

Idaho Power's Response:

This question relates to Idaho Power's Wildfire Mitigation Plan, Section 3.2.1: Wildfire Risk Modeling Process.

- 1) In an attempt to capture extreme heat that may result from climate change, the quantification uses the 50 most severe fire weather days within Idaho Power's service territory since 1979.
- 2) The North American Regional Reanalysis (NARR) is a model produced by the National Centers for Environmental Prediction and was used to acquire data for temperature, wind, moisture, soil, and atmospheric conditions. In addition, Remote Automated Weather Stations located in Eastern Oregon were analyzed over a period of 20 years from January 1, 2000 to August 31, 2021.

Jim Kreider Question: *How were the necessary adjustments to account for unique aspects of certain areas, including factors that may increase or decrease risk, which would not be accounted for in the computer modeling made? There are 6 factors that were considered and I'd like to understand what information went into those 6 factors and how the results from each factor were combined to be manually input into the model.*

Idaho Power's Response:

This question relates to Idaho Power's Wildfire Mitigation Plan, Section 3.2.2: Wildfire Risk Areas.

The computer model produced initial tier levels throughout Idaho Power's service territory. The company then reviewed the tiers to determine necessary adjustments based on unique aspects of the area not captured by the computer model.

Jim Kreider Request: *I'd also like to see the results/outputs of this Wildfire Risk Modeling.*

Idaho Power Response:

The results of the risk modeling are provided in the company's Wildfire Mitigation Plan. The underlying dataset and output of the model are not public information.

Subject: Re: [EXTERNAL]Contact info for new Wildland Fire person
Date: Wed, 23 Feb 2022 17:13:46 -0800
From: jim kreider <jkreider@campblackdog.org>
To: Williams, Alison <AWilliams@idahopower.com>

Hi Alison and Wildfire team,

Thank you for the answers to my questions. Like most answers they raise more questions and these are my follow up questions to the answers provided. Unless otherwise noted these questions are focused on the primary B2H and alternate routes in Union county.

3.2 Identifying Areas of Elevated Wildfire Risk

Thank you for sharing the sources of the 4 data inputs used to develop the fundamental physical and environmental features that lead to an elevated likelihood of wildfires. Please share with me the actual data sets by year and calculations to reach the final number(s) used as inputs for the 1) weather conditions, 2) topography, 3) fuel types, and 4) moisture content to determine the: a) fire spread, b) flame lengths, and c) spotting calculations. Please show the calculation(s) for how 1-4 created a-c and the final Fire Probability input value used in the Wildfire risk calculation.

Additionally please share the: x) census data used to determine structure density and the final input values used and y) how each fire simulation determined the number of structures affected by a given fire. Show the calculation(s) for the resulting consequence input value used in the Wildfire risk calculation.

Please show the values of the Fire Probability and Consequence multiplied to calculate the Wildfire Risk values for all segments developed along the two-kilometer buffer evaluated for the B2H in Union county.

3.2.1. Wildfire Risk Modeling Process

Please share the locations of the Remote Automated Weather Stations used in Eastern Oregon, the raw data and calculations used for the final value of seasonal variation in live fuel moisture per location or segment.

3.2.2. Wildfire Risk Areas

Please share all 3 tier levels along the B2H route in Union county. Show how the unadjusted data compiled for the 6 factors was input into the model? Show unadjusted tier levels on the B2H route and alternates in Union county.

Show each adjustment made, why the adjustment was made, the value of the adjustment and the final input into the model. Show adjusted tier levels.

If the unadjusted data is manually adjusted and produces a change in a tier level what appear to be the data point(s) that modified the tier classification?

General Question

Why is the underlying dataset and output of the model not public information? If we cannot see and understand how Idaho Power came to these conclusions why should we believe them to be accurate?

Trust but verify and that is what I am trying to do. Respectfully – jim