

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Upper Missouri Waterkeeper,

Madison River Foundation, and

Montana Environmental Information Center

Docket No. P-2188-_____

Complainants,

v.

Northwestern Energy,

Licensee.

COMPLAINT FOR ENFORCEMENT OF LICENSE OBLIGATIONS & RELIEF

Pursuant to Section 306 of the Federal Power Act (“FPA”),¹ Complainants hereby respectfully request that the Federal Energy Regulatory Commission (the “Commission” or “FERC”), issue an order enforcing provisions of the license issued for the Hebgen Dam portion of the Missouri-Madison Hydroelectric Project, FERC Project No. 2188, that require Licensee Northwestern Energy (hereinafter “Licensee”) to, *inter alia*, (a) maintain a continuous minimum flow of 600 cfs at USGS Gauge No. 6-388 near the Kirby Ranch, and to (b) limit changes in outflow from Hebgen Dam to no more than 10 percent per day for the entire year. Complainants request that the Commission enforce these requirements, expressed in Project License 2188 Article 403, and order the requested relief, including specifically that Licensee fund

¹ 16 U.S.C. § 825e (authorizing any person to apply by petition for Commission action against any other person alleged to be in contravention or violation of any statute, rule, order or other law administered by the Commission). *See also* 18 C.F.R. § 385.206 (2012) (Rule 206 of the Rules of Practice and Procedures of the Federal Energy Regulatory Commission).

investigation(s) and allocate necessary resources towards ensuring violations cannot reoccur, and to address the impacts caused by its violations.

I. INTRODUCTION & SUMMARY

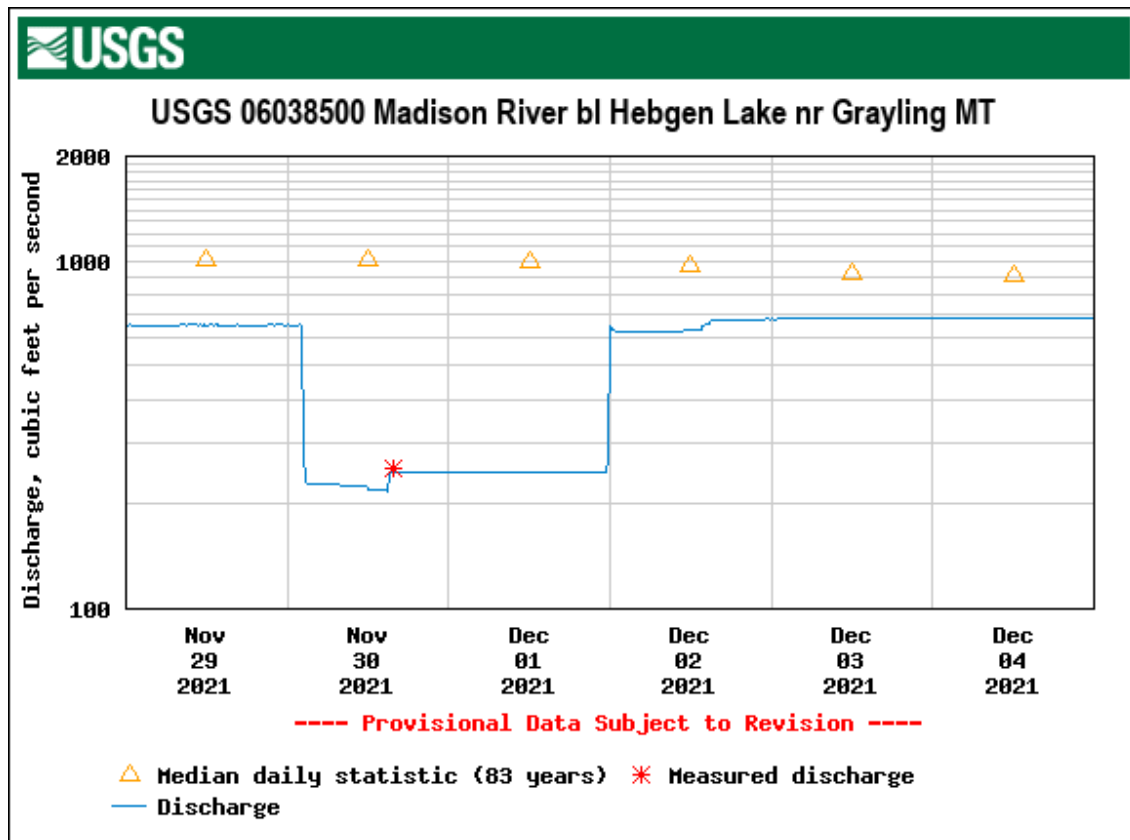
Licensee owns and operates the Hebgen Dam as one of nine components of the Missouri-Madison Hydroelectric Project located on the Madison and Missouri Rivers in Gallatin, Madison, Lewis and Clark, and Cascade Counties, in southwestern Montana. Eight of the project's nine developments were constructed between 1906 and 1930, including the Hebgen Dam at issue. The Hebgen and Madison developments are located on the Madison River. Hebgen Reservoir inundates the Madison River valley adjacent to the western edge of Yellowstone National Park, in the vicinity of West Yellowstone, Montana, just beyond the Park boundaries. It is operated as a storage facility, with releases providing head and flow to the downstream developments and to maintain the world-famous aquatic resources within the Madison River.

Operation of Hebgen Dam is coordinated with the Bureau of Reclamation (BOR) through a third-party agreement called the Missouri River Coordination Agreement (MRCA). The MRCA, which outlines the relationship of operations amongst the Madison-Missouri Project, specifies the reservoirs, including Hebgen, will be operated to maintain specific storage levels balancing protection of the downstream fishery resources and recreational interests, codified as flow conditions of operations. Notable here are requirements that Hebgen Dam must satisfy flow levels of 150 cfs directly downstream and 600 cfs farther downstream at Kirby Ranch.

Shortly after 2:00 am Mountain Standard Time on November 30, 2021, a gate failure resulted in a significant reduction of outgoing river flows into the Madison River from Hebgen Dam. Flows dropped from 648 cfs down to 228 cfs as measured downstream at USGS Gauge 06038500. Licensee's operations system did not identify the flow reduction, while the USGS

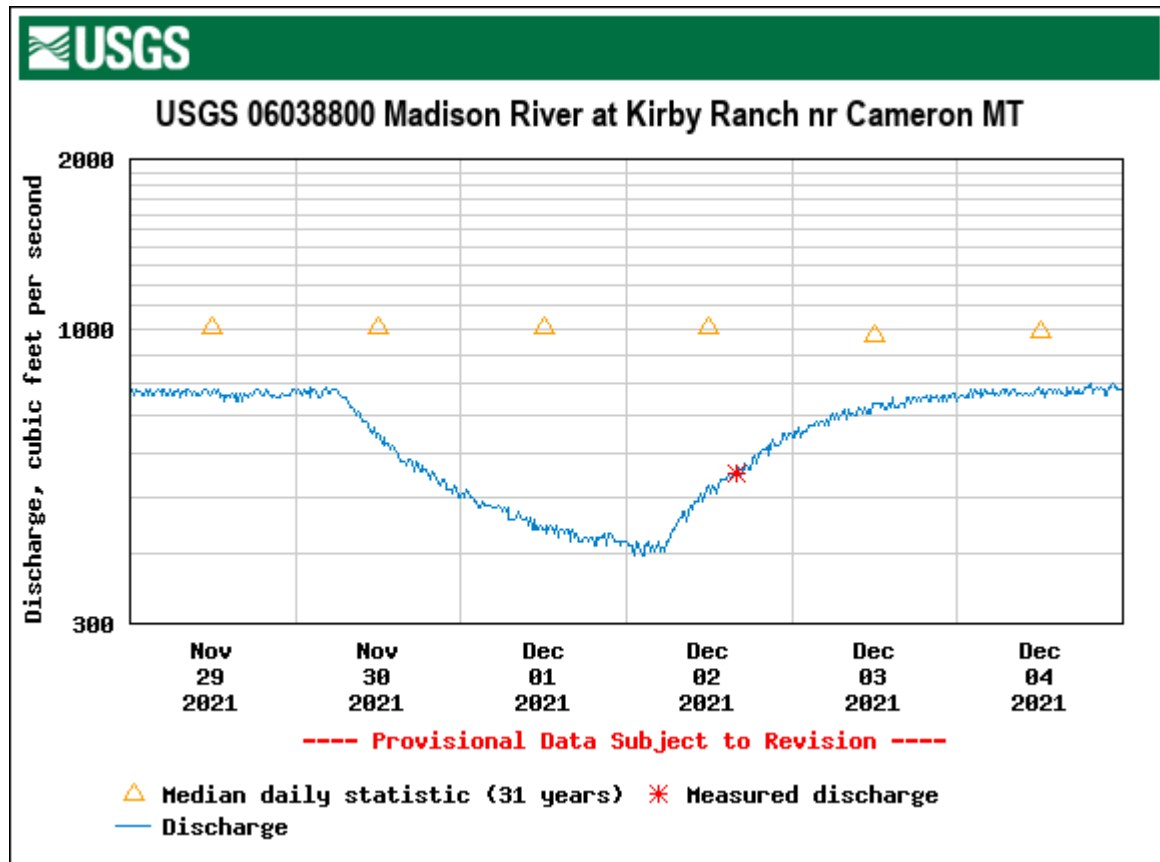
Gauge did reflect the abrupt change in flows. The USGS Gauge 6038500 measured outflow at Hebgen as dropping from 648 cfs to 278 cfs within a 15-minute period (a reduction of 57%) and a maximum reduction down to 216 cfs (a reduction of 67%) within a 24-hour period. This change in outflow equated to approximately a .70 ft of elevation drop in the river during an already low-flow seasonal time period.

USGS Gauge No 06038500 data below Hebgen Dam is presented below.



Licensee restored flows within approximately 48 hours. During the dam failure, the downstream Madison River was functionally dewatered in the majority of its shallower side channels and cobble habitat. During this time period of non-compliance, Hebgen outflows ranged from 216 to 248 cfs, with Madison River flows dropping below the 600 cfs Article 403 minimum at Kirby Ranch 12 miles downstream at 14:30 on November 30th, ultimately reducing to 395 cfs at 02:15 on December 2nd. Flows increased at Kirby Ranch soon after Hebgen outflows were restored, at approximately 19:15 on December 2nd.

USGS Gauge No 06038800 data at Kirby Ranch is presented below.



The dewatering of the Upper Madison River is a direct result of Licensee's violations. Of critical concern are resultant impacts to aquatic resources and the regional outdoors economy which is in large part based upon the Upper Madison's trophy fisheries. The abrupt drop in river levels exposed significant portions of the Upper Madison's side channels and shallow cobble substrate and stranded fish in isolated shallow areas. Fish mortality was observed by a wide variety of public and private entities including Licensee, Montana Fish Wildlife and Parks, and various non-governmental entities. During the approximately 48-hour dewatering event, brown trout had concluded annual Fall spawning and nests of eggs (redds) were in gravels. Based upon information and belief, it is likely that a disproportionate number of brown trout redds in downstream reaches were negatively affected by Licensee's violations given the location of brown trout spawning habitat requirements being within shallower, gravel-bottom substrate, and

the fact that such habitat was exposed and/or compromised by the Hebgen Dam failure, dewatering, and resultant lowering of river water levels.

In sum, the Complaint at-hand is in response to the Licensee's violations of flow conditions from Hebgen Dam and likely degradation to downstream aquatic resources, and in particular fishery resources. This Complaint also arises in response to the future economic harms that may flow as an indirect consequence of Licensee's violations. *E.g.*, fishery mortality and/or loss of brown trout young of year and limited spawning viability during the dewatering downstream of the Hebgen Dam could create significant economic consequences for the local recreation-based economy. It is also noteworthy that the Hebgen Dam dewatering at-issue here is the second significant dam license violation of this project in 13 years,² the first dam violation being a 2008 dam intake structure failure resulting in a massive jump in flows from 850 cfs to 3,400 cfs, and both of these violations call into question the safety of the dam structures and sufficiency of related monitoring protocols.

Complainants do not lightly invoke the Commission's jurisdiction seeking enforcement and the relief discussed herein. As further described in Section III below, Complainants are a collection of public interest, charitable entities that are committed to working together in ensuring a transparent accounting of the Hebgen Dam failure and Upper Madison River dewatering occurs, that necessary steps are taken to improve Hebgen Dam structural fitness and downstream monitoring, that adequate resources are allocated to assessing the ecological and economic consequences flowing from Licensee's violations, and to making downstream aquatic life and dependent communities whole again. Complainants therefore request that the Commission issue an order determining and declaring that license violations occurred, enforcing

² See "Hebgen Dam scare rattles Ennis residents," Bozeman Daily Chronicle, September 1, 2008, available online at: https://www.bozemandailychronicle.com/news/hebgen-dam-scare-rattles-ennis-residents/article_3f485c0f-b06c-5e59-bebd-873caa6e4354.html

license requirements, and ordering the corollary relief requested as necessary to right the wrong that has occurred.

II. COMMUNICATIONS

Communications regarding this Complaint should be sent to the following persons:

Guy Alsentzer, Esq.

Executive Director

Upper Missouri Waterkeeper

24 S. Willson Ave., ste. 6-7

Bozeman, MT 59715

P: (406) 570-2202

Guy@UpperMissouriWaterkeeper.org

Jonathan Malovich.

Executive Director

Madison River Foundation

222 E Main Street Ste H

Ennis, MT 59729

P: (406) 599-6389

jon@madisonriverfoundation.org

III. PARTIES

The following is a description of the Complainants in this action. As a result of the Licensee's violations with the requirements of its Project license, as described below, Complainants, their members and/or board members, and downstream communities of SW Montana have experienced injuries and harms including but not limited to, diminishment of recreational opportunities, impaired quality of life, exposure to harmful pollution, threats to public safety, and frustration of economic development and/or business opportunities. These harms are of the types that certainly implicate, but are not readily reducible to, a monetary figure.

1. Complainant Upper Missouri Waterkeeper, Inc. (Waterkeeper) is a regional, water advocacy, 501(c)3 non-profit membership organization dedicated to protecting fishable, swimmable, drinkable water and community health throughout the 25,000 square miles of the Upper Missouri River Basin. Waterkeeper is based out of Bozeman, Montana with staff in Ennis, Montana, Wise River, Montana, and Helena, Montana. Waterkeeper is concerned with

the negative environmental, recreational, and economic impacts of the Hebgen Dam failure and dewatering of the Upper Madison River. Waterkeeper has members who reside in Madison County and throughout SW Montana and members who specifically recreate upon and enjoy the diverse amenities provided by the Upper Madison River.

2. Complainant Madison River Foundation is a River Science & Conservation based 501c3 membership non-profit based in Ennis, Montana with local members throughout Madison County and Montana who rely on the Madison River for their livelihood and wellbeing, as well as a nationally based membership who travel from a far to enjoy its waters and communities. Madison River Foundation is focused and dedicated to the health and wellbeing of the Madison River and its tributaries and the communities that depend on its resources being healthy and protected. MRF was the first group informed at the time of Dam failure and first to notify Licensee and MFWP of the dewatering occurring on the Upper Madison. MRF is concerned about the unknown, and potentially significant, short and long-term negative effects this event will have on water resource health, wildlife, and downstream communities.

3. Complainant Montana Environmental Information Center is a member-supported Montana non-profit organization based in Helena, Montana. Founded in 1973, MEIC represents approximately 5,000 members and supporters from across Montana and the United States. MEIC is dedicated to protecting and restoring Montana's natural environment and protecting Montanans' constitutional right to a clean and healthful environment. MEIC is frequently involved in public policy matters and litigation concerning water quantity and quality in Montana. MEIC has also advocated for years to protect the Madison River, and other rivers across Montana, the surrounding public lands, and the fish and wildlife that depend upon that landscape. MEIC members live near, recreate in, irrigate from, and otherwise derive benefits from the public waters of the Madison River.

IV. REQUEST FOR ENFORCEMENT

Licensee has operated the Hebgen Dam development in violation of Article 403, condition nos. 1 and 3. Complainants respectfully request that the Commission issue an order enforcing these obligations.

A. Licensee Violated Article 403, Condition 1 (minimum flows to Upper Madison River).

Article 403, condition 1 of the license requires Licensee to “maintain a continuous minimum flow of 150 cfs in the Madison River as measured just downstream from Hebgen Dam at USFS Gauge No. 6-385, and a continuous minimum flow of 600 cfs at USGS Gauge No. 6-388 near the Kirby Ranch.” Licensee violated condition 1 when its outflow from Hebgen Dam between November 30 and December 2, 2021 diminished by more than fifty percent, resulting in continuous minimum flows of less than 600 cfs as measured at the Kirby Ranch USGS gauge. Upon information and belief, Licensee does not contest these facts.

B. Licensee Violated Article 403, Condition 3 (limit outflow changes to < 10% daily)

Article 403, condition 3 of the license requires Licensee to “limit changes in outflow from Hebgen Dam to no more than 10 percent per day for the entire year.” Licensee violated condition 3 when its outflow from Hebgen Dam dropped from 648 cfs to 278 cfs within a 15 minute period and a maximum reduction down to 216 cfs within a 24-hours period (a 57% and 67% reduction in flows, respectively) between November 30 and December 2, 2021. Upon information and belief, Licensee does not contest these facts.

C. Licensee Has Failed to Operate Hebgen Dam to Adequately and Equitably Protect and Mitigate Impacts to Fish and Wildlife and Other Environmental Resources Affected By the Project

As part of the relicensing of the Madison-Missouri Project over two decades ago, significant efforts were made by the Licensee, FERC, governmental agencies and stakeholders to ensure the final license would adequately and equitably protect and mitigate impacts of Hebgen Dam on downstream water resources and fisheries. *See* Final License, Madison-Missouri Project P-2108, FERC 2000. Particular attention was paid to mitigating and improving habitat conditions for trout population viability, resulting in a variety of conditions including but not limited to requirements for Licensee to limit flows and develop and implement plans restoring the Upper Madison River for the purpose of trout habitat viability.

The flow-based conditions of the license are explicit for good reason, and not solely due to Hebgen's water storage functions. The river downstream of Hebgen Dam is world famous. Successful natural reproduction of wild fish and restrictive fishing regulations has resulted in the river downstream of Hebgen becoming one of the premiere trout fisheries in the Nation. Unfortunately, Licensee's violations created a dewatering event that occurred at an ecologically sensitive time period for brown trout recruitment. Brown trout sexually mature usually at age 3, but in the age range of 2-5. With already historically low brown trout population numbers greater than age 2, additional fish mortality as a result of this dewatering event will have long-term negative impacts on the fisheries health, particularly for brown trout. Numerous media reports and MT FWP biologists identified extensive fish die-offs after the dewatering event below Hebgen Dam.³

The recruitment of brown trout at age 0 were also likely negatively impacted by the Licensee's violations. The brown trout spawn in the Upper Madison typically occurs between October and December. Eggs are laid in shallow, rocky spawning areas known as redds, and hatch the following Spring between February and April under natural conditions.⁴ As a result of

³ Billing Gazette, [Fish stranded after Hebgen Lake Dam glitch cuts off water to Madison River](#), Nov. 30, 2021

⁴ Brown, C.J.D. 1971. [Fishes of Montana](#). Montana State University, Bozeman, MT. pp. 207.

the Hebgen Dam failure and dewatering of the Upper Madison, brown trout redds were dried out, exposed, and/or threatened, and this was noted during fish recovery efforts by MT FWP, NWE, and citizen volunteers. The extent of brown trout eggs loss due to redds being dried out and exposed is a critical scientific unknown. However, the significant drop in river flows means a likely result is extensive redd and/or juvenile fish mortality and recruitment declines due to Licensee's violations, all of which may result in long-term negative impacts on the Upper Madison fishery.

Compounding the extreme dewatering of the Upper Madison's reaches directly downstream of Hebgen Dam are ongoing poor habitat conditions caused or contributed to by the Dam. A 2018 aquatic macroinvertebrate study of two sites below Hebgen Dam conducted by the Madison River Foundation found the lowest biological integrity of all the sites surveyed.⁵ That independent examination of Upper Madison sites found significant differences in macroinvertebrate communities compared to NWE data, and significantly lower macroinvertebrate scores than from samples collected by NWE at the monitoring station below Cabin Creek. It is likely the Hebgen Dam failure exacerbated the already degraded biological conditions for macroinvertebrates below the dam and so too negatively impacted macroinvertebrate populations downstream by decreasing food sources for fish and other macroinvertebrate dependent species.

The likely impacts arising from Licensee's violations also extend beyond ecology and biology to economic concerns. Montana Fish Wildlife and Parks ("FWP") classifies the Upper Madison River below Hebgen Dam as a Class I fishery (outstanding fishery resource); it is one of the most popular and heavily fished stretches of river in Montana. According to Montana

⁵ Madison River Foundation, Baseline Macroinvertebrate Monitoring Report 2016-2017 for the Upper Madison River, Montana, November 2018.

Fish, Wildlife & Parks, 26% of fishing in the state of Montana takes place in Region 3, where the Madison River is situated.⁶ The Upper Madison River experiences the heaviest usage of any waterway in the state from both visitors and fishermen, with 243,589 visitors to recreational sites and over 207,000 angler days in 2017, respectively.⁷

The fly-fishing industry is a major contributor to the economy of Southwest Montana. The estimated annual economic value of fishing-related expenditures is over \$900 million⁸, with approximately \$152 million directly derived from the Madison River (based on 2017 data).⁹ FWP's baseline data from 2014, adjusted to 2020 dollars to account for inflation, estimate that residents spend \$90.93 per day on angling trip expenses in Montana and non-residents average \$704.59 per day while fishing in Montana, including transportation, food, lodging, and guide services, not including the cost of fishing licenses and durable goods such as rods, reels, waders, boats, etc.¹⁰ Fishing-related expenditures in Southwest Montana by non-residents in 2018 totaled \$75,875,000, amounting to 16.4% of total expenditures by non-resident visitors.¹¹

Similarly, the Madison River supports a significant percentage of the workforce in Madison County, with over 300 outfitters with Special Recreation Permits for the Madison, not to mention the countless hotel and lodging, restaurant, and retail workers whose employment depends upon a healthy and productive Madison River fishery.¹² In Montana, fishing outfitter revenue was \$76,742,200 in 2017,¹³ and with a 15% biennial increase in angler days¹⁴ as

⁶ <https://fwp.mt.gov/aboutfwp/regions/region3>

⁷ <https://fwp.mt.gov/binaries/content/assets/fwp/aboutfwp/councils--committees/madison-river-workgroup/draft-madison-ea-sept-2020.pdf>

⁸ <https://fwp.mt.gov/binaries/content/assets/fwp/aboutfwp/legislature/fisheries-division-overview.pdf>

⁹ <https://fwp.mt.gov/binaries/content/assets/fwp/aboutfwp/councils--committees/madison-river-workgroup/draft-madison-ea-sept-2020.pdf>

¹⁰ *Id.*

¹¹ *Id.*

¹² https://billingsgazette.com/outdoors/rule-capping-outfitters-guides-on-madison-river-delayed/article_bf09a3a9-12b9-51fa-9978-1e25f38f5226.html

¹³ https://scholarworks.umt.edu/cgi/viewcontent.cgi?article=1376&context=itrr_pubs

¹⁴ <https://fwp.mt.gov/binaries/content/assets/fwp/aboutfwp/councils--committees/madison-river-workgroup/draft-madison-ea-sept-2020.pdf>

recorded by FWP, 2021 fishing revenue is assumed to have increased. The unknown ecological impacts of the Upper Madison dewatering event may incite negative economic impacts, influencing the local economies of Ennis, Virginia City, and West Yellowstone.

The Licensee's violations are also of significant concern because the Madison River fishery has experienced a worrying decline in estimated abundances of brown and rainbow trout below Hebgen Dam. A 2019 Montana FWP study found that rainbow and brown trout (approximately 6 inches or greater) in the Pine Butte section of the Madison River have declined below the 20-year average. Estimates found that both rainbow and brown trout declined by about 40% from 2018 to 2019 in the Madison below Quake Lake. The findings confirmed a marked decline in rainbow and brown trout over age-2 while recruitment of fish age-0 was still strong at the time of this survey.¹⁵ The extent to which the Licensee's violations exacerbate this troubling trend is also unknown.

Last, the Hebgen Dam failure and dewatering of the Upper Madison River between November 30th and December 2, 2021 indicate that Licensee's control and monitoring systems are, at a minimum, inadequate to identify changes in outflow that violate license requirements and which may cause or contribute to significant ecological and economic damage downstream. In particular, this Complaint arises due to the potentially significant negative ecological impacts that may arise from Licensee's violations and dewatering of the Upper Madison during the critical fall spawning period of brown trout. Montana FWP has already observed significant declines in brown trout populations across Missouri River tributaries in SW Montana, including the Madison River. Complainants are concerned that the Licensee's violations occurred during

¹⁵ Montana FWP, Madison River Drainage 2188 Project Report, 2019.

one of the most sensitive times of year for population recruitment of brown trout – the annual fall spawn – and further that the severity of Licensee’s dewatering represents potentially significant short and long-term implications for brown trout populations within the Upper Madison.

In turn, potential diminution of brown trout populations in the Upper Madison could have cascading negative economic and social impacts on the downstream local business and recreational interests. These potential economic and social harms are of immediate concern because recreational fishing on the Upper Madison constitutes a disproportionately large basis of the regional outdoor economy and one of the largest economic contributors to Madison County.

V. RELIEF

Complainants hereby respectfully request that the Commission issue an order determining and declaring that the Licensee has violated the minimum flow requirements of its license and reaffirming the binding nature of those conditions. In addition to such relief, Complainants respectfully request that the Commission include in its order requirements that the Licensee provide the following compensatory and injunctive relief, as well as any additional relief the Commission may deem necessary:

1. Fund a complete structural evaluation of Hebgen Dam outflow, bypass, and flow monitoring systems, conducted by independent consultants jointly agreed upon by Complainants and Licensee;
2. Develop, fund, and implement an ongoing maintenance and improvement plan at the Licensee’s sole expense and subject to Commission approval and enforcement addressing all Hebgen Dam infrastructure and waters, including appropriate preventative and monitoring measures and systems, to ensure full compliance with the terms of the FERC license;

3. Fund a comprehensive, third-party assessment of the ecological impacts that Licensee's dewatering caused upon downstream aquatic resources in the Upper Madison River, including but not limited to specific assessment of brown trout population and estimated mortality and loss of young of year class;
4. Develop, vest, and administer an Upper Madison River Restoration Fund with sufficient financial resources for undertaking short and long term aquatic and/or biological restoration activities, guided by the investigation pursuant to Item 3 above, to restore Upper Madison River habitat and fisheries to pre-dewatering conditions, and to make available financial resources to downstream business and community interests that may incur hardship as a result of the Licensee's violations and river dewatering.¹⁶

VI. RESOLUTION

Pursuant to Rule 603 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.603, Complainants request the appointment of a settlement judge.

Pursuant to Rule 206(b)(6), Complainants state that while they are aware of correspondence between Licensee and FERC regarding its Nov-Dec 2021 license violations, the ecological and economic issues presented here are not pending in existing Commission proceedings or a proceeding in any other forum in which the Complainants are a party.

Pursuant to Rule 206(b)(9), Complainants state that the Enforcement Hotline, Dispute Resolution Service and tariff-based dispute resolution services were not used. No process has been agreed upon for resolving the Complaint. Complainants believe that alternative dispute

¹⁶ To implement this request for relief, the Commission is urged to include as part of its Order that (a) community listening sessions be convened, with the assistance of an independent trained facilitator, to ascertain the exact extent of the need for restoration activities and economic compensation to reliant, downstream interests, with such meetings being open to the public and advertised in local newspapers at least thirty days in advance, and (b) Licensee fund and implement all further reasonable restoration activities and compensation recommended through the community listening sessions described above.

resolution (ADR) under the Commission's supervision could successfully resolve the dispute. Therefore, as an alternative to Commission enforcement, Complainants request Commissioner-supervised ADR, or that the Commission appoint a settlement judge or other ADR official to aid in their discussions with Licensee towards a negotiated settlement.

Pursuant to Rule 206(b)(11), Complainants state that they know no reason why the standard processes will not be adequate for expeditiously resolving this Complaint.

VII. SERVICE AND NOTICE

In accordance with Rule 206(c), the Complainants have served a copy of this complaint upon the Licensee simultaneously with its filing.

VIII. CONCLUSION

For the foregoing reasons, Complainants respectfully request that the Commission: (1) determine and declare that Licensee violated flow requirements of its license when it dewatered the Upper Madison River for approximately 48 hours, (2) order Licensee to comply with the terms and conditions of its FERC license, including the specific relief as specified in Section V above, and (3) order any additional relief deemed appropriate.

Respectfully submitted,

/s/ Guy Alsentzer

Dated: January 5, 2022

Certificate of Service

I hereby certify that I have this day served the foregoing document to each person designated below.

Via Electronic & First Class Mail:

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE, Room 1A
Washington, DC 20426
efiling@ferc.gov

Heather H. Grahame
Vice President-General Counsel
NorthWestern Corporation d/b/a North Western Energy
208 N. Montana Avenue, Suite 205
Helena, MT, 59601
heather.grahame@northwestern.com

Montana Fish, Wildlife, and Parks Commission
Montana Fish, Wildlife, and Parks
1420 East Sixth Avenue
PO Box 200701
Helena, MT 59620-0701
fwcomm@mt.gov
CommissionerRegion3@mtfwp.org

Dated at this 5th day of January, 2022.

/s/ Guy Alsentzer

Upper Missouri Waterkeeper
24 S. Willson Ave, Ste. 6-7
Bozeman, MT 59715
Guy@UpperMissouriWaterkeeper.org
T: 406.570.2202