Center for American Progress

Boundary Waters at Risk

Trump's Attempts to Shortcut Science and Ignore Local Concerns Are Endangering Minnesota Wilderness

By Carlos Rivero Lopez and Jenny Rowland-Shea May 8, 2019

In early April, Rep. Betty McCollum (D-MN) faced off against Secretary of Agriculture Sonny Perdue during a hearing of the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Subcommittee. The congresswoman lambasted Perdue for the last-minute cancelation of a two-year study meant to determine if mining should be allowed on the doorstep of Minnesota's Boundary Waters Canoe Area Wilderness, the nation's most visited wilderness area.¹ The study was canceled 20 months into the 24-month review.

"Twenty months of collecting public input, 20 months of science-based assessment, and all you released was a one-page press release," objected McCollum, calling the press release "completely inadequate." Previously, during a 2017 Interior-Environment appropriations hearing, Perdue promised McCollum that a thorough two-year study would be conducted and completed. McCollum maintained that by stopping the study, he had "started a roller coaster of events that will lead to, possibly, the destruction of these pristine waters."²

The showdown between Rep. McCollum and Secretary Perdue highlights the Trump administration's efforts to remove protections from the wilderness's watershed and its broader assault on public lands and waters on behalf of extractive industries. From proposing oil and gas drilling off nearly every U.S. coastline to rolling back protections for national monuments where coal, oil, and uranium companies have expressed interest, the Trump administration's energy dominance agenda has threat-ened public lands across multiple fronts.³

The Boundary Waters case is emblematic of the Trump administration's modus operandi: bypass the regulatory process by shortcutting scientific assessment, ignoring local opposition, and bending the law.⁴ This unsound approach to decision-making has been recognized as such in court, where the Trump administration has only a 6 percent success rate on cases related to the Administrative Procedure Act, which governs the way agencies develop and issue regulations.⁵ The average success rate of previous administrations in such cases is 70 percent.⁶ The administration's brazen disregard for transparency, science, and process in the Boundary Waters issue may ultimately be its undoing, but until the courts weigh in, this incredible wilderness system remains at serious risk of irrevocable damage from the sulfide-ore mining at its doorstep.

Threatening the country's most visited wilderness area

The Boundary Waters Canoe Area Wilderness, one of the country's greatest natural marvels, is located within the Superior National Forest in Minnesota. Covering more than 1 million acres, Boundary Waters is the largest wilderness area east of the Rocky Mountains and north of the Everglades.⁷ It stretches nearly 200 miles along the U.S.-Canada border and is contiguous with Canada's Quetico Provincial Park, which is also managed as a wilderness area.⁸ Home to gray wolves, black bears, and moose—as well as fish such as largemouth bass and sturgeon—Boundary Waters has more than 1,200 miles of canoe routes, 12 hiking trails, and more than 2,000 designated campsites, attracting about 155,000 visitors annually—more than any other U.S. wilderness.⁹

While Boundary Waters is protected from development within its borders, it remains vulnerable to threats in the watershed in which it lies. One of those threats comes from Twin Metals Minnesota, a subsidiary of Antofagasta PLC, a Chilean mining company owned by billionaire Andrónico Luksic, who is also Ivanka Trump and Jared Kushner's landlord. President Donald Trump's daughter and son-in-law rent their \$5.5 million Washington, D.C., mansion from Luksic for \$15,000 a month—a relationship that raises conflict of interest questions.¹⁰

Since 2016, Twin Metals has spent nearly \$1 million lobbying the Trump administration in order to gain access to public lands near Boundary Waters.¹¹ The company has also been implicated in a number of bribery and corruption scandals in its home country, including allegations involving a high-ranking Chilean cabinet minister and a questionable \$10-million-dollar loan to the daughter-in-law of the Chilean president.¹²

In 2012, Twin Metals requested renewals for two mineral leases to mine for copper and nickel on U.S. Forest Service (USFS) lands within three miles of Boundary Waters.¹³ Sulfide-ore mining, the process Twin Metals would use to mine heavy metals, is well documented for causing catastrophic pollution that poses a serious risk to the wilderness area. In fact, the Environmental Protection Agency (EPA) lists metal mining as the United States' most toxic industry, primarily the result of acid mine drainage—a side effect of mining rock with high sulfide content.¹⁴ The pollutants from acid mine drainage can contaminate the land surface, soils, and groundwater.¹⁵ Because of Boundary Waters' shallow groundwater and abundant lakes and streams, the area is especially vulnerable.¹⁶ Metal mining is a particularly risky venture. A 2012 study representing 89 percent of U.S. copper production found that every mine operation experienced a spill or accidental release.¹⁷ Research shows that if an accident were to occur near Boundary Waters, the consequences would be disastrous. Many species of local fish would be wiped out due to increased water acidity; phosphorus pollution would likely cause toxic algal blooms; and sulfates and heavy metals would pose a threat to plants, wildlife, and humans.¹⁸

To make matters worse, Antofagasta has a poor environmental track record. From 2008 to 2010, the company was responsible for the highest number of toxic spills in the region of Coquimbo, Chile, including one spill in 2009 that dumped 13,000 liters of copper concentrate directly into a river.¹⁹ Antofagasta also faced a fine of \$23.8 million and the closure of its biggest copper mine in Chile due to violations of its environmental permit, including water pollution.²⁰ Despite these charges, Antofagasta has been working on a \$1.3 billion expansion of the mine since 2018.²¹

Damage to Boundary Waters' ecosystem would have a lasting financial effect on local communities that benefit from the robust and growing outdoor recreation and travel economy that the wilderness supports, as well as from new residents who have moved to the area because of quality of life and recreation opportunities. Studies estimate that if sulfide-ore copper mining were to take place in the region, the loss in visitor spending caused by industrial and related development and pollution could amount to \$288 million a year and lead to the overall loss of 4,490 local jobs.²² This would have a reverberating negative impact on the regional economy. Notably, a recent independent study from Harvard University showed that protecting Boundary Waters from the Twin Metals mine would result in dramatically more jobs and income over a 20-year period than the proposed mining activity would.²³ The authors of the study found that in each of the 72 different mining scenarios examined, all would result in the local community being subject to boom and bust cycles of employment and income. In 69 of the 72 scenarios, the net present value of leaving Boundary Waters protected would be positive, indicating that the financial benefits of the protections significantly outweigh the costs.

Cutting corners and ignoring science

The issues surrounding Twin Metals' two mineral leases date back nearly to the formalization of Boundary Waters as a wilderness area. The original mineral leases were sold in 1966, predating the National Environmental Policy Act (NEPA), the cornerstone of the federal government's process for environmental review.²⁴ Because of this, the mineral leases lacked today's environmental analysis standards and managed to be renewed and grandfathered out of subsequent environmental protections. In 2014, the Obama administration ended the pattern of decades past and directed the USFS to conduct a review of copper mining in the surrounding Superior National Forest.²⁵ The process included a public comment period, two public hearings, listening sessions, and a scientific assessment, resulting in the USFS deeming the potential risk to Boundary Waters "unacceptable."²⁶ The USFS went on to note that the consequences of continued mining could cause "serious and irreplaceable harm" to the wilderness area, prompting the agency to withhold its consent to renew the Twin Metals leases.²⁷

Not long after the review, the U.S. Department of the Interior (DOI) solicitor suggested that the Bureau of Land Management (BLM) had the discretion to deny Twin Metals its mineral lease renewals, which the BLM subsequently did.²⁸ The USFS and the BLM then implemented a moratorium on new mineral exploration and development applications for two years, during which time the agencies would conduct an environmental impact statement (EIS) analysis to determine whether 234,000 acres of the watershed around Boundary Waters should be withdrawn from mining for up to 20 years.²⁹

However, under the Trump administration, the federal government's policy toward Boundary Waters has shifted. The administration has moved aggressively to circumvent necessary scientific analysis and undo the established protections. Just days before Christmas 2017, in a highly questionable move, the DOI's new acting solicitor reversed the Obama-era legal opinion declining the renewal of Twin Metals' mineral leases, paving the way for them to be renewed.³⁰

In January 2018, the USFS canceled the EIS it had planned during the Obama administration.³¹ Instead, the agency opted for an environmental assessment (EA), a less rigorous analysis typically reserved for noncontroversial actions. By May 2018, the BLM had reinstated Twin Metals' mining leases, opening the area to the same risks that the Obama administration's review had deemed unacceptable.³²

In September 2018, the U.S. Department of Agriculture (USDA), which controls the USFS, canceled the mineral withdrawal begun during the Obama administration and pulled the plug on the environmental assessment that, in 2017, Secretary Perdue had promised to complete. The USDA claimed that the analysis had not revealed any new scientific information.³³ Despite Perdue's previous claim to Rep. McCollum that he is "not smart enough to know [what] to do without the fact space and the sound science" and that "no decision will be made prior to the conclusion" of the study, when asked about his decision to prematurely end the study, Perdue merely said that he could not directly answer.³⁴ He added that he had no timeline for release of any documents that could prove whether the agency's actions were indeed based on science.

In December 2018, the BLM released a separate 34-page EA recommending that Twin Metals' mineral leases be renewed.³⁵ However, the lack of proper scientific assessment in the EA was clear. Analysis of all potential environmental effects—including those on water resources, cultural resources, recreation, wildlife, vegetation, and soil—were described in just seven pages. Equally concerning, the entire EA included just 10 references, and only a single study on potential acid mine drainage was cited. Moreover, that study was authored by Golder Associates Inc., a company hired by Twin Metals in 2014 to write a technical report on the proposed mining project.³⁶

While Twin Metals will still need to submit a mine plan to the state of Minnesota, the Trump administration is now in prime position to renew the company's leases and make sulfide-ore mining near Boundary Waters a reality.



Locally and statewide, Minnesotans strongly support the Boundary Waters Canoe Area Wilderness. A 2018 statewide survey found that 78 percent of state voters view the area favorably, and 1 in 5 visit every year.³⁷ In addition, about 70 percent of statewide voters oppose sulfide-ore copper mining near Boundary Waters, as do a majority of locals.³⁸ Both scientific assessment and public opinion support the value of Boundary Waters' integrity; yet the Trump administration appears willing to disregard this evidence.

Opposition to the Trump administration's Boundary Waters agenda has been swift and vocal. Nine area businesses joined the Northeastern Minnesotans for Wilderness to sue the DOI and the BLM over the reinstatement of Twin Metals' mineral leases.³⁹ The area businesses—including outfitters, canoe manufacturers, wilderness discovery groups, and a resort—stated that the BLM's decision to renew the mineral leases threatened not only the environment, but their livelihoods and the region's entire outdoor recreation economy. Two additional lawsuits have also challenged the Trump administration's push for mining near Boundary Waters.⁴⁰ And more than 170 businesses, sporting groups, and conservation groups sent three letters to then-Interior Secretary Ryan Zinke and Secretary Sonny Perdue opposing the reinstatement of Twin Metals' expired mineral leases and supporting the mining moratorium.⁴¹

Rep. McCollum and the House Committee on Natural Resources are spearheading Congress' response to this issue. In November 2018, Reps. McCollum and Raúl M. Grijalva (D-AZ) sent a letter to Zinke and Perdue criticizing their decisions to cancel the mineral withdrawal application and the EIS, stating that the decisions "ignored the science-based decision-making and conservation-based management standards to which your agencies are legally bound."⁴² In March, Reps. McCollum, Grijalva, and Alan Lowenthal (D-CA) went a step further, rejecting the claim that no new scientific information was found during the environmental assessment and accusing the DOI and the USDA of choosing to "waste taxpayer funds, ignore public comments, and suppress scientific information rather than have this evidence revealed to the public."⁴³

Conclusion

By reversing an Obama-era decision that served to protect one of the country's most beautiful and vulnerable wilderness areas from risky mining, the Trump administration has unabashedly bolstered Twin Metals' mining initiative. In its mission to bypass the regulatory process by shortcutting scientific assessment and ignoring local opposition, the current administration has overwritten legal opinions, disregarded NEPA, quashed scientific assessment, and ignored public opinion.

Furthermore, President Trump himself is getting in on the action. During a recent trip to Minnesota—a state that rebuked him in the 2016 election and whose population overwhelmingly rejects mining in Boundary Waters—the president bragged about his removal of the mining ban near Boundary Waters.⁴⁴ Trump claimed that protections of Boundary Waters had put mineral resources "under lock and key" and that he had restored "mineral exploration for the miners and workers of Minnesota."⁴⁵

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Fortunately, the president does not have the final word—especially given his administration's record in court. The administration must fulfil Rep. McCollum's request and release the documents behind the abandoned mineral withdrawal study. In addition, Congress must continue rigorous oversight of the Trump administration's dismissal of science and rush to deliver leases to Twin Metals. It should also pass legislation to permanently protect Boundary Waters watershed and ensure that safeguards survive long after the Trump administration.

The Boundary Waters Canoe Area Wilderness is ground zero for the Trump administration's fight against science and the law. Ultimately, it is up to Congress and the courts to prevent mining on the edge of the wilderness before it's too late.

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Endnotes

- 1 U.S. Department of the Interior, "Obama Administration Takes Steps to Protect Watershed of the Boundary Waters Canoe Area Wilderness," Press release, December 15, 2016, available at https://www.doi.gov/pressreleases/obamaadministration-takes-steps-protect-watershed-boundarywaters-canoe-area; U.S. Forest Service, "Boundary Waters Canoe Area Wilderness: Trip Planning Guide," available at https://www.fsuda.gov/Internet/FSE_DOCUMENTS/ fseprdfo11535.pdf (last accessed April 2019).
- 2 House Appropriations Committee, "Department of Agriculture Budget Request for Fiscal Year 2020 (EventID=109280),"YouTube, April 9, 2019, available at https:// www.youtube.com/watch?v=fH1usfNfB6c.
- 3 Hiroko Tabuchi and Tim Wallace, "Trump Would Open Nearly All U.S. Waters to Drilling, But Will They Drill?," *The New York Times*, January 23, 2018, available at https://www. nytimes.com/interactive/2018/01/23/climate/trump-offshore-oil-drilling.html; Eric Lipton and Lisa Friedman, "Oil Was Central in Decision to Shrink Bears Ears Monument, Emails Show," *The New York Times*, March 2, 2018, available at https://www.nytimes.com/2018/03/02/climate/bearsears-national-monument.html.
- 4 Marshall Helmberger, "Old memos shed new light on Twin Metals leases," *The Timberjay*, Dec 5, 2018, available at http://timberjay.com/stories/old-memos-shed-new-lighton-leases,14638.
- 5 Administrative Procedure Act, Public Law 404, 79th Congress., 2nd sess. (June 11, 1946), available at http:// www.justice.gov/jmd/ls/legislative_histories/pl79-404/actpl79-404.pdf.
- 6 Fred Barbash and Deanna Paul, "The real reason the Trump administration is constantly losing in court," *The Washington Post*, March 19, 2019, available at https://www.washingtonpost.com/world/national-security/the-real-reasonpresident-trump-is-constantly-losing-in-court/2019/03/19/ f5ffb056-33a8-11e9-af5b-b51b7ff322e9_story.html?utm_ term=.c7a3b54ba19e.
- 7 Ibid.
- 8 Wilderness Connect, "Boundary Waters Canoe Area Wilderness," available at https://www.wilderness.net/NWPS/ wildView?WID=70 (last accessed April 2019).
- 9 Ibid.; U.S. Forest Service, "Boundary Waters Canoe Area Wilderness: Trip Planning Guide."
- 10 James V. Grimaldi and Mark Maremont, "Trump Administration to Grant Mining Leases That Will Benefit Landlord of President's Daughter Ivanka Trump," *The Wall Street Journal*, December 22, 2017, available at https://www. wsj.com/articles/trump-administration-to-grant-miningleases-that-will-benefit-landlord-of-presidents-daughterivanka-trump-1513989674; Mark Maremont and James V. Grimaldi, "Ivanka and Jared Kushner's Rent in Washington: \$15,000 a Month," *The Wall Street Journal*, April 3, 2017, available at https://www.wsj.com/articles/ivanka-trumpand-jared-kushners-rent-in-washington-15-000-a-month-1491234218?mod-article_inline.
- 11 Center for Responsive Politics, "Twin Metals," available at https://www.opensecrets.org/lobby/clientsum. php?id=F210933%20%20%20&year=2018 (last accessed May 2019).
- 12 Anthony Esposito, "Chile public prosecutor investigates former minister for bribery," Reuters, June 21, 2016, available at https://www.reuters.com/article/us-chile-crimeantofagasta-idUSKCN0Z72JF; Rosalba O'Brien, "Chilean president's family caught up in loan scandal," Reuters, February 10, 2015, available at https://www.reuters.com/ article/chile-scandal-idUSL5N0VK3LZ20150210.
- 13 Dan Kraker, Duluth News Tribune, "Feds reopen forests near Boundary Waters to mining," MPR News, September 6, 2018, available at https://www.mprnews.org/ story/2018/09/06/boundary-waters-mining; U.S. Department of the Interior, "Obama Administration Takes Steps to Protect Watershed of the Boundary Waters of the Canoe Area Wilderness."

- 14 Environmental Protection Agency, "TRI Explorer," available at https://iaspub.epa.gov/triexplorer/release_ industry?epa_region=&p_view=USSC&ttrilib=TRIQ1&TAB_ RPT=1&LINESPP=&sort=RE_TOLBY&FLD=RELLBY&FL D=TSFDSP&sort=fmt=2&TopN=27&STATE=AII+states &COUNTY=AII+counties&chemical=_ALL_&year=201 2&report=&BGCOLOR=%23D0E0FF&FOREGCOLOR= black&FONT_FACE=arial&FONT_SIZE=10+pt&FONT_ WIDTH=normal&FONT_STYLE=roman&FONT_ WEIGHT=bold (last accessed April 2019).
- 15 A. Peppas, K. Komnitsas, and I. Halikia, "Use of organic covers for acid mine drainage control," *Minerals Engineering* 13 (5) (2000): 563–574, available at https://www.sciencedirect. com/science/article/abs/pii/S0892687500000364.
- 16 Ata Akcil and Soner Koldas, "Acid Mine Drainage (AMD): causes, treatment and case studies," Journal of Cleaner Production 14 (2006): 1139–1145, available at https://www.deepdyve.com/lp/elsevier/acid-minedrainage-amd-causes-treatment-and-case-studies-WNJk0CWTRB?key=citeulike; Stu Levit, "Follow-Up Report: Acid Mine Drainage and other Water Quality Problems at Modern Copper Mines Using State-of-the-Art Prevention, Treatment, and Mitigation Methods" (Bozeman, MT: Center for Science in Public Participation, 2018), available at https://earthworks.org/cms/assets/ uploads/2018/12/22-Levit-S.-M.-Follow-Up-Report-Acid-Mine-Drainage-and-other-Water-Quality-Problems-at-Modern-Copper-Mines-Using-State-of-the-Art-Prevention-Treatment-and-Mitigation-Methods-Levit-2018b.pdf.
- 17 Bonnie Gestring, "U.S. Copper Porphyry Mines Report: The Track Record of Water Quality Impacts Resulting From Pipeline Spills, Tailings Failures and Water Collection and Treatment Failures" (Washington: Earthworks, 2012), available at https://earthworks.org/cms/assets/ uploads/2012/08/Porphyry_Copper_Mines_Track_Record_-_8-2012.pdf.

18 Ibid.

- 19 Antonio Belmar and others, "Conflicts Over Water In Chile: Between Human Rights and Market Rules" (Santiago: Chile Sustentable, Berlin: Hinrich-Böll-Stiftung, Ottawa: The Council of Canadians, 2010), available at http://www.chilesustentable.net/wp-content/uploads/2015/06/Conflictsover-Water-in-Chile.pdf.
- 20 Antonio de la Jara and Gram Slattery, "Chile regulator draws up charges against Antofagasta's Los Pelambres mine," Reuters, October 13, 2016, available at https://www. reuters.com/article/us-chile-mining-regulator-idUSKC-N12E003.
- 21 Tom Daly, "Antofagasta approves \$1.3 billion Los Pelambres copper mine expansion," Reuters, November 15, 2018, available at https://www.reuters.com/article/us-china-copper-antofagasta/antofagasta-approves-1-3-billion-los-pelambres-copper-mine-expansion-idUSKCN1NK0JU.
- 22 Spencer Phillips and Carolyn Alkire, "Sulfide-Ore Copper Mining and/or A Sustainable Boundary Waters Economy: The Need to Consider Real Tradeoffs" (Charlottesville, VA: Key-Log Economics, 2017), available at https://www. savetheboundarywaters.org/sites/default/files/attachments/sulfideorecopperminingandtheboundarywaters_final_20170718.pdf.
- 23 James H. Stock and Jacob T. Bradt, "U.S. Forest Service (USFS) Environmental Assessment (EA) on Proposed 20-year Mineral Leasing Withdrawal in Superior National Forest," Harvard University, August 6, 2018, available at https://scholar.harvard.edu/files/stock/files/snf_withdrawal_ea_stock_and_bradt_aug6_2018.pdf.
- 24 Richard Pérez-Peña, "U.S. Blocks Mine Planned Near Boundary Waters in Minnesota," *The New York Times*, December 15, 2016, available at https://www.nytimes. com/2016/12/15/us/boundary-waters-minnesota-mining. html; National Environmental Policy Act, Public Law 190, 91st Cong., 1st sess. (January 1, 1970), available at https:// www.govinfo.gov/content/pkg/STATUTE-83/pdf/STATUTE-83-Pg852.pdf.

- 25 Tom Tidwell, "Local View: Industrial mining must be kept away from the Boundary Waters," *Duluth News Tribune*, November 3, 2018, available at https://www.duluthnewstribune.com/opinion/columns/4524156-local-view-industrial-mining-must-be-kept-away-boundary-waters.
- 26 Ibid.; Thomas L. Tidwell, "Twin Metals Proposed Lease Renewal with Bibliography," U.S. Department of Agriculture, December 14, 2016, available at https://www.savetheboundarywaters.org/sites/default/files/attachments/ twin_metals_proposed_lease_renewal_with_bibliography. pdf.

27 Ibid.

- 28 Hilary C. Tompkins, "Twin Metals Minnesota Application to Renew Preference Right Leases (MNES-01352 and MNES-01353)," U.S. Department of Interior, March 8, 2016, available at https://www.doi.gov/sites/doi.gov/files/ uploads/m-37036.pdf.
- 29 Pérez-Peña, "U.S. Blocks Mine Planned Near Boundary Waters in Minnesota."
- 30 Daniel H. Jorjani, "Reversal of M-37036, 'Twin Metals Minnesota Application to Renew Preference Rights Leases (MNES-01352 and MNES-01353)," U.S. Department of Interior, Dec 22, 2017, available at https://www.doi.gov/sites/doi.gov/files/uploads/m-37049.pdf; Helmberger, "Old memos shed new light on Twin Metals leases."
- 31 U.S. Forest Service, "Forest Service Moving Forward With Environmental Analysis for Proposed Mineral Withdrawal on Superior National Forest," Press release, January 26, 2018, available at https://www.fs.usda.gov/detail/superior/ news-events/?cid=FSEPRD570103.
- 32 Duluth News Tribune, "Twin Metals gets leases back from Feds," May 2, 2018, available at https://www.duluthnewstribune.com/business/energy-and-mining/4440253-twinmetals-gets-leases-back-feds.
- 33 U.S. Department of Agriculture, "USDA Removes Roadblock to Mineral Exploration in Rainy River Watershed," Press release, September 6, 2018, available at https://www.usda. gov/media/press-releases/2018/09/06/usda-removesroadblock-mineral-exploration-rainy-river-watershed; Kraker, "Feds reopen forests near Boundary Waters to mining."
- 34 Betty McCollum, "Secretary Perdue to Rep. McCollum: Boundary Waters Environmental Review Will Proceed," YouTube, May 25, 2017, available at https://www.youtube. com/watch?time_continue=299&v=acas2sWWtWU; House Appropriations Committee, "Department of Agriculture Budget Request for Fiscal Year 2020 (EventID=109280)."
- 35 Bureau of Land Management, "Bureau of Land Management Proposes to Renew Hardrock Mineral Leases With Updated Stipulations in the Superior National Forest," Press release, December 20, 2018, available at https://www.blm.gov/press-release/bureau-land-management-proposes-renew-hardrock-mineral-leases-updated-stipulations; Bureau of Land Management, "Environmental Assessment: Addition of Terms and Conditions for Renewal of Hardrock Leases, MNES 001352 and MNES 001353" (Washington: U.S. Department of the Interior, 2018), available at https://eplanning.blm.gov/epl-front-office/projects/nepa/98730/164517/200658/DraftEA_TwinMetalsLeaseRenewal_2019_12_20.pdf.

- 36 John Barber and others, "Twin Metals Minnesota Project: NI 43-101 Technical Report on Pre-feasibility Study" (Duluth, MN: Duluth Metals, 2014), available at http://www.twinmetals.com/wp-content/uploads/2012/09/TMM-Project-PFS-Technical-Report.pdf.
- 37 Fabrizio Ward, LLC, "Save the Boundary Waters Survey" (Fort Lauderdale, FL: 2018), available at https://www.savetheboundarywaters.org/sites/default/files/attachments/ stbw_deck_statewide_public__final.pdf.

38 Ibid.

- 39 Steve Karnowski, "Lawsuit challenges federal leases for planned Minnesota mine," The Associated Press, June 21, 2018, available at https://apnews.com/099b017627a6493a 9024df7b66ca676d.
- 40 Earthjustice, "Lawsuit Aims to Prevent Mining Pollution Near Boundary Waters Wilderness in Minnesota," Press release, June 25, 2018, available at https://earthjustice. org/news/press/2018/lawsuit-aims-to-prevent-miningpollution-near-boundary-waters-wilderness-in-minnesota; Jimmy Lovrien, "More groups sue Department of Interior over mineral leases," Duluth News Tribune, June 25 2018, available at https://www.duluthnewstribune.com/news/ government-and-politics/4464734-more-groups-suedepartment-interior-over-mineral-leases.
- 41 Save the Boundary Waters, "As the danger intensifies, 170 businesses and organizations urge the federal government to protect the Boundary Waters Wilderness," Press release, May 31, 2018, available at https://www.savetheboundarywaters.org/sites/default/files/attachments/18-05-25_pressrelease__1.pdf.
- 42 Betty McCollum and Raúl M. Grijalva, "USDA DOI letter on SNF Mineral Withdrawal cancellation," Office of Rep. Betty McCollum, November 5, 2018, available at https://mccollum.house.gov/sites/mccollum.house.gov/files/documents/18.1105%20USDA%20DOI%20letter%20on%20 SNF%20Mineral%20Withdrawal%20cancellation.pdf.
- 43 Raúl M. Grijalva, Betty McCollum, and Alan S. Lowenthal, "Grijalva to USDA and DOI on BWCAW," House Committee on Natural Resources, March 1, 2019, available at https:// naturalresources.house.gov/imo/media/doc/2019-3-1%20 Grijalva%20to%20USDA%20and%20DOI%20on%20BW-CAW.pdf.
- 44 Fabrizio Ward, LLC, "Save the Boundary Waters Survey"; Dylan Brown, "Trump brags about lifting ban near Boundary Waters," E&E News, April 16, 2019, available at https:// www.eenews.net/stories/1060169863.
- 45 Hannah Jones, "Trump brags of helping foreign company threaten Minnesota's Boundary Waters," *City Pages*, April 16, 2019, available at http://www.citypages.com/news/trumpbrags-of-helping-foreign-company-threaten-minnesotasboundary-waters/508610561.

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