

STATE OF MINNESOTA
COUNTY OF HENNEPIN

DISTRICT COURT
FOURTH JUDICIAL DISTRICT

Case Type: Civil - Other

Stinson LLP,

Court File No. _____

Plaintiff,

COMPLAINT

v.

University of Minnesota,

Defendant.

INTRODUCTION

1. This is an action to compel the Defendant University of Minnesota (“University”) to comply with its obligations under the Minnesota Government Data Practices Act (“DPA”).

2. Under the DPA, “government data are presumed to be accessible to the public” in recognition of “the public’s right ‘to know what the government is doing.’” *Westrom v. Minn. Dep’t of Labor & Indus.*, 667 N.W.2d 148, 150 (Minn. Ct. App. 2003), *aff’d*, 686 N.W.2d 27 (Minn. 2004).

3. To achieve these goals, the DPA requires Minnesota government agencies, including the University, to make public records available for inspection in a prompt and timely manner.

4. This means a state agency, upon receiving a DPA request, must take reasonable steps to preserve responsive data and documents.

5. In August 2020, Plaintiff Stinson LLP (“Plaintiff”) submitted two DPA requests to the University. Plaintiff received no response to these requests for eight weeks and no responsive data for nineteen weeks.

6. As of the date of this Complaint, Plaintiff has received only a small fraction of the data it requested, consisting of approximately 850 documents, many of which were already publicly available or duplicative.

7. The University has rebuffed Plaintiff’s efforts to prioritize and to work with the University to streamline the University’s response obligations. Among other things, the University refused to preserve responsive data until months after the DPA requests were submitted; ignored Plaintiff’s communications; failed to deliver updates when promised; refused to discuss a production schedule; and brushed aside a search term proposal designed to *reduce* the University’s response obligations and speed up its response. Most recently, the University has refused to engage with Plaintiff or provide status updates, leaving Plaintiff in the dark about when, if ever, the University will comply with its obligations.

8. Through its actions and inactions, the University has denied Plaintiff its statutory right to inspect public data in an “appropriate and prompt manner.” Minn. Stat. § 13.03, subd. 2(a); *see also* Minn. R. 1205.0300 (“[T]he responsible authority shall provide for a response to a request for access within a *reasonable time*.” (emphasis added)). Intervention by this Court is necessary to ensure that Plaintiff receives the access guaranteed by the DPA and the University complies with its obligations to the public.

PARTIES

9. Stinson LLP is a partnership and a “person” within the context of the DPA. Minn. Stat. § 13.02, subd. 10.

10. Plaintiff is an “aggrieved person” because the University is denying it access to public data. *See* Minn. Stat. § 13.08, subd. 4.

11. The University is a government entity with obligations under the DPA. Minn. Stat. § 13.02, subd. 17.

JURISDICTION AND VENUE

12. This action arises under the DPA, Minnesota Statute § 13.01, *et seq.*

13. This Court has subject matter jurisdiction over actions to compel compliance and actions seeking injunctions under the DPA. Minn. Stat. § 13.08, subs. 2, 4.

14. This Court has personal jurisdiction over the Defendant, and venue is proper, because the facts giving rise to Plaintiff’s claims occurred in Hennepin County and the University is located in Hennepin County. Minn. Stat. § 13.08, subd. 3.

STATUTORY BACKGROUND

15. Government entities are required to “make and preserve all records necessary to a full and accurate knowledge of their official activities.” Minn. Stat. § 15.17, subd. 1.

16. The government entity has an obligation to “carefully protect and preserve government records from deterioration, mutilation, loss, or destruction.” Minn. Stat. § 15.17, subd. 2.

17. Access to those records is governed by the DPA. Minn. Stat. *Id.* § 15.17, subd. 4.

18. The DPA “regulates the collection, creation, storage, maintenance, dissemination, and access to government data in government entities.” Minn. Stat. § 13.01, subd. 3. It “establishes a presumption that government data are public and are accessible by the public.” Minn. Stat. § 13.01, subd. 3. The public has a right to access public data. *See, e.g., Westrom*, 667 N.W.2d at 150.

19. To ensure that agencies comply with the legislative mandate to make data available for public inspection, the DPA instructs state agencies to designate a “responsible authority,” who is in charge of “collection, use and dissemination of any set of data on individuals, government data, or summary data.” Minn. Stat. §§ 13.02, subd. 16(a), (b); 13.03, subd. 1.

20. The responsible authority must establish procedures to “insure that requests for government data are received and complied with in an appropriate and prompt manner.” Minn. Stat. § 13.03, subd. 2(a).

21. A person may submit a request to the responsible authority to inspect or copy public government data. Minn. Stat. § 13.03, subd. 3(a).

22. The responsible authority has an obligation to inform the requester if the requested public data is confidential, copyrighted or otherwise not available to the public. Minn. Stat. § 13.03, subds. 3(f), 4, 5.

FACTUAL ALLEGATIONS

23. In June 2020, Minnesota Attorney General Keith Ellison filed a complaint in the District Court of Ramsey County against the American Petroleum Institute and several oil and gas companies (the “API Defendants”). *See* Compl., *Minnesota v. American Petroleum Institute, et al.*, No. 62-CV-20-3837 (Minn. Dist. Ct. filed June 24, 2020). Echoing allegations made by attorneys general in other jurisdictions, General Ellison alleges, among other things, that the oil industry engaged in the ongoing public debate on alleged climate change (“climate change”) and thereby misled the public for decades about the environmental effects of carbon emissions. This, he alleges, caused the federal government (and governments throughout the world) to impose less stringent regulations on fossil fuels, leading to greater fossil fuel consumption. General Ellison

alleges that this consumption of fossil fuels throughout the world led to increased temperatures, which allegedly caused a variety of injuries to Minnesota and its citizens.

24. University faculty (and others associated with the University) have directly and frequently participated in the ongoing public debate about climate change and climate change litigation, and several faculty members have assisted the Attorney General's Office in crafting the theories of liability and alleged injuries set forth in the June 2020 complaint.

25. More specifically, information obtained from the Attorney General's Office reflects that University employees actively and directly contributed to the development of legal theories for bringing suit against the API Defendants, including by researching and preparing legal memoranda setting out these theories and the strengths and weaknesses of those theories.

26. To better understand the University's participation in these matters of great public importance, on August 26, 2020, Plaintiff submitted two separate DPA requests: one to the Twin Cities campus and one to the Duluth campus. *See* Ex. A and B.

27. By October 20, 2020—nearly eight weeks after it submitted its requests—Plaintiff had received no response from the University. Plaintiff wrote the University that day, asking the University either to grant prompt access to the requested data or to provide written objections to the underlying requests.

28. The University delayed another week before responding. On October 27, the responsible authority for the University acknowledged the two DPA requests. In that correspondence, the University asked Plaintiff to narrow the requests in two ways: first, to identify specific employees as document custodians; and second, to prioritize the requests.

29. Plaintiff promptly complied. On November 11 and November 13, respectively, Plaintiff sent the University two letters. These letters clarified that certain DPA requests, generally

related to the topic of climate change research and climate change litigation, should receive the highest priority. These letters also identified specific professors associated with those requests.

30. Plaintiff and a University representative then spoke on December 9. During that call, the University stated it was unable to estimate how long it would take to respond to the requests. The University stated that it had only three full-time staff members working on DPA requests and, at that time, had over 140 pending requests. It also explained its process for prioritizing and responding to requests.

31. Specifically, the University stated that its practice is to process requests based on complexity rather than date of the request. As a result, the University generally prioritizes smaller, simple requests over requests that it deems larger or more complex, regardless of which requests were submitted first. The University also explained that it had not implemented a litigation hold or instructed relevant document custodians of their duty to preserve responsive materials.

32. As an example of how long it could take to process and respond to Plaintiff's requests, the University noted that it had one request, seeking data from the emails of two professors over a nine-month period, that had been pending for over a year and that *no* data responsive to that request had been produced. The practical effect of the University's problematic approach to responding to DPA requests that the University deems "larger or more complex" is that the University may take years to respond to those requests. This approach is not consistent with the DPA or the policy goals underlying the DPA.

33. Practically, the limitations and inadequacies of the University's process have meant that other state agencies have produced documents authored by University professors well before the University.¹ *See* Ex. C.

34. On December 18, 2020, Plaintiff requested an update on the status of its requests. Plaintiff reminded the University that, at the University's suggestion, Plaintiff had prioritized its requests and identified a specific set of professors. Plaintiff also reminded the University of its obligation to preserve data under the DPA and Minnesota Statute § 15.17. In its December 18 letter, Plaintiffs asked the University to provide available times to discuss these issues before the holidays. The University never responded.

35. On January 5, 2021, the University produced approximately thirty documents—its first release of data since the August 26 requests. The bulk of that production consisted of the curriculum vitae of two professors (which were publicly available) and a chapter from a textbook. Plaintiff also received a letter from a different representative stating that the University “will provide responsive data as soon as feasible.” Ex. D. That letter did not acknowledge, much less address, Plaintiff's concerns about document preservation raised in Plaintiff's December letter.

36. In the ensuing five weeks, Plaintiff repeatedly asked the University to take reasonable steps to preserve responsive data. The University continued its pattern of delay. Not only did the University ignore several communications from Plaintiff, but the University initially refused to send preservation notices to the named document custodians. It was not until

¹ To be clear, this action is in no way intended to interfere with academic freedom, to target particular political viewpoints, or to inhibit speech or expression. To the contrary, and as demonstrated by Exhibit C, certain University faculty appear to have assisted in the development of a legal theory and lawsuit filed by the Attorney General. It is the flawed lawsuit developed by University employees and filed by the Attorney General that is targeting speech and seeking liability for expressing viewpoints.

February 4—over five months after the DPA requests were issued, and nearly seven weeks after Plaintiff's December 18 letter—that the University confirmed in writing that (i) Google Vault holds had been implemented on all custodians' Google accounts and (ii) certain current University employees had received preservation instructions.

37. Despite the foregoing, the University still refused to send preservation instructions to a number of former employees who likely have materials responsive to Plaintiff's requests. These former employees include, for example, the former director of the Institute of the Environment at the University of Minnesota Twin Cities. This individual was involved in research related to climate change when she worked at the University.

38. While the University's actions with respect to document preservation are problematic, its failure to work with Plaintiff to streamline the review and production process—and thereby ensure Plaintiff timely access to responsive data—is of even greater concern.

39. In late January, having received just one small production over the course of five months, Plaintiff asked the University to discuss the overall timing of future productions. The University resisted, claiming any estimate would be difficult given the scope of Plaintiff's requests, and suggested that Plaintiff could expedite the process by limiting the relevant date ranges. Plaintiff offered to consider a temporal limitation for its priority items. Plaintiff also asked the University to identify any other issues, apart from temporal scope, that are likely to cause delay.

40. On February 8, Plaintiff received a second production from the University. The February 8 production contained certain emails that the University had previously produced to another party in response to a different DPA request, but inexplicably did not include any of the attachments to those emails.

41. Plaintiff and the University spoke again on February 17. During that call, Plaintiff offered to further prioritize its DPA requests. This prioritization would have focused the University's initial response obligations on a handful of requests related to climate change and a handful of custodians. The prioritization also would have restricted the relevant date range to 2016 to August 2020. The University also asked Plaintiff to consider narrowing the topic to climate change *litigation*. Plaintiff agreed to consider that accommodation.

42. The next day, Plaintiff wrote the University and agreed to the University's request. Plaintiff's email confirmed the new priorities and related date range. Plaintiff also proposed search terms to aid in reviewing the emails and documents of the three top-priority custodians. In that email, Plaintiff asked the University to test the terms by running a hit report on the three custodians' electronic files for the relevant period. The purpose of this request was simple: to determine whether the proposed search terms would help narrow the University's review burden and thereby facilitate timely production of responsive materials.

43. Eight days later, having received no response to the February 18 email or a February 23 follow-up, Plaintiff emailed the University yet again, asking for an update on both the timing of the University's next production and a call to discuss the search term proposal.

44. It was not until March 1, nearly three weeks after the parties' prior call, that the University made itself available to discuss these issues. But on the March 1 call, the University provided no new information. It had not discussed the missing email attachments from the February production; it had not discussed the proposed search terms with its IT staff; and it had no sense for when its next production was expected. The University did, however, commit to addressing those issues over the next week.

45. On March 8, having received no update, Plaintiff emailed the University and proposed a call for that day or the next. The University never responded. Plaintiff then emailed the University on March 10, repeating the request and proposing times later in the week. The University ignored this request as well. Finally, on March 12, after yet another email from Plaintiff, the University agreed to speak the following week.

46. The parties' March 17 call was more of the same. The University still had no update on the missing email attachments; still would not commit to a timeline for future productions; and still had not tested Plaintiff's proposed search terms for the three top-priority custodians. Claiming the new date range of 2016 to August 2020 was still too broad, the University asked Plaintiff to yet again narrow its requests by limiting the period to 2018 to August 2020.

47. On March 18, the University made its third production of approximately 40 documents, consisting largely of documents unrelated to the climate change litigation.

48. Shortly thereafter, Plaintiff agreed (for the fourth time) to further prioritize its requests. On March 23, after the University finally explained the missing email attachments, Plaintiff informed the University that it could apply the narrowed date range of 2018 to August 2020 to the top-priority requests. Plaintiff also repeated its request that the University test the terms—proposed over a month earlier—on the three custodians over the truncated period. The University agreed to give Plaintiff an update by the end of the following day.

49. The University once again failed to deliver, and provided no update on March 24. Plaintiff wrote to the University on March 25, reminding the University of its agreement to provide an update by March 24, and renewing its request for an update on the search term process. The University responded, indicating it was busy, and declined to provide any substantive update. Plaintiff followed up yet again on March 29, and was told that day that the University had no

update and no time to meet to discuss these matters further. The University offered no explanation for why it failed to provide an update on March 24, as promised, and no indication as to when (if ever) the University planned to test the proposed search terms

50. On April 8, 2021, the University made its fourth production of 70 documents, at least a quarter of which were multiple versions of the same email string or document.

51. On April 20, 2021, the University made its fifth production of 172 documents, again, many of which were duplicates. The batch demonstrates that the University does have responsive documents but it did not produce them until eight months after Plaintiff's requests were served.

52. On April 27, 2021, having received no further communication from the University since March 29, Plaintiff again requested a meeting to continue the discussion, still unresolved since February, about using search terms to aid the University's efforts to respond to Plaintiff's request, sending preservation notices to certain custodians, and producing the email attachments that should have been part of the University's production in January. As of the date of this Complaint, the University has not responded to the April 27 email.

53. This sequence confirmed what Plaintiff had long suspected: the University has no intention of granting the public timely access to information about its faculty's activities related climate change litigation.

54. Rather than permit the public to "know what the government is doing," the University is treating Plaintiff's DPA requests as a matter of nuisance that merits no significant attention, and, indeed, ignoring its statutory obligations to the public under the DPA. This leaves Plaintiff no choice but to seek recourse in the courts and judicial assistance in securing public data to which Plaintiff is entitled.

55. As a result of the University's limited compliance procedures and reluctance to provide access to public data, the University has failed to respond to Plaintiff's requests in a timely manner, and has refused to commit to a reasonable response and production schedule.

56. The University's conduct in this situation raises serious questions as to how it approaches its DPA obligations. Plaintiff is a law firm with considerable resources to devote to this important cause, and in that regard is likely an outlier among those seeking public data from the University. Unlike Plaintiff, a typical member of the public lacks the resources and legal expertise needed to take drastic measures, such as this action, to compel the University's compliance with its statutory duties.

57. This action therefore constitutes an important bellwether with respect to the University's obligations under Minnesota law to be transparent as to "what the government is doing"—transparency that, as the state legislature has recognized in authorizing DPA requests, works to the good of government and the benefit of the people of Minnesota.

DPA VIOLATIONS

58. As of the date of this Complaint, the University has not complied with Plaintiff's DPA requests.

59. The requested data is presumed to be public, Minn. Stat. § 13.01, subd. 3, and the University has not informed Plaintiff that any of the requested data is not public.

60. The University has not complied with its obligation to respond to Plaintiff's data requests in "an appropriate and prompt manner." Minn. Stat. § 13.03, subd. 2(a).

61. Plaintiff did not receive any response from the University between the submission date of August 26, 2020, and October 26, 2020. There was no response from the University for over eight weeks.

62. In addition, the University has not meaningfully responded to Plaintiff's requests as of the date of this Complaint. The University violated the standard set forth in Minnesota Commission Advisory Opinion 02-026, which concluded that a government entity "did not respond in an appropriate and timely manner" where it "did not respond at all for six weeks." *See also* Advisory Opinion 96-003 ("[A] response to a request for data, delivered six weeks later, cannot be considered prompt.").

63. The University did not provide any data between August 26, 2020, and January 5, 2021, when it made a partial production of responsive data nearly *nineteen weeks* after Plaintiff submitted its requests. This production consisted of five non-unitized .pdf documents, two of which are publicly available curriculum vitae of University of Minnesota professors.

64. Subsequent productions have been similarly perfunctory. They consisted of: (i) a single, non-unitized pdf of email chains with no attachments; (ii) curricula vitae of several professors and documents unrelated to climate change litigation; and (iii) roughly seventy email strings, many of which were duplicates.

65. The University has not complied with its obligations to establish procedures that "insure" appropriate and prompt responses. Minn. Stat. § 13.03, subd. 2(a).

66. Under its established procedures, the University's compliance with Plaintiff's requests, if it occurs at all, will likely take well over a year. It has already taken seven months, and the University still has not complied with Plaintiff's requests.

67. Several Advisory Opinions conclude that a delay of eight months between request and receiving the data is not timely or prompt, as required by statute. *See*, Advisory Opinions 19-010 & 06-029.

68. Other government entities have conceded that a six-month delay from mid-August to mid-January is an untimely response. *Webster v. Hennepin County*, 910 N.W.2d 420, 431 (Minn. 2018).

69. The University is acting contrary to the standard set forth in *Webster*, 910 N.W.2d at 431. In *Webster*, the Supreme Court explained that the DPA requires government entities to have “‘established procedures,’ [that] when followed, should result in appropriate and prompt responses *in all cases.*” *Id.*

70. The University refuses to provide any specific estimate for when it might respond to the request, but has indicated that compliance will take more than a year.

71. Such a timeline is contrary to Advisory Opinions 19-010 and 06-029 and the Supreme Court’s guidance in *Webster*.

72. The University did not undertake reasonable steps to ensure that current professors preserve responsive data and that responsive data is not lost or destroyed for four months following Plaintiff’s DPA request.

73. Further, the University has done nothing to preserve potentially responsive data in the possession of former employees and professors.

74. Plaintiff reserves the right to add a claim for failure to preserve if it learns of any spoliation. *See Halva v. Minn. State Colls. & Univs.*, 953 N.W.2d 496, 506–07 (Minn. 2021).

CLAIMS FOR RELIEF

COUNT ONE

Failure to Respond in an “Appropriate and Prompt Manner” (Minn. Stat. § 13.03, subd. 2)

1. Plaintiff restates and incorporates by reference each and all of the above-numbered paragraphs.

2. Plaintiff is aggrieved by Defendant's failure to respond to its requests under the DPA in an appropriate and prompt manner.

3. Defendant's actions and failures constitute violations of the DPA.

4. Plaintiff is entitled to remedies including an order compelling Defendant's compliance with the DPA.

DEMAND FOR RELIEF

WHEREFORE, Plaintiff Stinson LLP requests judgment in its favor against the University of Minnesota, pursuant to § 13.08, subd. 2 and 4, awarding Plaintiff the following:

- A. An order compelling the University to produce all data responsive to Plaintiff's requests by a date certain, such date to be determined by the Court following a hearing on the record;
- B. All attorney fees, costs and expenses allowed under Minnesota Statute 13.08, subd.4;
- C. Such other and further relief as the Court deems necessary, just or proper.

Dated: May 7, 2021

/s/ Todd Noteboom

Todd Noteboom, #0240047

Peter Schwingler, #0388909

STINSON LLP

50 South Sixth Street, Suite 2600

Minneapolis, MN 55402

(612) 335-1500

todd.noteboom@stinson.com

peter.schwingler@stinson.com

ATTORNEYS FOR PLAINTIFF



EXHIBIT A

MINNESOTA
JUDICIAL
BRANCH



Andrew W. Davis

PARTNER

DIRECT: 612.335.1556

OFFICE: 612.335.1500

Andrew.Davis@stinson.com

August 26, 2020

Lynne Williams, Director of University Marketing and Public Relations
302 Darland Administration Bldg
1049 University Drive
Duluth, MN 55812

Data Request – Public Data

Re: Request for public data under the Data Practices Act

Dear Ms. Williams:

We are writing to you as the responsible authority for the University of Minnesota - Duluth (“University”). This letter is a formal request for access to government data under the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13. If there is a designee to whom we should direct this data request, please inform me as soon as possible.

For purposes of these data requests, the term “climate change” includes but is not limited to global warming and greenhouse gas emissions.

We seek access to the following data, including, for each request below, data contained in written documents, letters, e-mails, text messages, notes, reports, meeting minutes, internal memoranda, and the like:

- All data relating to the participation, coordination, research, promotion, or other activity by the University or its faculty related to any climate change litigation or putative climate change litigation, including by Professors John Green (emeritus), John Goodge, Richard Axler, or Byron Steinman.
- All data relating to internal communications, including e-mail communication, by or between Professors John Green (emeritus), John Goodge, Richard Axler, and/or Byron Steinman regarding climate change or climate change litigation.
- All data relating to internal communications, including e-mail communication, by or between Professors John Green (emeritus), John Goodge, Richard Axler, and/or Byron Steinman regarding their letter to the editor of the Duluth News Tribune dated August 11, 2020, *see* <https://www.duluthnewstribune.com/opinion/letters/6606299-Readers-View-Beware-biased-sources-of-climate-deniers>.
- All data relating to communications, including e-mail communication, by or between Professors John Green (emeritus), John Goodge, Richard Axler, Byron Steinman, and/or the Minnesota Attorney General’s Office, regarding climate change or climate change litigation.

50 South Sixth Street, Suite 2600, Minneapolis, MN 55402

STINSON LLP  STINSON.COM

August 26, 2020

Page 2

- All data relating to communications, including e-mail communication, by or between Professors John Green (emeritus), John Goodge, Richard Axler, Byron Steinman, and/or any other local, state, federal, or other governmental agency, regarding climate change or climate change litigation.
- All data relating to communications, including e-mail communication, by or between Professors John Green (emeritus), John Goodge, Richard Axler, Byron Steinman, and/or any non-governmental organization including the Minnesota Center for Environmental Advocacy, regarding climate change or climate change litigation.
- All data relating to research on climate change, including but not limited to research regarding the sources and causes of climate change and the effects or impacts of climate change both inside and outside of Minnesota.

We are requesting the opportunity to inspect this data pursuant to Minnesota Statutes, section 13.03, subdivision 3.

If you determine that you will redact or withhold any data that is otherwise responsive to the above requests, please inform us in writing of the specific statutory basis or bases for your denial.

If you have any questions or need clarification regarding these requests, please contact me at your earliest convenience. I can be reached at andrew.davis@stinson.com or 612.335.1556.

Sincerely,

Stinson LLP



Andrew W. Davis



EXHIBIT B

MINNESOTA
JUDICIAL
BRANCH



Andrew W. Davis

PARTNER

DIRECT: 612.335.1556

OFFICE: 612.335.1500

Andrew.Davis@stinson.com

August 26, 2020

Records and Information Management Office
University of Minnesota – Twin Cities
360 McNamara Alumni Center
200 Oak Street SE
Minneapolis, MN 55455-2006

Data Request – Public Data

Re: Request for public data under the Data Practices Act

Dear Records and Information Management Office:

We are writing to you as the responsible authority for the University of Minnesota (“University”). This letter is a formal request for access to government data under the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13. If there is a designee to whom we should direct this data request, please inform me as soon as possible.

For purposes of these data requests, the term “climate change” includes but is not limited to global warming and greenhouse gas emissions.

We seek access to the following data, including, for each request below, data contained in written documents, letters, e-mails, text messages, notes, reports, meeting minutes, internal memoranda, and the like:

- All data relating to the participation, coordination, research, promotion, or other activity by the University or its faculty related to any litigation or putative litigation related to or involving climate change, including (without limitation) by the University of Minnesota Law School, the Humphrey School of Public Affairs, Professor Alexandra Klass, Dr. Stephen Polasky, Dr. Gabe Chan, or J. Drake Hamilton. The data requested includes, but is not limited to, all communications (whether in electronic form, hard copy, or otherwise) to or from the individuals named above that refer or relate in any way to litigation or putative litigation related or involving climate change.
- All data relating to the University’s purchase, use, consumption, or sale of fossil fuels, including but not limited to gasoline, diesel fuel, or other petroleum products for use in automobiles, trucks, aircraft, and other vehicles and equipment owned, leased or used by the University.
- All data relating to the total volume of gasoline, diesel fuel, and all other petroleum products purchased or used by the University of Minnesota, or any other state agency, over the past 20 years.
- All data relating to research on climate change, including but not limited to research regarding the sources and causes of climate change and the effects or impacts of climate change.

50 South Sixth Street, Suite 2600, Minneapolis, MN 55402

STINSON LLP  STINSON.COM

August 26, 2020

Page 2

- All data, including electronic communications, relating to research on meteorological and other consequences of climate change in Minnesota, including the following:
 - Rising temperatures;
 - Excessive rainfall and flooding;
 - Snow and ice cover;
 - Agricultural processes;
 - Drought;
 - Infrastructure;
 - Ecosystem harm; and
 - Public health.
- All data, including electronic communications, relating to research on the potential causes of climate change, both within and outside of Minnesota.
- All data relating to internal communications, including e-mail communication, by or between Professor Alexandra Klass, Dr. Stephen Polasky, and/or Dr. Gabe Chan, regarding climate change or actual or putative climate change litigation.
- All data relating to communications, including e-mail communication, by or between Professor Alexandra Klass, Dr. Stephen Polasky, Dr. Gabe Chan, and/or any non-governmental organizations or representatives, including Fresh Energy, J. Drake Hamilton, Vik Sher, Roberta Walburn, Sher Edling LLP, and the Minnesota Center for Environmental Advocacy, regarding climate change or climate change litigation.
- All data relating to communications, including e-mail communication, by or between Professor Alexandra Klass, Dr. Stephen Polasky, Dr. Gabe Chan, and the Minnesota Attorney General's Office, regarding climate change or climate change litigation.
- All data relating to communications, including e-mail communication, by or between Professor Alexandra Klass, Dr. Stephen Polasky, Dr. Gabe Chan, Vik Sher, Sher Edling LLP, Roberta Walburn, and the Minnesota Attorney General's Office, regarding a Seminar entitled "The Legal and Scientific Case for Recovering Climate Change Damages in Minnesota from Fossil Fuel Companies," which took place at the University of Minnesota Law School on October 15, 2019.
- All data relating to communications, including e-mail communication, by or between Professor Alexandra Klass, Dr. Stephen Polasky, Dr. Gabe Chan, and/or any other local, state, federal, or other governmental agency, regarding climate change or climate change litigation.
- All data, including e-mail communications, relating to the opinion piece published by Prof. Alexandra Klass in MinnPost dated July 13, 2020 and entitled, "Ellison extends a proud history: Holding ExxonMobil and Koch accountable."

August 26, 2020

Page 3

- All data relating to the University's annual expenditures (budgeted and actual) on travel, including airfare and reimbursed mileage, for the past ten years.
- All data relating to the preparation (including underlying research and associated communications) of the various materials addressing "the connection between climate change and health" referenced on the website of the Center for Global Health & Social Responsibility at globalhealthcenter.umn.edu/education/climatehealth.
- All data relating to the preparation and drafting of the component of the Mission Statement of the Department of Soil, Water, and Climate that states the department's mission is to "predict and mitigate impacts of environmental and climate change on ecosystems and society" (see www.swac.umn.edu/about-us/mission-statement).
- All data related to communications (internal and external), including e-mail communication, with respect to the research and findings documented in the research identified at www.swac.umn.edu/about-us/news/n2oemissions, including with respect to (but not limited to) the impact of agriculture on greenhouse gas emissions, global warming, and/or climate change.
- All data related to research showing or suggesting that global warming phenomena have increased crop yield in the upper Midwest United States, including but not limited to the State of Minnesota. Such data should include, but is not necessarily limited to, research performed in conjunction with the study identified at <https://twin-cities.umn.edu/research-brief-climate-change-already-affecting-global-food-production-and-not-equally>.

We are requesting the opportunity to inspect this data pursuant to Minnesota Statutes, section 13.03, subdivision 3.

If you determine that you will redact or withhold any data that is otherwise responsive to the above requests, please inform us in writing of the specific statutory basis or bases for your denial.

If you have any questions or need clarification regarding these requests, please contact me at your earliest convenience. I can be reached at andrew.davis@stinson.com or 612.335.1556.

Sincerely,

Stinson LLP



Andrew W. Davis



EXHIBIT C

MINNESOTA
JUDICIAL
BRANCH

UNIVERSITY OF MINNESOTA

Twin Cities Campus

*The Law School
Walter F. Mondale Hall*

*Room 285
229–19th Avenue South
Minneapolis, MN 55455
612-625-1000
Fax: 612-625-2011
<http://www.law.umn.edu/>*

MEMORANDUM

TO: Keith Ellison
Minnesota Attorney General

FROM: Alexandra B. Klass
Distinguished McKnight University Professor
University of Minnesota Law School

Sam Duggan, Minnesota Law Class of 2020
Allie Jo Mitchell, Minnesota Law Class of 2020
Hannah Payne, Minnesota Law Class of 2020
Nicholas Redmond, Minnesota Law Class of 2019

DATE: April 2, 2019

RE: Potential Lawsuit against Fossil Fuel Companies for Minnesota Climate Change Damages

INTRODUCTION

The State of Minnesota has already suffered harms associated with climate change resulting from the use of fossil fuels. These harms will increase in future years, resulting in additional, significant costs and damages to the State. These harms include:

- Costs associated with flooding, including costs of damages to state property and costs to mitigate and remediate the flooding related impacts to property and public health;
- Costs associated with damages to tourism and outdoor recreation, including mitigating climate-related stress to plant and animal species and ecological systems;
- Costs associated with damages to agricultural yields, management and mitigation of crop diseases and crop pests, and costs of adapting to less fertile soils;

- Costs associated with additional medical treatment and hospital visits necessitated by extreme heat events, increased allergen exposure, increased asthma attacks, and exposure to vector-borne disease as well as mitigation measures and public education programs to reduce the occurrence of these impacts;
- Costs associated with responding to, managing, and repairing damages to Minnesota forest lands, including impacts on state-run hunting and fishing industries;
- Costs of analyzing and evaluating the impacts of climate change on infrastructure, including transportation, water supply, wastewater treatment, and the power system and the costs of adapting to and remediating those impacts;
- Costs of responding to, managing, and repairing damage to Minnesota fisheries, including extinction of cool- and cold-water fish species and the spread of aquatic invasive species; and
- Costs associated with the threats to indigenous communities from disruptions to their livelihoods, health, and cultural identities.¹

As a means to recover the costs that have been incurred and will be incurred by the State of Minnesota, this Memorandum describes potential causes of action that the State of Minnesota could bring against the largest, privately-owned fossil fuel companies to establish liability for their contributions to climate-related harms in Minnesota. Such a lawsuit would likely be brought in Minnesota District Court, modeled after complaints filed by several governmental entities against the fossil fuel companies for damages.

Part I of this memorandum provides an overview of the climate damages lawsuits brought in other states as well as the Attorneys General who have supported or opposed them. Part II evaluates potential claims that could be brought to hold fossil fuel companies accountable under Minnesota state law, specifically consumer protection claims, product liability claims, and public nuisance and other common law tort claims.

¹ The nature of the harms summarized here are set forth in detail in the separate Memorandum of J. Drake Hamilton, Science Policy Director at Fresh Energy.

As in other climate damages cases, the defendants would likely include the largest, privately-owned fossil fuel companies, such as BP, Chevron, ConocoPhillips, ExxonMobil, and Shell.² Despite their long-standing knowledge of the risks associated with their products, these companies extracted, produced, promoted, and sold fossil fuel products that released massive amounts of CO₂ into the atmosphere. Based on peer-reviewed research known as the “Carbon Majors” report, 90 fossil fuel producers and cement manufacturers are known to be responsible for 63% of cumulative CO₂ and methane emissions since the beginning of the industrial revolution.³ Of those 90 carbon producers, 28 are responsible for 25% of emissions since 1965.⁴ In each of the climate damages lawsuits, plaintiffs have sued some set of the fossil fuel companies identified in the Carbon Majors report—for example, in the *San Mateo* case, described in Part I.A., Plaintiffs sued 23 of the named companies and their subsidiaries, which the Plaintiffs allege are collectively responsible for 20.3% of total CO₂ emissions between 1965 and 2015.

² The nature of each potential Defendant’s contacts with Minnesota is an issue that requires further research. In many of the climate damage lawsuits, discussed below, Defendants have challenged personal jurisdiction on grounds that Plaintiffs did not adequately link Defendants’ contacts in the state with the alleged harm. Minnesota law on personal jurisdiction is based on Minn. Stat. § 543.19 (Minnesota’s long-arm statute) as well as the Minnesota Supreme Court’s decision in *Money Mutual v. Rilley*, 884 N.W.2d 321 (Minn. 2016), *cert. denied*, 137 S. Ct. 1331 (2017) (interpreting Minn. Stat. § 543.19). *See also* Minn. Stat. § 116B.11 (allowing court to exercise personal jurisdiction for Minnesota Environmental Rights Act (“MERA”) claims over any person or corporation who commits any act in the state *or outside the state* which would “impair, pollute, or destroy the air, water, land, or other natural resources located within the state” or engages in any activities specified in Minn. Stat. § 543.19). Notably, various fossil fuel companies have significant contacts with Minnesota. For instance, a subsidiary of Koch Industries (Flint Hills Resources) owns the Pine Bend Refinery in Rosemount, Minnesota. In addition, Koch, Marathon, Enbridge, Amoco, and other oil and gas companies own and operate over 4,000 miles of crude oil and refined petroleum pipelines throughout the state. *See, e.g.*, MINNESOTA INTERAGENCY REPORT ON PIPELINES 2 (Dec. 2015), https://www.eqb.state.mn.us/sites/default/files/documents/Interagency%20Report%20on%20Oil%20Pipelines4_0.pdf.

³ Richard Heede, *Tracing Anthropogenic Carbon Dioxide and Methane Emissions to Fossil Fuel and Cement Producers, 1854-2010*, 122 CLIMATIC CHANGE 229 (Nov. 22, 2013).

⁴ *Id.*

DISCUSSION

I. Climate Change Lawsuits—Current Status

This section provides an overview of the recent climate damages lawsuits brought by several municipalities, one state, and one industry trade association against fossil fuel companies seeking damages for climate-related harms.⁵ This section will also discuss the positions of Attorneys Generals who have expressed their support or opposition to the climate damages lawsuits.

A. Damages Lawsuits for Climate-Related Harms

In 2017 and 2018, several governmental and private entities brought lawsuits seeking damages for climate-related harms caused by the extraction, production, promotion, and sale of fossil fuel products. The complaints assert statutory and common law claims, including consumer protection, public nuisance, private nuisance, trespass, and products liability. At the core of these lawsuits, Plaintiffs allege that the fossil fuel companies knew or should have known that the unabated extraction, production, promotion and sale of their fossil fuel products would result in material harm to the public. Instead of disclosing or taking appropriate action on this information, the fossil fuel companies “engaged in a coordinated, multi-front effort to conceal and deny their own knowledge of those threats, discredit the growing body of publicly available scientific evidence, and persistently create doubt in the minds of customers, consumers, regulators, the media, journalists, teachers, and the public about the reality and consequences of the impacts of

⁵ Other related actions include the lawsuit brought by the New York Attorney General against ExxonMobil for investor fraud, the investigation by the Massachusetts Attorney General as to whether ExxonMobil misled consumers and investors, and other climate lawsuits (such as *Juliana v. U.S.*, in which 21 youth plaintiffs have brought constitutional and public trust claims against the U.S. federal government in order to establish a national climate recovery plan). However, this Memorandum focuses solely on the lawsuits brought by governmental and private entities seeking damages for climate-related harms, and therefore does not address these other actions.

their fossil fuel pollution.” Complaint, *County of San Mateo v. Chevron Corp.*, No. 17CIV03222 (Cal. Super. Ct. July 17, 2017).⁶

These lawsuits are the second generation of tort lawsuits against fossil fuel companies for climate-related harms. The first lawsuits, filed in the early 2000s, sought relief in federal court under federal common law public nuisance, ultimately resulting in dismissal by the U.S. Supreme Court and the U.S. Court of Appeals for the Ninth Circuit. *See American Electric Power v. Connecticut*, 564 U.S. 410 (2011); *Native Vill. of Kivalina v. ExxonMobil Corp.*, 696 F.3d 849 (9th Cir. 2012), *cert. denied*, 569 U.S. 1000 (2013). These rulings serve as a backdrop for this second wave of tort litigation that looks to state law to hold fossil fuel companies accountable for climate-related harms.

In *American Electric Power*, several states and private land trusts brought federal public nuisance claims against the five largest GHG emitting facilities in the United States. 564 U.S. at 418. Plaintiffs sought an injunction against each defendant “to cap its carbon dioxide emissions and then reduce them by a specified percentage each year for at least a decade.” *Id.* at 419. The Supreme Court determined that the Clean Air Act displaced plaintiffs’ federal common law claims because the statute directly authorizes the EPA to regulate CO₂ emissions from stationary sources. *Id.* at 424 (citing 42 U.S.C. § 7411).

In *Kivalina*, an Alaskan village brought a public nuisance action against several fossil fuel companies and energy producers seeking to recover damages from climate change caused by defendant oil and utility companies’ GHG emissions. *Kivalina*, 696 F.3d at 854. Relying on

⁶ A common argument among defendants is that federal court is the proper venue, that federal law is the appropriate choice of law, and that the Clean Air Act displaces plaintiffs’ claims. As a result, they contend that the suits should be dismissed. All of the lawsuits are described in detail at the Sabin Center for Climate Change Law’s U.S. Climate Change Litigation Database, available at <http://climatecasechart.com/case-category/common-law-claims/>. For each case, the database has a summary of the case, its current status, and links to various court filings and decisions.

American Electric Power, the Ninth Circuit decided that the Clean Air Act displaces federal common law claims for harms caused by GHG emissions regardless of the relief sought. *Id.* at 857.

In response to *American Electric Power* and *Kivalina*, recent lawsuits brought against fossil fuel companies seeking to recover climate-related damages have attempted to avoid Clean Air Act displacement by bringing state law claims in state courts, and by focusing on the extraction, production, promotion, and sale of fossil fuels rather than emissions of GHGs. In each of the cases filed in state court, Defendants have removed the action to federal court. As detailed below, two of these cases have been dismissed on the merits (and are now on appeal to the Second and Ninth Circuits), while several others are awaiting rulings on remand motions.

1. Lawsuits where plaintiffs were granted remand to state court, or where remand motions are pending

In the cases described in this section, the Plaintiffs have either succeeded in having the claims remanded to state court or motions for remand are pending.

a. San Mateo v. Chevron

In 2017, five local governments—San Mateo County, Marin County, Santa Cruz County, the City of Imperial Beach, and the City of Santa Cruz —filed separate lawsuits in California Superior Court against various fossil fuel companies.⁷ See e.g., Complaint, *County of San Mateo v. Chevron Corp.*, No. 17CIV03222 (Cal. Super. Ct., July 17, 2017). In addition to public nuisance, Plaintiffs brought claims for strict liability for failure to warn, strict liability for design defect, private nuisance, negligence, negligent failure to warn, and trespass. Plaintiffs alleged that the fossil fuel companies’ “production, promotion, marketing, and use of fossil fuel products,

⁷ In 2018, a sixth case was filed by the City of Richmond. It was removed to federal court and assigned to Judge Chhabria.

simultaneous concealment of the known hazards of those products, and their championing of anti-regulation and anti-science campaigns, actually and proximately caused” injuries to Plaintiffs, including increased frequency and severity of flooding and sea level rise that jeopardized infrastructure, beaches, schools and communities. *Id* at 4. Among other remedies, Plaintiffs requested compensatory and punitive damages, and abatement of nuisances. *Id* at i.

Defendants asserted that the claims were necessarily federal common law claims and removed the actions to federal court. Judge Chhabria of the U.S. District Court for the Northern District of California remanded the cases to state court. Judge Chhabria held “federal common law is displaced by the Clean Air Act . . . [when plaintiffs] seek damages for a defendant’s contribution to global warming.” *Cty. of San Mateo v. Chevron Corp.*, 294 F. Supp. 3d 934, 937 (N.D. Cal. 2018). However, the court went on to state that “[b]ecause federal common law does not govern the plaintiffs’ claims, it also does not preclude them from asserting the state law claims in these lawsuits. Simply put, *these cases should not have been removed to federal court on the basis of federal common law that no longer exists,*” because federal law that does not provide a cause of action does not provide federal jurisdiction. *Id.* at 937 (emphasis added).

In remanding the cases to state court, Judge Chhabria expressly disagreed with Judge Alsup’s reasoning discussed below in Section I.A.2.a. Defendants appealed the remand order to the Ninth Circuit. Briefing is now completed.

b. Rhode Island v. Chevron

In July 2018, Rhode Island’s Attorney General Peter Kilmartin, with Sher Edling as outside counsel, brought a similar suit against fossil fuel companies in Rhode Island state court. Defendants removed the case to federal court, and Plaintiffs filed a motion for remand (remand hearing was held on February 6, 2019). Rhode Island seeks to hold various fossil fuel companies

liable for present and future damages to state-owned or operated facilities and property as well as for other harms. Complaint, *State of Rhode Island v. Chevron Corp.*, No. PC-2018-4716 (R.I. Super. Ct. 2018). Rhode Island seeks, among other relief, compensatory and punitive damages, and abatement of nuisances under state law (specifically public nuisance, strict liability for failure to warn, strict liability for design defect, negligent design defect, negligent failure to warn, trespass, impairment of public trust resources and state Environmental Rights Act—Equitable Relief Action). To date, this is the only climate change damage lawsuit brought by a state as opposed to a municipality. The parties are currently awaiting the court’s decision on remand.

c. Baltimore v. BP

In July 2018, the Mayor and City Council of Baltimore, with Sher Edling as outside counsel, brought suit in Maryland state court against various fossil fuel companies. Similar to *San Mateo* and *Rhode Island*, Baltimore alleged that through Defendants’ extraction, production, promotion, and sale of fossil fuels, Defendants concealed the hazards of their products and disseminated information intended to mislead consumers, customers, and regulators regarding the known and foreseeable risks of climate change caused by their products. Complaint at 116, *Mayor and City Council of Baltimore v. BP*, No. 24-C-18-004219 (Md. Cir. Ct. 2018). Alleged damages include more severe and frequent storms and floods, increased sea level, heat waves, droughts, and harms to public health. Baltimore is seeking compensatory and punitive damages, and equitable relief among other remedies for public nuisance, private nuisance, strict liability failure to warn, strict liability design defect, negligent, design defect, negligent failure to warn, trespass, and violations of Maryland’s Consumer Protection Act. Defendants removed the case to federal court, and Baltimore filed a motion for remand.

d. Pacific Coast Federation of Fishermen's Association v. Chevron

In November 2018, a fishing industry trade association represented by Sher Edling filed a climate damages suit against fossil fuel companies in California state court. The trade group is relying on California state nuisance and products liability law to hold the Defendants liable for closures to crab fisheries caused by climate change. *Pacific Coast Federation of Fishermen's Association v. Chevron Corp.*, No. CGC-18-571285 (Cal. Super. Ct. 2018). Specifically, Plaintiffs assert that warming ocean temperatures caused by climate change have led to an increase in a plankton species, *Pseudo-nitzschia*, responsible for causing “amnesic shellfish poisoning” through the release of the toxin domoic acid. Plaintiffs seek compensatory and punitive damages, and equitable relief. In December 2018, Defendants removed the case to federal court, and the case was assigned to Judge Chhabria who remanded *San Mateo* from federal to state court.

e. Boulder County v. Suncor Energy

In April 2018, three Colorado local government entities—the City of Boulder and the Counties of Boulder and San Miguel—filed suit against fossil fuel companies seeking damages and other relief for the companies’ role in causing climate change. Outside counsel includes the Hannon Law Firm, EarthRights International, and the Niskanen Center. Plaintiffs brought claims under public and private nuisance, trespass, the Colorado Consumer Protection Act, and civil conspiracy. As a means to address jurisdictional and displacement issues, Plaintiffs stated the following:

[Plaintiffs] do not seek to impose liability, restrain or interfere with Defendants ability to participate in public debates about climate change, or otherwise interfere with Defendants’ speech. . . [and] do not seek to enjoin any oil and gas operations or sales in the State of Colorado, or elsewhere, or to enforce emissions controls of any kind. Plaintiffs do not seek damages or abatement relief for injuries to or occurring on federal lands. Plaintiffs do not seek damages or any relief based on any activity by Defendants that could be considered lobbying or petitioning of federal, state or local governments.

Complaint at 123, *Cty. of Boulder v. Suncor Energy Inc.*, No. 2018CV030349 (Colo. D. Ct. 2018). Defendants removed the case to federal court, and Plaintiffs moved to remand. Remand hearing is scheduled for May 30, 2019.

2. *Lawsuits where federal courts considered and dismissed plaintiffs' claims*

Defendant fossil fuel companies have universally removed these lawsuits to federal court, although one lawsuit—brought by the City of New York—was originally filed in federal court. Three of these cases have been dismissed by federal courts, and are currently on appeal before the Second and Ninth Circuits. One case has been stayed pending the outcome of the Ninth Circuit appeal.

a. *City of Oakland v. BP*

The cities of San Francisco and Oakland brought separate state public nuisance lawsuits against BP, Chevron, ConocoPhillips, Exxon Mobil and Shell for damages caused by climate change. Complaint, *California v. BP*, No. 17-561370 (Cal. Super. Ct. Sept. 19, 2017) (referencing the San Francisco Complaint); Complaint, *California v. BP*, No. 17-1785889 (Cal. Super. Ct. Sept. 19, 2017) (referencing the Oakland Complaint). Plaintiffs requested relief in the form of an abatement fund to provide for the infrastructure necessary to adapt to climate impacts, such as sea level rise, and other relief. Plaintiffs argued that Defendants promoted the use of fossil fuels despite being aware that their use would cause severe climate change, and that harms would be catastrophic. Defendants removed the case to federal court, and Judge Alsup of the Northern District of California denied the cities' motion for remand. Judge Alsup held that the lawsuit was “necessarily governed by federal common law” and that “a patchwork of fifty different answers to the same fundamental global issue would be unworkable.” *California v. BP*, 2018 U.S. Dist.

LEXIS 32990, at *5, 10 (N.D. Cal., Feb. 27, 2018). Plaintiffs then filed an amended complaint, which included a federal public nuisance claim, and Defendants moved to dismiss.

After holding a climate science tutorial⁸ and oral argument on the motion to dismiss, Judge Alsup dismissed the consolidated case. *City of Oakland v. BP P.L.C.*, 325 F. Supp. 3d 1017, 1019 (N.D. Cal. 2018). The court held that *American Electric Power's* and *Kivalina's* displacement rule applied even though Plaintiffs' claims were focused on producer responsibility rather than on emissions control. *Id.* at 1024 (“If an oil producer cannot be sued under the federal common law for their own emissions, *a fortiori* they cannot be sued for someone else’s.”). The court also grounded its holding in the doctrine of separation of powers and judicial restraint, finding that:

Plaintiffs' claims. . . though pled as state-law claims, depend on a global complex of geophysical cause and effect involving all nations. . . It demands to be governed by as universal a rule. . . governed by federal common law. . . Congress has vested in the EPA the problem of greenhouse gases and has given it plenary authority to solve the problem at the point of emissions. . . because plaintiffs' nuisance claims centered on defendants' placement of fossil fuels into the flow of international commerce, and because foreign emissions are out of the EPA and Clean Air Act's reach, the Clean Air Act did not necessarily displace plaintiffs' federal common law claims. Nevertheless, these claims are foreclosed by the need for federal courts to defer to the legislative and executive branches when it comes to such international problems. . . question of how to appropriately balance these worldwide negatives against the worldwide positives of the energy itself, and of how to allocate the pluses and minuses among the nations of the world, demand the expertise of our environmental agencies, our diplomats, our Executive, and at least the Senate. Nuisance suits in various United States judicial districts regarding conduct worldwide are far less likely to solve the problem and, indeed, could interfere with reaching a worldwide consensus.

Id. at 1017, 21, 24–26. Plaintiffs appealed to the Ninth Circuit. Briefing is expected to be complete in early May 2019.

b. City of New York v. BP

⁸ See *City of Oakland v. BP*, 325 F. Supp. 3d 1017, 1022 (N.D. Cal. 2018) (“All parties agree that fossil fuels have led to global warming and ocean rise and will continue to do so and that eventually the navigable waters of the United States will intrude upon Oakland and San Francisco.”).

In January 2018, New York City filed suit in federal court against five fossil fuel companies for damages and equitable relief, asserting public nuisance, private nuisance, and trespass claims under New York State law. Complaint at i, 63. *City of New York v. BP*, No. 1:18-cv-00182-JFK (S.D.N.Y. 2018). Outside counsel includes Hagens Berman and Seeger Weiss. The court granted defendants' motion to dismiss, essentially adopting the reasoning of Judge Alsup in *City of Oakland v. BP* described above. Judge Keenan stated:

[R]egardless of the manner in which the City frames its claims. . . the City is seeking damages for. . . greenhouse gas emissions, and not only the production of Defendants' fossil fuels. . . if ever a problem cried out for a uniform and comprehensive solution, it is the geophysical problem described by the complaints.

City of N.Y. v. BP, 325 F. Supp. 3d 466, 472 (S.D.N.Y. 2018). Plaintiff New York City appealed to the Second Circuit. Briefing is now completed.

c. King County v. Chevron

In May 2018, King County, with outside counsel from Hagens Berman, filed suit in Washington state court against five fossil fuel companies for public nuisance and trespass. Complaint at ii, *King Cty. v. BP*, 2:18-cv-00758-RSL (Wash. Super. Ct. 2018). Plaintiffs sought compensatory damages and the establishment of an abatement fund to pay for a climate change adaptation program. Defendants removed the case to federal court, and then moved for dismissal. Plaintiff moved for and was granted a stay until the Ninth Circuit issues its decision in *City of Oakland v. BP*. The stay is currently in place.

B. State Attorneys General taking a Position on Climate Change Litigation

Several state Attorneys General have filed amicus briefs in favor of Plaintiffs bringing climate damages claims. For example, in *City of New York v. BP*, Attorneys General Underwood (NY), Becerra (CA), Racine (DC), Frosh (MD), Grewal (NJ), Rosenblum (OR), Kilmartin (RI),

Donovan (VT), and Ferguson (WA) signed an amicus in support of New York City's claim.⁹ In support of the fossil fuel companies were Attorneys General Marshall (AL), Rutledge (AR), Coffman (CO), Carr (GA), Fisher (IL), Hill (IN), Schmidt (KS), Landry (LA), Peterson (NE), Hunter (OK), Wilson (SC), Paxton (TX), Reyes (UT), Morrissey (WV), Schimel (WS), and Michael (WY).¹⁰ In *Oakland v. BP*, Attorneys General Becerra (CA), Grewal (NJ), and Ferguson (WA) supported the Plaintiffs.¹¹ In support of the fossil fuel companies were the same group of Attorneys General who supported them in *New York City v. BP*.¹²

In the cases now on appeal, Attorneys General continue to weigh in. On January 29, 2019, several Attorneys General—Becerra (CA), Frosh (MD), Grewal (NJ), James (NY), Rosenblum (OR), Neronha (RI), Donovan (VT), Neronha (RI), and Ferguson (WA)—filed an amicus brief in the Ninth Circuit in support of remand in *San Mateo v Chevron*.¹³ On March 20, 2019, the same group of Attorneys General joined by Attorneys General Tong (CT), Ellison (MN), and Racine (DC) filed an amicus brief in the Ninth Circuit in support of plaintiffs in *City of Oakland v BP*.

II. Potential Claims Against Fossil Fuel Companies Under Minnesota Law

⁹ See *City of New York v. BP*, COLUMBIA UNIVERSITY SABIN CENTER FOR CLIMATE CHANGE LAW, <http://climatecasechart.com/case/city-new-york-v-bp-plc/> (last visited Jan. 1, 2018) (discussing state amicus brief asserting that the district court's reasoning was inconsistent with states' authority to address environmental harms and that the City's claims were not displaced by federal common law or barred by the Clean Air Act).

¹⁰ See *id.* (state amicus brief in support of motion to dismiss signed by fifteen states, which argued that claims raised nonjusticiable political questions, jeopardized the U.S.'s system of cooperative federalism, threatened extraterritorial regulation and were displaced by federal common law). The states also argued that federal statutes had displaced federal common law.

¹¹ See *City of Oakland v. BP*, COLUMBIA UNIVERSITY SABIN CENTER FOR CLIMATE CHANGE LAW <http://climatecasechart.com/case/people-state-california-v-bp-plc-oakland/> (last visited Jan. 1, 2018).

¹² See *id.*

¹³ See *County of San Mateo v. Chevron*, COLUMBIA UNIVERSITY SABIN CENTER FOR CLIMATE CHANGE LAW <http://climatecasechart.com/case/county-san-mateo-v-chevron-corp/> (last visited Jan. 1, 2018) (arguing that removal is not warranted because the Clean Air Act is a model of cooperative federalism).

This Part discusses potential claims the Minnesota Attorney General could bring against fossil fuel companies for climate change-related damages in Minnesota. The claims discussed below include consumer protection claims (Prevention of Consumer Fraud Act, Unlawful Trade Practices Act, False Statement in Advertising Act, Uniform Deceptive Trade Practices Act, and antitrust claims), product liability claims (design defect and failure to warn), and common law claims (public nuisance, private nuisance, trespass and strict liability for abnormally dangerous activities), drawing on the lessons learned from the pending climate damages lawsuits described above. This Part also discusses the statutes of limitations relevant to these claims.

A threshold issue that is relevant to several of the potential claims is *knowledge of harm* by the fossil fuel companies. For instance, a duty to warn consumers of a risk associated with a product arises where a manufacturer “knew or should have known about an alleged defect or danger, and should have reasonably foreseen that the defect or danger would cause injury.” *Block v. Toyota Motor Corp.*, 5 F. Supp. 3d 1047 (D. Minn. 2014) (citing *Seefeld v. Crown, Cork, & Seal Co.*, 779 F. Supp. 461, 464 (D. Minn. 1991); *Harmon Contract Glazing, Inc. v. Libby-Owens-Ford Co.*, 493 N.W.2d 146, 151 (Minn. Ct. App. 1992)). Likewise, the Minnesota Unlawful Trade Practices Act (“UTPA”) provides that “[n]o person shall, in connection with the sale of merchandise, knowingly misrepresent, directly or indirectly, the true quality, ingredients or origin of such merchandise.” Minn. Stat. § 325D.13.

The fossil fuel industry has been aware of the risks associated with their products for decades. As early as 1954, fossil fuel companies were conducting research into the effects of CO₂ in the atmosphere—over the years, company scientists published numerous peer-reviewed studies linking fossil fuel consumption to increases in atmospheric CO₂. *See* Brief for Center for Climate Integrity et al. as Amici Curiae Supporting Plaintiffs, *County of San Mateo v. Chevron Corp.*, No.

18-15499 at 3 (9th Cir. 2019). The dangers of excess CO₂ levels and their impacts on global climate—including rising sea levels—were discussed during a 1959 petroleum industry symposium. *Id.* at 4–5. By 1965, the president of the American Petroleum Institute warned that fossil fuels would cause catastrophic global warming by the end of the century. *Id.* at 5–6. These dire warnings were confirmed again and again by scientific study, much of it funded and presented by the oil industry, which led research efforts. *Id.* at 6–8. The risks of fossil fuel combustion, atmospheric CO₂, and climate change were presented as unequivocal by the oil industry in the late 1970s and early 1980s. *Id.* at 9–16.

By 1988, however, members of the oil industry began to conduct a coordinated, proactive effort to emphasize uncertainty in scientific conclusions regarding fossil fuel combustion and global warming—all while simultaneously recognizing a need for the corporations to prepare for the catastrophic changes that would be brought about by climate change. *Id.* at 18–20. As part of the “Global Climate Coalition,” Defendants insisted that climate change was caused by natural atmospheric fluctuations and that the human impact was minimal. *Id.* at 20. Defendants took part in a campaign to confuse the public, cast doubt upon the veracity of scientific consensus, and attacked the notion that climate change itself would result in significant harm. *Id.* at 22. Defendants spent millions of dollars paying scientists and third party organizations to promote contrarian and misleading theories to the public. *Id.* at 26–28. All the while, Defendants took deliberate steps to protect their own assets from the climate impacts they had publicly discredited. *Id.* at 30.

The remainder of this Part evaluates causes of action under Minnesota law that could be brought against fossil fuel companies for climate-related damages in Minnesota.

A. Consumer Protection Claims

Minnesota law codifies a broad range of consumer protections in the Prevention of Consumer Fraud Act (“CFA”), the Unlawful Trade Practices Act (“UTPA”), the False Statement in Advertising Act (“FSAA”), and the Uniform Deceptive Trade Practices Act (“UDTPA”). In the 1990s, the State of Minnesota and Blue Cross Blue Shield brought suit against the tobacco companies for violations of these statutes, which resulted in a \$6.6 billion settlement. Two of the climate damages lawsuits—in Colorado and in Maryland—allege statutory consumer protection violations.

The CFA forbids “[t]he act, use, or employment by any person of any fraud, false pretense, false promise, misrepresentation, misleading statement or deceptive practice, with the intent that others rely thereon in connection with the sale of any merchandise, whether or not any person has in fact been misled, deceived, or damaged thereby. . .” Minn. Stat. § 325F.69, subd. 1.¹⁴ The UTPA provides that “[n]o person shall, in connection with the sale of merchandise, knowingly misrepresent, directly or indirectly, the true quality, ingredients or origin of such merchandise.” Minn. Stat. § 325D.13. The FSAA prohibits a broad range of advertising and other activities designed to “increase the consumption” of merchandise that “contain[] any material assertion, representation, or statement of fact which is untrue, deceptive, or misleading . . .” Minn. Stat.

¹⁴ The Minnesota Supreme Court has stated “that the CFA should be liberally construed in favor of protecting consumers and that the CFA reflected ‘a clear legislative policy encouraging aggressive prosecution of statutory violations.’” Prentiss Cox, *Goliath Has The Slingshot: Public Benefit And Private Enforcement Of Minnesota Consumer Protection Laws*, 33 WM. MITCHELL L. REV. 163, 178 (2006) (citing *Ly v. Nystrom*, 602 N.W.2d 644, 308 (Minn. Ct. App. 1999) (citing *State v. Philip Morris, Inc.*, 551 N.W.2d 490, 495-96 (Minn. 1996)); see also Gary L. Wilson & Jason A. Gillmer, *Minnesota’s Tobacco Case: Recovering Damages Without Individual Proof of Reliance Under Minnesota’s Consumer Protection Statutes*, 25 WM. MITCHELL L. REV. 567, 590 (1999) (“Minnesota consumer protection statutes present one example in which the legislature has made a policy decision to make it easier to sue for a consumer protection violation than it would be under the common law. The legislature did so by relaxing the requirement of causation. . .”).

§325F.67. The UDTPA prohibits several kinds of conduct, including misrepresenting the standard, quality, or grade of goods. Minn. Stat. § 325D.44.¹⁵

The Attorney General is responsible for “investigat[ing] offenses” and “assist[ing] in enforcement” of the CFA, UTPA, and the FSAA. *See* Minn. Stat. § 8.31, subd. 1. Statutory law gives clear authority to the Attorney General to seek damages and equitable remedies for CFA, UTPA and FSAA violations, providing that “[i]n any action brought by the attorney general pursuant to this section, the court may award any of the remedies allowable under this subdivision,” which include “damages . . . costs and disbursements, including costs of investigation and reasonable attorney’s fees, and . . . other equitable relief.” Minn. Stat. § 8.31(3)(a).

Any claims under Minnesota consumer protection statutes for climate-related damages should be brought by the Attorney General as a direct action on behalf of the state, rather than a subrogation action on behalf of state citizens. *See State v. Minnesota School of Business, Inc.*, 915 N.W.2d 903, 910 (2018) (denying restitution to individuals that did not testify at trial). With respect to the causation standard in damages cases, the Minnesota Supreme Court held that Minn. Stat. § 8.31, subd. 3(a) demands:

[T]hat there must be some “legal nexus” between the injury and the defendants’ wrongful conduct. . . where the plaintiffs’ damages are alleged to be caused by a lengthy course of prohibited conduct that affected a large number of consumers, the showing of reliance that must be made to prove a causal nexus need not include direct evidence of reliance by individual consumers of defendants’ products. Rather, the causal nexus and its reliance component may be established by other direct or circumstantial evidence. . .

Grp. Health Plan, Inc. v. Philip Morris Inc., 621 N.W.2d 2, 15 (Minn. 2001).

¹⁵ The UDTPA is not expressly mentioned in Minn. Stat. § 8.31, so “[t]here is a question whether damages are available for violations.” Wilson & Gillmer, *supra* note 18 at 588. The court did not allow a UDTPA action for damages in the tobacco litigation; however, some argue that damages may be available pursuant to § 8.31(3)(a). *Id.* at 588-589.

The Minnesota tobacco lawsuit was a direct action in which the State of Minnesota and Blue Cross Blue Shield sued on their own behalf for the increased costs they incurred as public healthcare providers. *Wilson & Gillmer, supra* note 18, at 570-76. While specific individual reliance was not required, at least six types of evidence were used to establish “legal nexus” causation: (1) defendants’ intentional misconduct; (2) addiction of defendants’ customers; (3) defendants’ exploitation of smokers; (4) defendants’ reassurance of smokers through advertising; (5) defendants’ youth marketing strategies; and (6) defendants’ intent that their conduct be relied upon. *Id.* at 608-624.

Based on publicly available information, including the records of existing damages lawsuits, there is a wealth of similar facts the Attorney General can rely on in a case against the fossil fuel companies for climate change damages. As with the tobacco companies, the fossil fuel companies intentionally deceived consumers, regulators, media, and the general public in Minnesota about the risks associated with their fossil fuel products through advertisements, public statements, and funded research. Much of this information has only recently come to light due to investigative reports by Inside Climate News, Columbia School of Journalism, L.A. Times, Amy Westervelt’s Drilled podcast, and others.

There is also evidence that the fossil fuel companies have encouraged a public “addiction” to oil and created hostility toward alternative, cleaner fuels. These actions are similar to the tobacco companies’ efforts to increase individuals’ nicotine intake, despite their ability to lower nicotine content. *See Wilson & Gillmer, supra* note 18, at 613-16 (“The tobacco industry has the technological capability of removing most of the nicotine from cigarettes. However, evidence suggests the tobacco industry maintains nicotine at certain levels because the companies know that nicotine is the addictive substance. . .”) (citation omitted).

The plaintiffs in both the Baltimore and Colorado lawsuits allege that the development of “dirtier” sources of fuel shows oil companies’ blatant disregard of climate data. *See, e.g.*, Colorado Complaint ¶¶ 83, 384 (“Exxon’s business plans include . . . development of more carbon-intensive fossil fuels, such as shale oil and tar sands. . . . despite its knowledge of the grave threats . . . as far back as the 1950s, Exxon increased the development of dirtier fuels that contributed even more substantially to . . . atmospheric CO₂”). In addition, the industry’s expenditures on advertising may be used to establish the companies’ intent that their public statements would be relied on by consumers. *Wilson & Gillmer, supra* note 18 at 601, 617 (“Even without a showing of intentional conduct, vast promotional expenditures give rise to a presumption that consumers have been deceived The industry conceded that success in the marketplace is evidence of consumer reliance on the industry’s words and actions.”).

The Attorney General may also bring antitrust claims against the fossil fuel companies, similar to the conspiracy claims in the Colorado lawsuit. The prohibitions in the Minnesota Antitrust Law of 1971, Minn. Stat. §§ 325D.49-325D.66, include conspiracy and seeking/exercising monopoly power. According to the Minnesota Supreme Court, “Minnesota antitrust law is generally interpreted consistently with federal antitrust law.” Brent A. Olson, MINN. PRAC., BUSINESS LAW DESKBOOK § 22A:1 (2018) (citation omitted). As such, “antitrust claims are *not* subject to a heightened standard of specificity in pleading . . .” *In re Milk Indirect Purchaser Antitrust Litig.*, 588 N.W.2d 772, 775 (Minn. Ct. App. 1999). The court may assess significant penalties: “Any person, any governmental body. . . injured directly or indirectly by a violation of sections 325D.49 to 325D.66, shall recover three times the actual damages sustained . . .” Minn. Stat. § 325D.57. The Attorney General has express authority to investigate and

commence appropriate legal action seeking damages for violation of the statutory provisions. Minn. Stat. § 325D.59.

B. Products Liability Claims

Nine of the climate damages lawsuits (Baltimore, Rhode Island, Richmond, City of Santa Cruz, County of Santa Cruz, San Mateo, Marin, Imperial Beach and the Pacific Coast Federation of Fisherman’s Association) have alleged design defect and failure to warn claims arising under state common law.¹⁶ These suits allege both negligent design defect and failure to warn, and strict liability design defect and failure to warn. *Id.* Minnesota could allege similar products liability claims against fossil fuel companies related to their extraction, production, marketing, and sale of fossil fuel products.

Minnesota adopted strict liability in tort for products liability cases in 1967. *See McCormack v. Hanksraft Co.*, 154 N.W.2d 488 (Minn. 1967). The Minnesota Supreme Court found that public policy necessitated protecting consumers from the risk of harm that arose from “mass production and complex marketing.” *Id.* at 500. Under this theory, manufacturers are liable for the cost of injuries that result from their defective product regardless of negligence or privity of contract. *Id.* In *McCormack*, the Court reasoned that strict liability should apply as the makers of the product are in the best position to “most effectively reduce or eliminate the hazard to life and health, and absorb and pass on such costs [to consumers].” *Id.*

¹⁶ *See Mayor & City Council of Baltimore v. B.P.*, 24-C-18-004219 (Md. Cir. Ct. 2018); *Rhode Island v. Chevron Corp.*, PC-2018-4716 (R.I. Super. Ct. 2018); *City of Richmond v. Chevron Corp.*, C18-00055 (Cal. Super. Ct. 2018); *City of Santa Cruz v. Chevron Corp.*, 17CV03243 (Cal. Super. Ct. 2017); *County of Santa Cruz v. Chevron Corp.*, 17CV03242 (Cal. Super. Ct. 2017); *County of San Mateo v. Chevron Corp.*, 17CIV03222 (Cal. Super. Ct. 2017); *County of Marin v. Chevron Corp.*, CIV1702586 (Cal. Super. Ct. 2017); *City of Imperial Beach v. Chevron*, C17-01227 (Cal. Super. Ct. 2017); *Pacific Coast Federation of Fisherman’s Association, Inc. v. Chevron Corp.*, CGC-18-571285 (Cal. Super. Ct. 2018).

Since *McCormack*, products liability law has expanded in Minnesota to cover three different theories of defective products: (1) manufacturing defects that arise from flaws in the way the product was made; (2) design defects that result from an unreasonably safe product design; and (3) failure to warn of reasonably foreseeable dangers from a products use. *See Rest. (Third) of Torts: Products Liability* § 2 (1998). As products liability law has evolved, Minnesota courts have merged strict liability and negligence theories for design defect and failure to warn claims. *See Westbrook v. Marshalltown Mfg. Co.*, 473 N.W.2d 352 (Minn. Ct. App. 1991) (“*Bilotta* merged strict liability, negligence, and implied warranty remedies into a single products liability theory.”) (referencing *Bilotta v. Kelley Co., Inc.*, 346 N.W.2d 616, 623 (Minn. 1984)); *Block v. Toyota Motor Corp.*, 5 F. Supp. 3d 1047 (D. Minn. 2014) (“Toyota correctly notes that [in Minnesota] in the product liability context, strict liability and negligence theories merge into one unified theory, sharing the same elements and burden of proof.”).

Of the three products liability claims alleged in the other damages lawsuits, only design defect and failure to warn claims would apply in Minnesota. Manufacturing defect claims cover defects that may occur in a discrete number of product units during the manufacturing process rather than a defect contained in all units of the product as a result of a defect in the design. *See Bilotta*, 346 N.W.2d at 622 (explaining that manufacturing flaw cases look at the condition of the product and compares any defects found with the flawless product). In this scenario, all units of the fossil fuel product on the market result in a dangerous condition—increased CO₂ emissions resulting in climate change—and thus any claims for damages would be based on a design defect or failure to warn rather than a manufacturing defect.

1. *Design defect*

In Minnesota, a manufacturer has a duty to use reasonable care in designing its product “to protect users from unreasonable risk of harm while using it in a foreseeable manner.” *Bilotta*, 346 N.W.2d 616; *see also Schweich v. Ziegler, Inc.*, 463 N.W.2d 722, 731 (Minn. 1990). A manufacturer’s duty “arises from the probability or foreseeability of injury to the plaintiff.” *Domagala v. Rolland*, 805 N.W.2d 14, 26 (Minn. 2011). To determine the foreseeability of injury in products liability actions, Minnesota courts “look to the defendant’s conduct and ask whether it was objectively reasonable to expect the specific danger causing the plaintiff’s injury.” *Montemayor v. Sebright Products, Inc.*, 898 N.W.2d 623 (Minn. 2017).

If a manufacturer breaches this duty and the defect proximately causes the plaintiff’s injury, it is liable under a design defect theory. *Farr v. Armstrong Rubber Co.*, 288 Minn. 83, 90 (Minn. 1970). To recover against a manufacturer for a design defect, a plaintiff must show that: “(1) a product was in a defective condition unreasonably dangerous for its intended use; (2) the defect existed at the time the product left the defendant’s control; and (3) the defect proximately caused the plaintiff’s injury.” *Duxbury v. Spex Feeds, Inc.*, 681 N.W.2d 380, 393 (Minn. Ct. App. 2004). *See also Adams v. Toyota Motor Corp.*, 867 F.3d 902, 916–17 (8th Cir. 2017) (applying Minnesota law).

Unreasonably dangerous condition: To determine whether the design of a product is unreasonably dangerous, Minnesota courts employ the reasonable care balancing test used in *Bilotta*. This test looks at the totality of circumstances including: “a balancing of the likelihood of harm, and the gravity of harm if it happens, against the burden of the precaution which would be effective to avoid the harm.” *Id.* It is an objective standard that “focuses on the conduct of the manufacturer in evaluating whether its choice of design struck an acceptable balance among several competing factors.” *Id.* at 622. Courts and juries often consider whether or not there

existed, or the plaintiff can prove, a practical alternative design. *See Kallio v. Ford Motor Co.*, 407 N.W.2d 92, 96 (Minn. 1987) (holding that existence of a practical alternative design is a factor, but not an element of a *prima facie* case, in design defect claims).

Fossil fuel products were—and continue to be—designed in a manner that is unreasonably dangerous for their intended use. GHG emissions resulting from the use of fossil fuel products cause severe and grave harms, including increased severity of dangerous weather patterns, rising sea level, increased drought, increased weather patterns, serious public health concerns particularly to low income and minority communities, and overall climate change damages. As early as 1954, the fossil fuel companies had knowledge of the gravity of this harm, as well as their responsibility in creating the harm—in other words, that catastrophic harm would occur from their continued extraction, production, use, and marketing of fossil fuel products. This is particularly true in light of generally accepted scientific knowledge that unabated anthropogenic GHG emissions would result in catastrophic impacts.

Defect existed at the time it left defendants' control: The second element of a design defect claim is that “the defect existed at the time the product left the defendant’s control” *Duxbury*, 681 N.W.2d at 393. The damages caused by GHGs emitted from the combustion/use of fossil fuel products exist at the time the products are extracted, refined, distributed, marketed, and sold by fossil fuel companies. Furthermore, fossil fuel products reached the user in a condition substantially unchanged from that in which it left the companies’ control—and “were used in the manner in which they were intended to be used . . . by individual and corporate consumers; the result of which was the addition of CO₂ emissions to the global atmosphere with attendant global and local consequences.” Complaint at ¶ 212, *PCFFA v. Chevron Corp.*, CGC-18-571285 (Cal.

Super. Ct. 2018). Therefore, the defect existed at the time fossil fuel products left the fossil fuel companies' control.

Defect proximately caused the plaintiff's injury: Finally, the plaintiff must prove that the design defect proximately caused the plaintiff's injury. *Duxbury*, 681 N.W.2d at 393. "Proximate cause exists if the defendant's conduct, without intervening or superseding events, was a substantial factor in creating the harm." *Thompson v. Hirano Tecseed Co., Ltd.*, 456 F.3d 805, 812 (8th Cir. 2006) (applying Minnesota law). A substantial factor has also been described as a "material element" in the happening of the injury. *Draxton v. Katzmarek*, 280 N.W. 288, 289 (Minn. 1938).

But-for causation is still necessary for a substantial factor causation analysis, because "if the harm would have occurred even without the negligent act, the act could not have been a substantial factor in bringing about the harm." *George v. Estate of Baker*, 724 N.W.2d 1, 11 (Minn. 2006) (citing Rest. (Second) of Torts § 432 (1965)). However, if there are concurring acts that together cause the plaintiff's injury and act contemporaneously, or so nearly together that there is no break in the chain of causation, this is sufficient to meet the causation analysis even if the injury would not have resulted in the absence of either one. *Roemer v. Martin*, 440 N.W.2d 122, 123, n.1 (Minn. 1989). If there are concurrent acts of negligence, both parties are liable for the whole unless the resulting damage is "clearly separable." See *Mathews v. Mills*, 178 N.W.2d 841, 844 (Minn. 1970). Before a particular factor can be said to be a concurrent cause, it must, first of all, be established that it is a cause. *Roemer*, 440 N.W.2d at 123.

The fossil fuel companies' extraction, production, refining, marketing, and sale of fossil fuel products was and will continue to be a substantial factor in creating Minnesota's harms from climate change. As previously discussed, 90 fossil fuel producers and cement manufacturers are

responsible for 63% of the cumulative industrial CO₂ and methane emissions worldwide between 1751 and 2010. Several climate attribution studies and reports link these anthropogenic GHG emissions to climate change and its damages.¹⁷

California has similarly adopted the substantial factor test to determine proximate causation. *People v. Atlantic Richfield Co.*, 2013 WL 6687953, at *16 (Cal. Super. Ct. 2013) (“Under this test, independent tortfeasors are liable so long as their conduct was a “substantial factor” in bringing about the injury.”), *aff’d sub nom. People v. ConAgra Grocery Products Co.*, 17 Cal. App. 5th 51 (Cal. Ct. App. 2017). In *Atlantic Richfield Co.*, California counties brought a public nuisance action against five lead paint manufacturers seeking abatement of the nuisance created by the lead paint manufactured and sold by defendants in 10 jurisdictions in California. Three of the paint manufacturers—ConAgra, NL Industries, and Sherwin Williams—were found to have created or assisted in the creation of the public nuisance and, as a result, the Court held their conduct was a substantial factor in bringing about the public nuisance. *Id.* at *54.

The California Court of Appeals upheld the trial court findings, further emphasizing that all three defendants’ marketing campaigns promoting lead paint as safe for use in residential homes and on doors and windows frames played at least a *minor* role in creating the public nuisance and therefore met the “substantial factor” test. *People v. ConAgra Grocery Products Co.*, 17 Cal. App. 5th 51, 102–03 (Cal. Ct. App. 2017). It is important to note that California’s substantial factor test is broader than Minnesota’s, requiring that defendant’s conduct only be a “very minor force” to making a finding of substantial factor. *ConAgra Grocery Products Co.*, 17 Cal. App. 5th at 102.

¹⁷ EKURZEL, ET AL., UNION OF CONCERNED SCIENTISTS, THE RISE IN GLOBAL ATMOSPHERIC CO₂, SURFACE TEMPERATURE, AND SEA LEVEL FROM EMISSIONS TRACED TO MAJOR CARBON PRODUCERS 479 (2017), <https://link.springer.com/content/pdf/10.1007%2Fs10584-017-1978-0.pdf> (quantifying the contribution of historical and recent carbon emissions from ninety major industrial carbon producers to “the historical rise in global atmospheric CO₂, surface temperature, and sea level.”).

In addition to establishing that the design defect is a substantial factor, or material element, in bringing about plaintiff's injuries, a plaintiff may need to show that there is no "superseding" event that breaks the causal chain between the defendants' conduct and the plaintiff's injury:

A cause is "superseding" if four elements are established: (1) its harmful effects must have occurred after the original negligence; (2) it must not have been brought about by the original negligence; (3) it must actively work to bring about a result which would not otherwise have followed from the original negligence; and (4) it must not have been reasonably foreseeable by the original wrongdoer.

Regan v. Stromberg, 285 N.W.2d 97, 100 (Minn. 1979). There were no intervening or superseding events that caused Minnesota's climate damages. No other act, omission, or natural phenomenon intervened in the chain of causation between the fossil fuel companies' conduct and Minnesota's injuries and damages, or superseded the fossil fuel companies' breach of its duty to design a reasonable safe product.

Joint and Several Liability and Market Share Liability: Even if an individual oil or gas company may claim that its extraction, production, and sale of fossil fuel products was not a substantial factor or the "but-for" cause of Minnesota's climate damages, Minnesota can rely on two liability structures to overcome the causation burden: (1) joint and several liability; and (2) market share liability.

Minnesota courts continue to apply joint and several liability within a comparative fault regime. See *Hosley v. Armstrong Cork Co.*, 383 N.W.2d 289 (Minn. 1986). In general, parties whose negligence combines to cause an indivisible injury are jointly and severally liable, even if not acting in concert. *Maday v. Yellow Taxi Co.*, 311 N.W.2d 849 (Minn. 1981); see also *Rowe v. Munye*, 702 N.W.2d 729, 736 (Minn. 2005) ("[M]ultiple defendants are jointly and severally liable when they, through independent consecutive acts of negligence closely related in time, cause indivisible injuries to the plaintiff."). A harm is indivisible if "it is not reasonably possible to make

a division of the damage caused by the separate acts of negligence.” *Mathews v. Mills*, 178 N.W.2d 841, 844 (Minn. 1970) (quotation omitted). When two or more persons are jointly liable, contributions to awards shall be in proportion to the percentage of fault attributable to each, except that each is jointly and severally liable for the whole award where two or more persons act in a common scheme or plan that results in injury, or a person commits an intentional tort. Minn. Stat. § 604.02, subds. 1–3 (2018). However, a plaintiff would still be required to show that each defendant’s conduct was a substantial factor in causing its harm. *Jenson v. Eveleth Taconite Co.*, 130 F.3d 1287, 1294 (8th Cir. 1997).

At least four damages lawsuits have alleged that the fossil fuel companies’ acts and omissions were indivisible causes of the plaintiffs’ injuries and damages, given that it is not possible to determine the source of any particular GHG molecule from anthropogenic sources.¹⁸ Joint and several liability would also apply in a lawsuit against fossil fuel companies for damages resulting from climate change in Minnesota. Minnesota is experiencing a single indivisible injury caused by several fossil fuel companies’ independent actions closely related in time. *See Jenson*, 130 F.3d at 1305 n.9 (explaining how the single indivisible injury rule imposes joint and several liability). Because Minnesota’s harm is indivisible, each fossil fuel company would be liable for the entire harm. *Id.*

If the fossil fuel companies argue that Minnesota’s harms are divisible, then each company may be able to limit their liability. However, the defendant asserting divisibility bears the burden of proving apportionment. *See e.g., Jenson*, 130 F.3d at 1294 (explaining that “plaintiffs bear no burden to prove apportionment” because apportionment is akin to an affirmative defense). Fossil

¹⁸ *City of Richmond v. Chevron Corp.*, C18-00055 (Cal. Super. Ct. 2018); *City of Santa Cruz v. Chevron Corp.*, 17CV03243 (Cal. Super. Ct. 2017); *County of Santa Cruz v. Chevron Corp.*, 17CV03242 (Cal. Super. Ct. 2017); *Pacific Coast Federation of Fisherman’s Association, Inc. v. Chevron Corp.*, CGC-18-571285 (Cal. Super. Ct. 2018) (“*PCFFA v. Chevron*”).

fuel companies could attempt to prove apportionment based on the amount of GHGs released by their fossil fuel products.

Atlantic Richfield Co. once again provides reference for how oil and gas companies may be held jointly and severally liable. 2013 WL 6687953, 44 (Cal. Super. Ct. 2013). Under California law, when multiple tortfeasors are each a substantial factor in creating a public nuisance, they are jointly and severally liable for that nuisance. *Id.* at * 44 (quoting *Am. Motorcycle Assn v. Superior Court*, 20 Cal. 3d 578, 586 (1978)). Similar to Minnesota, if the injury is indivisible, then each actor whose conduct was a substantial factor in causing the damages is legally responsible for the whole. *Id.* In other words, joint and several liability applies when multiple sources of contamination result in a single nuisance. *Id.* (quoting *State v. Allstate Ins. Co.*, 45 Cal. 4th 1008, 1036 (2009)). As a result, the California Superior Court found that the three lead paint manufacturers who were substantial factors in causing the public nuisance were jointly and severally liable. *Id.* A similar theory of recovery could be used in Minnesota against fossil fuel companies applying Minnesota's theory of concurrent harms, the indivisible harm rule, and joint and several liability.

Finally, a market share liability theory that some states have applied in products liability cases involving DES and lead paint allows a plaintiff to recover damages based on defendants' proportion of the market share at the time the injury was caused, if the defendants all produced an identical or fungible product, and the plaintiff is unable to identify the specific product that caused their injuries. *See Sindell v. Abbott Labs.*, 607 P.2d 924 (Cal. 1980) (establishing market share liability theory in DES case and apportioning liability based on the relative market share of each of the liable defendants); *Collins v. Eli Lilly Co.*, 342 N.W2d 37, 49 (Wis. 1984) (adopting version

of market share liability in DES case known as “risk contribution theory”); *Thomas v. Mallett*, 701 N.W.2d 523 (Wis. 2005) (applying risk contribution theory from *Collins* to lead paint claims).

The Minnesota Supreme Court has not explicitly accepted or rejected the market share liability theory. See *Bixler v. J.C. Penney Co.*, 376 N.W.2d 209, 214 n.1 (Minn. 1985) (“We express no opinion as to whether we would adopt such a rule [market share liability], particularly where the product involved is not entirely fungible with similar products on the market.”). Because the Minnesota Supreme Court has not categorically ruled out the market share liability theory, it is possible that under the right set of facts, that theory of recovery may be available.

If Minnesota were to adopt a market share liability theory, there are good arguments that the facts of a climate damages lawsuit against fossil fuel companies would support its application. Fossil fuel companies’ actions and the damages in Minnesota stemming from the use of their products closely resemble the factual circumstances of cases involving DES and lead paint. Fossil fuel products are fungible, the fossil fuel companies breached a legally recognized duty by failing to design their products in a reasonably safe manner, fossil fuel companies continued to market and produce their products despite knowledge of this danger, and the use of these products caused Minnesota’s injuries. Moreover, in the case of fossil fuel companies, the Carbon Majors report and other research that has quantified and attributed GHG emissions to specific companies provides a strong basis for determining liability under market share or risk-contribution theories.

2. *Products Liability Failure to Warn*

In Minnesota, “[g]enerally stated, a failure to warn claim has three elements: ‘(1) whether there exists a duty to warn about the risk in question; (2) whether the warning given was inadequate; and (3) whether the lack of a warning was a cause of plaintiff’s injuries.’” *Block v.*

Toyota Motor Corp., 5 F. Supp. 3d 1047 (D. Minn. 2014) (quoting *Seefeld v. Crown, Cork & Seal Co., Inc.*, 779 F. Supp. 461, 464 (D. Minn. 1991)).

Duty to warn: The first element of a failure to warn claim is whether a duty exists. “The duty to warn arises when a manufacturer knew or should have known about an alleged defect or danger, and should have reasonably foreseen that the defect or danger would cause injury.” *Id.* (citing *Seefeld*, 779 F. Supp. at 464; *Harmon Contract Glazing, Inc. v. Libby–Owens–Ford Co.*, 493 N.W.2d 146, 151 (Minn. Ct. App. 1992)). The duty extends to all reasonably foreseeable users. *Whiteford v. Yamaha Motor Corp.*, 582 N.W.2d 916, 918 n.6 (Minn. 1998).

This knowledge on the part of the manufacturer can be actual or constructive, and “a duty to warn may exist if a manufacturer has reason to believe a user or operator of it might so use it as to increase the risk of injury, particularly if the manufacturer has no reason to believe that the users will comprehend the risk.” *Kallio v. Ford Motor Co.*, 407 N.W.2d 92, 99 (Minn. 1987). Manufacturers have a heightened responsibility to “keep[] informed of current scientific knowledge,” which is relevant to the question of whether a manufacturer knew or should have known of its product’s risks. *Harmon*, 493 N.W.2d at 151. Any “manufacturer who has actual or constructive knowledge of dangers to users of his product has the duty to give warning of such dangers.” *Westerberg v. School Dist. No. 792, Todd County*, 148 N.W.2d 312 (Minn. 1967).

The knowledge of an alleged defect or danger can be either actual or constructive. *See Kallio v. Ford Motor Co.*, 407 N.W.2d 92, 99 (Minn. 1987). Because a manufacturer has a duty to keep informed of all current scientific knowledge, courts in Minnesota will look to current/past scientific knowledge to help determine whether a manufacturer *should* have known of the risks associated with its products. *Harmon Contract Glazing, Inc. v. Libby–Owens Ford Co.*, 493 N.W.2d 146, 151 (Minn. Ct. App. 1992).

As discussed earlier, fossil fuel companies had both actual and constructive knowledge, particularly in light of scientific knowledge generally accepted at the time, that their fossil fuel products were dangerous due to release of GHG emissions and increased atmospheric CO₂. It was also reasonably foreseeable that climate change damages would result from these emissions and thus fossil fuel companies had a duty to warn potential users of the foreseeable dangers.

However, a manufacturer has no duty to warn of dangers that are obvious to anyone using the product. *See Drager v. Aluminum Indus. Corp.*, 495 N.W.2d 879, 884 (Minn. Ct. App. 1993). “A failure to warn ‘is not the proximate cause of injury if the user is aware of the danger posed by the device in issue.’” *Shovein v. SGM Group USA, Inc.*, 2008 WL 11348494, at *6 (D. Minn. 2008) (citing *Mix v. MTD Products, Inc.*, 393 N.W.2d 18, 19 (Minn. App. 1986)). For example, in *Mix v. MTD*, the Minnesota Court of Appeals held that MTD did not have a duty to warn of the danger that could result from attempting to reattach a belt while the lawnmower’s engine was in neutral because the danger was obvious to most potential users. *Mix v. MTD Prods., Inc.*, 393 N.W.2d 18, 20 (Minn. Ct. App. 1986). Because of fossil fuel companies’ protracted and intensive denialist campaigns, the dangers of using fossil fuel products were intentionally concealed from—and therefore not well known or accepted by—the public.

Adequate warning: Second, if a warning was issued it must be adequate. “To be legally adequate, a product supplier’s warning to a user of any foreseeable dangers associated with the product’s intended use should (1) attract the attention of those that the product could harm; (2) explain the mechanism and mode of injury; and (3) provide instructions on ways to safely use the product to avoid injury.” *Gray v. Badger Min. Corp.*, 676 N.W.2d 268, 274 (Minn. 2004). Consumers of fossil fuel products were prevented from recognizing the risk that fossil fuel products would cause grave climate changes because the companies “individually and in concert

widely disseminated marketing materials, refuted the scientific knowledge generally accepted at the time, and advanced pseudo-scientific theories of their own.” Complaint at ¶ 318, *County of Santa Cruz v. Chevron Corp.* (Cal. Super. Ct. 2018). Therefore, oil and gas companies provided no warning, let alone an adequate one, to consumers.

Causation: In order to recover under a failure to warn theory, the plaintiff must show a causal connection between the inadequate warning or failure to warn and the injuries sustained. *Rients v. Int’l Harvester Co.*, 346 N.W.2d 359, 362 (Minn. Ct. App. 1984). A plaintiff must show that *had* adequate warnings been provided, the injury would not have occurred. *See Hauenstein v. Loctite Corp.*, 347 N.W.2d 272, 276 (Minn. 1984) (explaining that causation is not met when the accident would have occurred whether or not there was a warning). While many states have adopted a “heeding presumption”—a rebuttable presumption that if warnings had been provided, they would have been read and heeded—the Minnesota Supreme Court has declined to apply this presumption. *Kallio v. Ford Motor Co.*, 407 N.W.2d 92, 99–100 (Minn. 1987); *see also Tuttle v. Lorillard Tobacco Co.*, 377 F.3d 917, 925 (8th Cir. 2004). Furthermore, when a plaintiff requested the Minnesota Court of Appeals to adopt the heeding presumption in *Montemayor v. Sebright Products, Inc.* (unpublished case), the Court found that it was not its role “to extend the law.” 2017 WL 5560180, at *3 (Minn. Ct. App. 2017).

However, the U.S. Court of Appeals for the Eighth Circuit has noted that, to establish causation in Minnesota failure to warn cases, “it is sufficient to present testimony that purchasers would have avoided the risk of harm had they been told of the relevant danger.” *In re Levaquin Products Liability Litigation*, 700 F.3d 1161, 1168 (8th Cir. 2012) (citing *Erickson v. American Honda Motor Co., Inc.*, 455 N.W.2d 74, 77 (Minn. Ct. App. 1990)). This type of testimony can be rebutted by evidence that the plaintiff knew of the danger or disregarded other dangers or ignored

other warnings. 27 Minn. Prac. Series § 4.11 (2018). This was at issue in *Tuttle v. Lorillard Tobacco Co.* because Tuttle passed away from oral cancer (caused by defendant's smokeless tobacco product) before he could testify that he would have avoided the risk of harm if he had been told of the danger. 377 F.3d at 925 (8th Cir. 2004). The Court reasoned that because Tuttle continued to use smokeless tobacco until 1993, even after the Smokeless Tobacco Act required warnings in advertising and on packaging as early as February 1987, that "Tuttle's actions undercuts any 'heeding presumption' and any reasonable reliance arguments." *Id.* at 927 n.6.

Had Minnesota been adequately warned of the significance of danger that fossil fuel consumption and use presented to the state and the public, it would have heeded said warnings. With adequate warnings, Minnesota would have consumed fewer fossil fuel products or began to transition away from a fossil fuel dependent economy much sooner.

C. Public Nuisance

Under Minnesota law, public nuisance is a misdemeanor offense, defined in Minn. Stat. § 609.74:

[w]hoever by an act or failure to perform a legal duty intentionally does any of the following is guilty of maintaining a public nuisance, which is a misdemeanor:

- (1) maintains or permits a condition which unreasonably annoys, injures or endangers the safety, health, morals, comfort, or repose of any considerable number of members of the public; or
- (2) interferes with, obstructs, or renders dangerous for passage, any public highway or right-of-way, or waters used by the public; or
- (3) is guilty of any other act or omission declared by law to be a public nuisance and for which no sentence is specifically provided.

Minn. Stat. § 609.74 (2018). Under Minn. Stat. § 609.745, "[w]hoever having control of real property permits it to be used to maintain a public nuisance or lets the same knowing it will be so

used is guilty of a misdemeanor.” Minn. Stat. § 609.745 (2018). Statutory public nuisance violations brought under § 609.74 are enforced through criminal prosecution. However, it is unlikely that a claim for damages could be sought under the criminal statute, and instead this statute would provide a means for injunctive relief or abatement. *See* Minn. Stat. §§ 617.80, *et seq.*

In 2010, Minnesota Attorney General Lori Swanson brought “common law nuisance” claims against 3M Company to recover damages from the release of chemicals it produced known as perfluorochemicals (PFCs). *See* Complaint, *State v. 3M Co.*, No. 27-CV-10-28862, 2010 WL 5395085 at ¶¶ 83–89, 90–97 (Minn. Dist. Ct., Dec. 30, 2010). In particular, the complaint alleged damages for common law nuisance for contamination of surface water, groundwater, and sediments by PFCs released by 3M. The Attorney General claimed that the “use, enjoyment and existence of the State’s groundwater, surface water and sediments, free from interference, is a *common right* to citizens of the state.” *Id.* at ¶ 84 (emphasis added). 3M’s alleged contamination of groundwater, surface water, and sediments with PFCs “materially and substantially interferes with State citizens’ free enjoyment of these natural resources, and constitutes a public nuisance.” *Id.* at ¶ 85. On February 20, 2018—the day that the jury trial was scheduled to begin in the case—3M and the State of Minnesota settled the lawsuit for \$850 million.¹⁹

Beyond the 3M lawsuit, common law public nuisance claims in Minnesota appear to be rare; the majority of public nuisance claims seem to be brought primarily under municipal nuisance ordinances or the state public nuisance statute. Those that exist generally recognize a valid cause of action. For instance, in *State v. Lloyd A. Fry Roofing Co.*, 246 N.W.2d 692 (Minn. 1976), the Minnesota Supreme Court held that:

¹⁹ *See* Minn. Pollution Control Agency, *3M and PFCs: 2018 Settlement*, <https://www.pca.state.mn.us/waste/3m-and-pfcs-2018-settlement>; Bob Shaw, *Minnesota, 3M Reach Settlement Ending \$5 Billion Lawsuit*, PIONEER PRESS (Feb. 20, 2018), <https://www.twincities.com/2018/02/20/minnesota-3m-reach-settlement-ending-5-billion-lawsuit/>.

[T]he general rule regarding nuisances is that “it is immaterial how innocent the intent was[,] for the element of motive or intent does not enter into the question of nuisance,” so a state legislature may declare certain acts to be nuisances regardless of the intent with which they are carried out and even though they were not such at common law, or the legislature may delegate this authority to a municipal corporation.

Id. at 538 (citing Joyce, Law of Nuisance, § 43 at 77 & §§ 81, 84). On the subject of common law public nuisance, the Supreme Court cites Dean Prosser’s work on tort law and notes that intent and failure to act reasonably are not essential elements of common law nuisance violations, and “are even less relevant to nuisances that are codified in statutes or ordinances.” *Id.* at 539. *See also State v. Chicago, Milwaukee & St. Paul R.R. Co.*, 130 N.W. 545, 546 (Minn. 1911) (recognizing that although the Legislature cannot prevent a lawful use of property by prohibiting non-nuisance uses, “it is equally clear that acts or conditions which are detrimental to the comfort and health of the community may be effectively declared nuisances by the Legislature, and in the exercise of that power specified acts or conditions may be declared a nuisance, although not so determined at common law.”).

Although statutory public nuisance claims appear to make up the vast majority of cases in Minnesota, common law public nuisance may still resemble the Restatement approach: interference with public property or a right common to the public. *See* Restatement (Second) of Torts § 821B(1). Minnesota does not appear to explicitly adopt the Restatement approach to public nuisance, nor has the state explicitly rejected the Restatement approach. Notably, in 2014, a Minnesota district court appeared to reject the continuing role of common law public nuisance in the state. *See Doe 30 v. Diocese of New Ulm*, No. 62-CV-14-871, 2014 WL 10936509 at *9 (Minn. Dist. Ct. 2014) (“While plaintiff’s Complaint asserts a common-law public nuisance claim, it is evident from Minnesota’s public-nuisance jurisprudence that common-law claims either no longer exist or are synonymous with section 609.74 claims.”). Nevertheless, that decision was an

unpublished district court decision and the public nuisance analysis was dicta, as the court did not reach a decision on the issue.

D. Private Nuisance

Minnesota's statutory private nuisance law is covered by Minn. Stat. § 561.01:

Anything which is injurious to health, or indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property, is a nuisance. An action may be brought by any person whose property is injuriously affected or whose personal enjoyment is lessened by the nuisance, and by the judgment the nuisance may be enjoined or abated, as well as damages recovered.

Minn. Stat. § 561.01 (2018).

A private nuisance requires interference with another's use of property. *See Uland v. City of Winstead*, 570 F. Supp. 2d 1114, 1120 (D. Minn. 2008). There must be some type of conduct that causes the alleged nuisance harm, and that conduct must be "wrongful." *See Highview North Apts. v. County of Ramsey*, 323 N.W.2d 65, 70–71 (Minn. 1982) (citing *Randall v. Village of Excelsior*, 103 N.W.2d 131, 134 (1960)). This wrongful conduct varies, and may be characterized as, for example, intentional conduct, negligent conduct, ultrahazardous activity, statutory violation, or some other type of tortious activity. *Id.*

Minnesota's private nuisance statute appears to provide a broader cause of action than common law nuisance under the Restatement (Second) of Torts, as § 561.01 does not require that the action be intentional or unreasonable. The Minnesota Supreme Court has found that Minnesota's nuisance statute "defines a nuisance in terms of the *resultant harm* rather than in terms of the kind of conduct by a defendant which causes the harm . . . Where pollutants cause the harm, such as where sewage is deposited on plaintiff's property, the wrongful conduct appears to be self-evident." *Id.* (emphasis added). The Minnesota Supreme Court has likewise declined to apply the Restatement nuisance standard, preferring instead to use § 561.01 and Minnesota case law. *Id.*

In addition to nuisance abatement, a successful plaintiff may recover damages sustained as a result of the activity. Minn. Stat. § 561.01. Minnesota courts have found a range of activities to be private nuisances. *Heller v. American Range Corp.*, 234 N.W. 316 (Minn. 1931) (industrial plants transferring dust to adjacent residential property); *Brede v. Minnesota Crushed Stone Co.*, 179 N.W. 638 (Minn. 1920) (limestone quarries giving off noise, fumes, and odors); *Fagerlie v. City of Wilmar*, 435 N.W.2d 641 (Minn. App. 1989) (wastewater treatment plant odors); *Schrupp v. Hanson*, 235 N.W.2d 822 (Minn. 1975) (poultry and hog farm odors); *Highview North Apts. v. County of Ramsey*, 323 N.W.2d 65 (Minn. 1982) (water and sewage runoff).

In *Johnson v. Paynesville Farmers Union Co-op Oil Co.*, 817 N.W.2d 693, 706 (Minn. 2012), the Minnesota Supreme Court considered the state's approach to private nuisance in an action brought by an organic farmer against a co-op alleged to have caused pesticides to drift onto the organic farm. Citing Minn. Stat. § 561.01, the Supreme Court found that an action that seeks an injunction or to recover damages can be brought under the statute by any person whose property is injuriously affected or whose personal enjoyment is lessened by the nuisance. The plaintiff must show that the defendant's conduct caused an interference with the use or enjoyment of the plaintiff's property. *Id.* As an equitable cause of action, the Court stated that § 561.01 "implicitly recognized a need to balance the social utility of defendants' actions with the harm to the plaintiff." *Highview North Apartments v. County of Ramsey*, 323 N.W.2d 65, 71 (Minn. 1982).

In deciding the issue of nuisance, the *Johnson* court cited *Highview North Apartments v. County of Ramsey*, in which the Minnesota Supreme Court held that "disruption and inconvenience" caused by a nuisance are actionable damages. *Johnson*, 817 N.W.2d at 713 (citing *Highview North Apts.*, 323 N.W.2d at 73). In *Highview*, a plaintiff sued multiple municipalities over harm that consisted of groundwater seeping into two apartment building basements, a

condition that the court found to be “ongoing, injurious to the premises, substantial, and likely to worsen.” *Highview North Apts.*, 323 N.W.2d at 71. Based on *Highview*, the *Johnson* court remanded the plaintiffs’ claims to the district court to take evidence on the plaintiffs’ allegations that they suffered from “cotton mouth, swollen throat and headaches” because they were exposed to pesticide drift. *Johnson*, 817 N.W.2d at 713. According to the *Johnson* court, the inconvenience and adverse health effects, if proven, would affect the plaintiffs’ ability to use and enjoy their land, and thereby constitute a nuisance and justify an award of damages. *Id.*

E. Trespass

In Minnesota, “[t]respass encompasses any unlawful interference with one’s person, property, or rights, and requires only two essential elements: a rightful possession in the plaintiff and unlawful entry upon such possession by the defendant.” *Wendinger v. Forst Farms, Inc.*, 662 N.W.2d 546, 550 (Minn. Ct. App. 2003), *review denied* (Minn. Aug. 5, 2003). Minnesota courts have described trespass as “an invasion of the plaintiff’s right to exercise exclusive possession of the land” while “nuisance is an interference with the plaintiff’s use and enjoyment of the land.” *Fagerlie v. City of Willmar*, 435 N.W.2d 641, 644 n.2 (Minn. Ct App. 1989); *see also Johnson v. Paynesville Farmers Union Coop Oil Co.*, 817 N.W.2d 693, 701 (Minn. 2010) (stating that unlawful entry “must be done by means of some physical, tangible agency in order to constitute a trespass.”). Actual damages are not an element of the tort of trespass. *Johnson v. Paynesville Farmers Union* at 701 (citing *Greenwood v. Evergreen Mines Co.*, 19 N.W.2d 726, 734–35 (Minn. 1945)). In the absence of actual damages, the trespasser is liable for nominal damages. *Id.* (citing *Sime v. Jensen*, 7 N.W.2d 325, 328 (Minn. 1942)). Because trespass is an intentional tort, reasonableness on the part of the defendant is not a defense to trespass liability. *Id.* (citing *H. Christiansen & Sons, Inc. v. City of Duluth*, 31 N.W.2d 270, 273–74 (Minn. 1948)).

In *Johnson v. Paynesville Farmers Union Co-op. Oil Co.*, the Minnesota Supreme Court considered the question of whether particulate matter, such as pesticide drift can result in a trespass. *Id.* (noting that the “particulate matter” has been defined as “material suspended in the air in the form of minute solid particles or liquid droplets, especially when considered as an atmospheric pollutant.”). The Supreme Court found that Minnesota case law is consistent with a traditional formulation of trespass that has recognized trespasses when a person or a tangible object enters the plaintiff’s land and interferes with rights of exclusive possession. *Id.* According to the court, “disruption to the landowner’s exclusive possessory interest is not the same when the invasion is committed by an intangible agency, such as the particulate matter [pesticides] at issue here.” *Id.* at 702. “Such invasions,” the court continued, “may interfere with the landowner’s use and enjoyment of her land, but those invasions do not require that the landowner share possession of her land in the way that invasions by physical objects do.” *Id.*; see also *Wendinger v. Forst Farms, Inc.*, 662 N.W.2d 546, 550 (Minn. Ct. App. 2003) (noting that Minnesota “has not recognized trespass by particulate matter” and rejecting a trespass claim over offensive odors). The court declined to abandon traditional distinctions between trespass and nuisance law, and noted that the public policy concerns that compelled other jurisdictions to blur the lines between trespass and nuisance (e.g. statutes of limitations) are not present in Minnesota. *Id.* at 704–05. “In summary, trespass claims address tangible invasions of the right to exclusive possession of land, and nuisance claims address invasions of the right to use and enjoyment of land.” *Id.* at 705.

Although, as stated above, the Minnesota Attorney General’s lawsuit against 3M was settled on the day of trial, the Attorney General claimed trespass damages against the state’s public trust resources. Complaint, *State of Minnesota v. 3M Company*, No. 27-CV-10-28862, 2010 WL 5395085 (D. Minn. 2010). Much of the state’s suit was focused on direct groundwater and surface

water pollution, issues which are unlikely to be present when dealing with oil refineries, emissions, and climate damages. However, the effects of climate change can impact surface and groundwater in other ways that are not as direct, such as harm to aquatic organisms and plants through warmer waters, increased flooding and erosion from more severe storms and precipitation, drought, algae blooms, etc. Thus, a trespass claim against fossil fuel companies for climate change damages would be based on indirect invasions of property.

F. Strict Liability for Abnormally Dangerous Activities

The Second Restatement of Torts on Strict Liability for Abnormally Dangerous Activities is not controlling law in Minnesota, though Minnesota courts have discussed §§ 519–520. Restatement (Second) of Torts § 519–520 (1977); *see, e.g., Mahowald v. Minnesota Gas Co.*, 344 N.W.2d 856, 860–61 (Minn. 1984); *Cairly v. City of St. Paul*, 268 N.W.2d 908 (Minn. 1978); *Ferguson v. Northern States Power Co.*, 239 N.W.2d 190 (Minn. 1976); *Quigley v. Village of Hibbing*, 129 N.W.2d 765 (Minn. 1964). For example, in *Estrem v. City of Eagan*, 1993 WL 527888 at *1 (Minn. Ct. App. 1993), the Minnesota Court of Appeals noted that “[a]lthough this Restatement section is not controlling law in Minnesota, because the supreme court has recognized it in other cases, *see, e.g., Mahowald v. Minnesota Gas Co.* . . . we believe the trial court’s use of it was appropriate.” *Estrem v. City of Eagan*, 1993 WL 527888 at *1 (Minn. Ct. App. 1993).

However, the Minnesota Supreme Court has been careful to note that while “we have recognized the applicability of [the Restatement §§ 519 and 520] in other contexts, that is all we did—recognize the existence of those two sections. In none of these cases did we apply those sections, nor has our attention been directed to any other case where we did apply them.” *Mahowald*, 344 N.W.2d at 861. The Minnesota Supreme Court has explicitly rejected applying

Restatement §§ 519–520 in strict liability cases for accidents arising out of escaping gas from lines maintained in public streets. *Id.*

Nevertheless, applying strict liability without proof of negligence is consistent with a long line of Minnesota cases involving abnormally dangerous activities. *See, e.g., Sachs v. Chiat*, 162 N.W.2d 243 (1968) (pile driving abnormally dangerous activity that requires liability without fault); *Bridgeman-Russell Co. v. City of Duluth*, 197 N.W. 971 (Minn. 1924) (waterworks operated by municipal corporation requires liability without fault); *Wiltse v. City of Red Wing*, 109 N.W. 114 (Minn. 1906) (collapse of reservoir destroying plaintiff's house requires liability without fault); *Berger v. Minneapolis Gaslight Co.*, 62 N.W. 336 (Minn. 1895) (petroleum that escaped from gas company's tanks, damaging wells and cellars, requires liability without fault); *Cahill v. Eastman*, 18 Minn. 324 (Gil. 292) (Minn. 1871) (tunnel collapse under property lessee's land requires liability without negligence in its construction or maintenance).

The Minnesota Supreme Court was one of the first American jurisdictions to adopt the famous English tort law ruling on strict liability, *Rylands v. Fletcher*. *See, e.g., Minnesota Mining & Mfg. Co. v. Travelers Indem. Co.*, 457 N.W.2d 175, 183 (Minn. 1990). In *Rylands*, defendant owners of a mill built a reservoir to supply their mill with water. *Rylands v. Fletcher*, LR 3 H.L. 330 (1868). The plaintiff leased coal mines on neighboring land between the reservoir and the mill. Water from the reservoir burst into old, unused mine shafts, and flooded the mine. When the defendants appealed, arguing that they did not know that the flooded shafts were connected to the mine, the House of Lords held that the plaintiff did not need to prove negligence, because “the person who, for his own purposes, brings on his land and collects and keeps there anything likely to do mischief if it escapes, must keep it in at his peril.” *Id.* at 339. On the relationship of obligation between neighbors, the *Ryland* court found that:

[I]t seems but reasonable and just that the neighbour who has brought something on his own property (which was not naturally there), harmless to others so long as it is confined to his own property, but which he knows will be mischievous if it gets on his neighbour's, should be obliged to make good the damage which ensues if he does not succeed in confining it to his own property.

Id. at 340.

In *Kennedy Building Associates v. Viacom, Inc.*, the U.S. Court of Appeals for the Eighth Circuit found that Minnesota has “not limited the *Rylands* cause of action to cases in which the plaintiff and defendant were neighboring landowners,” citing *Hannem v. Pence*, a case in which a plaintiff was injured by falling ice while walking past a defendant's building. *Kennedy Building Associates v. Viacom, Inc.*, 375 F.3d 731, 740 (8th Cir. 2004) (citing *Hannem v. Pence*, 41 N.W. 657 (Minn. 1889)). The Minnesota Supreme Court has also applied the *Rylands* rule to defendants that do not own the land on which they created a hazard. *See Cahill v. Eastman*, 18 Minn. 324 (Gil. 292) (1871). Under Minnesota's strict liability rule, it makes no difference that a defendant is no longer in possession of control of the instrumentality that caused a hazard. *Id.*

Minnesota has also applied strict liability for abnormally dangerous activity to enterprises that ultimately benefit the community. Although these activities may be useful to society, the court has found that as times change and large-scale industrial activity increases, the responsibility for damages from useful operations should not fall on harmed individuals. *Bridgeman-Russell Co. v. City of Duluth* involved a waterworks operated by a municipal corporation that discharged water, damaging the plaintiff's property. *Bridgeman-Russell Co. v. City of Duluth*, 197 N.W. 971 (Minn. 1924). The Minnesota Supreme Court imposed strict liability, without requiring proof of negligence, stating that:

Congestion of population in large cities is on the increase. This calls for water systems on a vast scale either by the cities themselves or by strong corporations. Water in immense quantities must be accumulated and held where none of it existed before. If a break occurs in the reservoir itself, or in the principal mains, the flood

may utterly ruin an individual financially. In such a case, even though negligence be absent, natural justice would seem to demand that the enterprise, or what really is the same thing, the whole community benefited by the enterprise, should stand the loss rather than the individual. It is too heavy a burden upon one.

Id. at 972.

In light of this Minnesota case law expressing a fairly expansive view of strict liability, even in the case of activities that have social value, a claim by Minnesota against fossil fuel companies for climate change damages would appear to fit squarely within a claim for strict liability for abnormally dangerous activities.

G. Other Claims—MERA and MERLA

Minnesota could also consider claims under the Minnesota Environmental Rights Act, Minn. Stat. ch. 116B (“MERA”), and the Minnesota Environmental Response, Compensation, and Liability Act, Minn. Stat. ch. 115B (“MERLA”). In particular, the Minnesota Attorney General lawsuit against 3M discussed earlier contained a MERLA claim. The applicability of these claims to a potential lawsuit against fossil fuel companies for climate change damages is not discussed in this Memorandum but could be subject to further investigation.

H. Applicable Statutes of Limitations for All Claims

The statute of limitations for violations of the consumer protection laws is six years. Minn. Stat. § 541.05(2). Fraud allegations are also subject to a six-year statute of limitations under Minn. Stat. § 541.05(6), which begins upon “discovery by the aggrieved party of the facts constituting the fraud.” The statute of limitations may be suspended for fraudulent concealment if the facts which establish the cause of action are fraudulently concealed. *Hydra-Mac, Inc. v. Onan Corp.*, 450 N.W.2d 913, 918–19 (Minn. 1990). Antitrust claims in Minnesota are subject to a four-year statute of limitations, although “a cause of action for a continuing violation is deemed to arise at any time during the period of the violation.” Minn. Stat. § 325D.64, subd. 1.

For the product liability claims, a four-year statute of limitations applies to strict products liability claims, while a six-year statute of limitations applies to negligence claims. *See* Minn. Stat. § 541.05, subds. 1–2. However, because Minnesota courts have merged negligence and strict products liability theories into one single recovery for design defect and failure to warn claims, it is arguable that the six-year negligence statute of limitations would apply. For example, in *Klempka v. G.D. Searle & Co.* the U.S. Court of Appeals for the Eighth Circuit applied Minnesota law to hold that the statute of limitations was six years for a products liability claim. 63 F.2d 168, 170 (8th Cir. 1992).

For the common law tort claims of strict liability for abnormally dangerous activities, public nuisance, and private nuisance, and trespass, it is likely that a six-year statute of limitations would apply as such claims fall under the general six-year statute of limitations found in Minn. Stat. § 541.05, subd. 1(2). *See e.g., Citizens for a Safe Grant v. Lone Oak Sportsmen's Club, Inc.*, 624 N.W.2d 796 (Minn. Ct. App. 2001) (six-year limitations period applied to trespass and nuisance actions brought by neighborhood organization against gun club operating outdoor shooting ranges).

Two elements must be satisfied before a cause of action accrues for any of the common law claims: “(1) a cognizable physical manifestation of the disease or injury, and (2) evidence of a causal connection between the injury or disease and the defendant’s product, act, or omission.” *Narum v. Eli Lilly and Co.*, 914 F. Supp 317, 319 (D. Minn. 1996). Under Minnesota law, “[a] plaintiff who is aware of both her injury and the likely cause of her injury is not permitted to circumvent the statute of limitations by waiting for a more serious injury to develop.” *Klempka v. G.D. Searle & Co.*, 963 F.2d 168, 170 (8th Cir. 1992).

Fossil fuel company defendants may allege that Minnesota's claims are time barred because the first cognizable physical manifestation of climate change damages occurred longer than six years ago. However, Minnesota also recognizes the continuing violation doctrine. *Brotherhood of Ry. and S.S. Clerks, Freight Handlers & Station Employees v. State by Balfour*, 229 N.W.2d 3, 193 (Minn. 1975). That doctrine holds that when a violation is ongoing, the statute of limitations does not run from the initial wrongful action, but rather begins to run only when the wrong ceases. *N. States Power Co. v. Franklin*, 122 N.W.2d 26, 30-31 (Minn. 1963). For example, in *Hempel v. Creek House Train*, the Minnesota Supreme Court found that the defendant's continuing negligence tolled the limitations period. *Hempel v. Creek House Tr.*, 743 N.W.2d 305, 312 (Minn. 2007).

While there have been a number of cases where courts applying Minnesota law have found that the continuing violation doctrine did not apply based on the facts of the case, these were not categorical exclusions of the doctrine in Minnesota. *See e.g., Union Pac. R.R. Co. v. Reilly Indus., Inc.*, 4 F. Supp. 2d 860, 867 (D. Minn. 1998) (holding that the continuing wrong doctrine did not apply because there was no "leakage from storage tanks or basins," and that any "leakage" ceased before the relevant limitations period expired). Because the fossil fuel companies' extraction, production, marketing, and sale of fossil fuel products has continued, the continuing violation doctrine would apply, and the claims would not be barred by the statute of limitations.

MINNESOTA CLIMATE DAMAGES

Original draft by J. Drake Hamilton, Science Policy Director, Fresh Energy

Revised and edited by Kate Knuth, Ph.D.

Scientific review provided by:

- Jessica Hellmann, Ph.D.; Director, University of Minnesota Institute on the Environment
- Lee Frelich, Ph.D.; Director, University of Minnesota Forest Ecology Lab
- Jessica Gutknecht, Ph.D., Assistant Professor, Department of Soil, Water, and Climate, University of Minnesota
- Peter Reich, Ph.D.; Regents Professor Distinguished McKnight University Professor, F.B. Hubachek, Sr. Chair in Forest Ecology and Tree Physiology
- Vishnu Laalitha Surapaneni, M.D.; Assistant Professor of Medicine, Division of General Internal Medicine, University of Minnesota
- Tracy Twine, Ph.D.; Associate Professor, Department of Soil, Water, and Climate, University of Minnesota

Introduction

Climate change creates new risks and exacerbates existing climate vulnerabilities across Minnesota. The changes present growing challenges to human health and safety, quality of life, and rate of economic growth. The impacts of climate change are already being felt in communities across the state, and the damages of these impacts are projected to increase. The state has already spent millions adapting to the impacts of climate change and will need to spend many tens of millions more to adapt in the future.

Minnesota is experiencing rapid temperature increases, more frequent and intense extreme weather events, and changes in average climate conditions. These changes will continue to damage the state's infrastructure and ecosystems that provide critical benefits to the state's communities. By mid-century, without mitigation, the Midwest is projected to experience substantial loss of life, worsened health conditions, and economic impacts estimated in the billions of dollars as a result of climate change.²⁰ Minnesota's industries and economies that depend on natural resources and favorable climate, such as agriculture, outdoor recreation, and tourism, are vulnerable to increasing damages from climate change.

This memo presents an overview of climate change impacts in Minnesota, focused on areas where the state has, or will, incur substantial expenses. These impacts are largely driven by heat, extreme precipitation, and flooding, and include damage to infrastructure (transportation, wastewater, storm water, and power), health (heat, asthma, and vector borne diseases), forests, as

²⁰ Angel, J. R. *et al.* Chapter 21 : Midwest. *Impacts, Risks, and Adaptation in the United States: The Fourth National Climate Assessment, Volume II.* (2018). doi:10.7930/NCA4.2018.CH21

well as the costs planning and preparation. The descriptions of impacts and costs are meant to demonstrate the extent of damages created by the burning of fossil fuels. A more comprehensive and definitive assessment of impacts and costs would take further research and analysis.

Impacts of Climate Change in Minnesota (except as noted, from the Office of Climatology at the Minnesota Department of Natural Resources)

Minnesota is already being impacted by a changing climate, and these changes are projected to continue and accelerate. The magnitude of future impacts and expenditures needed to address them depend on the extent to which policies eventually limit greenhouse gas emissions. However, there is no realistic emissions scenario under which temperatures will not continue to warm until at least the year 2050.

Carbon dioxide is the principle global warming gas and warms the earth by acting like a blanket that keeps a portion of the infrared radiation from the sun from radiating back into space. For most of the history of human civilization, the amount of CO₂ in the Earth's atmosphere remained in a stable range between 260–280 parts per million (ppm).²¹ During the past 200 years, commencing with the Industrial Revolution (1720–1800 CE), increased combustion of fossil fuels, cement production, and deforestation²² have raised the average concentration of CO₂ in the atmosphere to greater than 410 ppm²³ – higher than any time in at least 800,000 years.²⁴ Most critically, however, more than half of all industrial emissions of CO₂ have occurred since 1988.²⁵

Due primarily to the increased concentration of anthropogenic CO₂ from fossil fuel combustion, the mean surface temperature²⁶ of Earth has increased by 1°C (1.8°F) since the Industrial Revolution.^{27,28,29} One way to conceptualize the immense amount of heat that Earth is absorbing is to combine measurements of ocean, land, atmosphere, and ice heating. Based on these data, over the last two decades Earth's climate system has been absorbing the heat equivalent, in

²¹ Laurantou, A. *et al.*, Changes in Atmospheric CO₂ and Its Carbon Isotopic Ratio During the Penultimate Deglaciation, *Quaternary Science Reviews* 29, 1983-1992 (2010).

²² Le Quéré, C. *et al.*, Global Carbon Budget 2018, *Earth System Science Data* 10, 2141-2194 (2018).

²³ Ed Dlugokencky and Pieter Tans, NOAA/ESRL <<http://www.esrl.noaa.gov/gmd/ccgg/trends/>>

²⁴ Masson-Delmotte, V. *et al.*, Chap. 5: Information from Paleoclimate Archives, *Climate Change 2013: The Physical Science Basis* (2013).

²⁵ Frumhoff, P. *et al.*, The Climate Responsibilities of Industrial Carbon Producers, *Climatic Change* 132, 157-171 (2015).

²⁶ *Global mean surface temperature* is calculated by combining measurements from the air above land and the ocean surface.

²⁷ Hawkins, E. *et al.*, Estimating Changes in Global Temperature Since the Preindustrial Period, *Bulletin of the American Meteorological Society* 98, 1841-1856 (2017).

²⁸ These facts were also agreed to by the defendant corporations in a tutorial before Judge William Alsup, in federal district court in the 9th circuit, in March 2018.

²⁹ IPCC, Summary for Policymakers, *Global warming of 1.5°C* (2018).

joules, of detonating four Hiroshima atomic bombs per second, or nearly 400,000 Hiroshima A-bombs per day.^{30,31}

In Minnesota, these increased temperatures vary in extent and pace depending on season and time of day. But global warming not only changes seasonal temperatures, it alters the hydrologic cycle, contributing to an increase in the intensity and frequency of extreme precipitation events, while potentially increasing the severity of droughts by making them hotter and more likely to dry out soils and deplete water resources.

Minnesota is warming rapidly. Average land surface temperatures increased at a rapid pace during the late 20th and early 21st centuries, and this increase is projected to continue. Data for the last half century (1960-2013) show that the rate of warming for Minnesota has sped up substantially, to 0.5° F per decade, meaning it is getting warmer faster. Dew points have also risen, which contributes to both increased humidity and rainfall. Temperatures in Minnesota are projected to increase substantially by 2050 under all emissions scenarios.

Winter temperatures in the state have been warming 13 times faster than summer temperatures. Since 1970, the average temperature increase per decade is 1.2° F for the period December through February, compared to a 0.09° F increase during that time for June through August. The state DNR has high confidence that heat will increase in severity, coverage, and duration, and that extreme winter cold will experience a continued, rapid decline.

Extreme precipitation and flooding

Climate change is not the only driver of flood risk and damage, but it is an increasingly important factor in these events.³² In many parts of the US, extreme precipitation events have become more frequent and severe and this trend is expected to continue. Statewide, Minnesota experienced a 42% increase in the heaviest rainfall events (1 in 100-year floods) between 1958 and 2016.³³ These changes contribute to both more frequent and more damaging flooding.

Winter and spring precipitation are important drivers of flood risk in the Midwest and are projected to increase by up to 30% by the end of this century.³⁴ In line with this trend, Minnesota

³⁰ Church, J. A. *et al.*, Revisiting the Earth's Sea-Level and Energy Budgets From 1961 to 2008, *Geophysical Research Letters* 38, L18601 (2011).

³¹ Nuccitelli, D. *et al.*, Comment on Ocean Heat Content and Earth's Radiation Imbalance II, Relation to Climate Shifts, *Physics Letters A* 376, 3466-3468 (2012).

³² *Minnesota's flood hazard mitigation grant assistance program: helping community's build resiliency since 1987.* (2018).

³³ Angel, J. R. *et al.* Chapter 21 : Midwest. *Impacts, Risks, and Adaptation in the United States: The Fourth National Climate Assessment, Volume II.* (2018).

³⁴ Easterling, D. R. *et al.* Ch. 7: *Precipitation Change in the United States. Climate Science Special Report: Fourth National Climate Assessment, Volume I.* (2017).

has experienced an increase in winter and spring flooding. Looking forward, heavy precipitation events (defined as rainfall equal to or greater than the historic 95th percentile) will significantly increase in frequency at least through the year 2100.³⁵

Minnesota counties have been battered by four 1-in-1,000-year floods in just the last 13 years, in 2004, 2007, 2010, and 2012 (MN State Climatology Office, DNR). In 2007, the state legislature provided \$165 million in disaster relief after flash flooding hit southeastern Minnesota. In 2010, the legislature in a special session provided \$80 million in disaster relief after flooding in the same part of the state. Again in 2012, the legislature called a special session and provided \$167 million in flood relief to Duluth and 15 counties as well as 3 tribes, after storms and epic flooding over the span of just one week in June of that year.³⁶ According to the US EPA, damages from the heightened flood risk in the Midwest are projected to be at least \$500 million (in 2015 dollars) annually by 2050.³⁷

Flooding can result in mass evacuations, damage to buildings, drinking water contamination, injury, and death.³⁸ Long after flood waters recede, flooded buildings, including homes, can experience mold growth that can trigger asthma attacks and allergies during cleanup efforts.³⁹ Minnesotans in flooded areas also suffer from mental health issues. Mental stress during flooding events can cause substantial health impacts, including sleeplessness, anxiety, depression, and post-traumatic stress disorder.^{40,41}

The 1997 Red River of the North flood in Minnesota, North Dakota, and Southern Manitoba was the most severe flood of that river since 1826, with damages for the region estimated at \$3.5 billion. In East Grand Forks, with a population of 9,000, just 8 homes had no flood damage. The state of Minnesota and communities in Minnesota paid for portions of the damage relief not covered by federal disaster relief.

³⁵ Gao, X. *et al.* Twenty-First-Century Changes in U.S. Regional Heavy Precipitation Frequency Based on Resolved Atmospheric Patterns. *J. Clim.* 30, 2501–2521 (2017).

³⁶ Salisbury, B. Minnesota Legislature OKs \$4.5M in disaster relief in one-day session. *Pioneer Press* (2015).

³⁷ U.S. Environmental Protection Agency. *Multi-Model Framework for Quantitative Sectoral Impacts Analysis: A Technical Report for the Fourth National Climate Assessment*. (2017). at <https://cfpub.epa.gov/si/si_public_record_Report.cfm?Lab=OAP&dirEntryId=335095>

³⁸ Crimmins, A. *et al.* *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*. (2016).

³⁹ Chew, G. L. *et al.* Mold and Endotoxin Levels in the Aftermath of Hurricane Katrina: A Pilot Project of Homes in New Orleans Undergoing Renovation. *Environ. Health Perspect.* 114, 1883–1889 (2006).

⁴⁰ *Adapting to Climate Change in Minnesota*. (2017). at <<https://www.pca.state.mn.us/sites/default/files/p-gen4-07c.pdf>>

⁴¹ Adeola, F. O. Mental Health & Psychosocial Distress Sequelae of Katrina: An Empirical Study of Survivors. *Hum. Ecol. Rev.* 16, 195–210 (2009).

Minnesota has taken steps to better prepare for floods. Since 1987 the Minnesota Flood Hazard Mitigation Grant Assistance Program has appropriated \$510 million of state funds to help local governments implement 365 flood risk reduction programs, and local governments also contribute to the costs of these projects.

Impacts on transportation, water supplies, stormwater management, wastewater management and treatment, and the power system

Climate change that is already underway and expected to continue poses challenges to various infrastructure systems.

Transportation Infrastructure

Minnesota has an aging transportation infrastructure that is further stressed by increases in heavy precipitation events and changes in the state's average annual precipitation. The expected continued increase in the frequency and severity of heavy precipitation events will affect access to roads, the viability of bridges, and the safety of pipelines. In addition, heavy rainstorms can result in the temporary closure of roadways and contribute to substantial economic disruptions.⁴²

As just one example, faster water flow caused by extreme rains can erode the bases of bridges, a condition known as scour. Scour may leave bridges vulnerable to damage and failure during flooding by undermining bridge foundations or removing the protection from the abutment slopes. The Minnesota Department of Transportation allocates resources to address bridge scour through multiple efforts; those costs will increase due to climate change.⁴³ The EPA estimates the annual cost of maintaining current levels of service on Midwestern bridges from scour damage from climate change at about \$400 million per year in 2050.⁴⁴

In addition, the EPA estimates that higher temperatures associated with unmitigated climate change would result, by 2090, in U.S. annual road maintenance costs increasing by over \$6 billion (in 2015 dollars) each year. Most of those costs would be borne by states, and Minnesotans would be responsible for most of those in-state costs.⁴⁵

⁴² *Adapting to Climate Change in Minnesota*. (2017). at <<https://www.pca.state.mn.us/sites/default/files/p-gen4-07c.pdf>>

⁴³ *Adapting to Climate Change in Minnesota*. (2017). at <<https://www.pca.state.mn.us/sites/default/files/p-gen4-07c.pdf>>

⁴⁴ U.S. Environmental Protection Agency. *Multi-Model Framework for Quantitative Sectoral Impacts Analysis: A Technical Report for the Fourth National Climate Assessment*. (2017). at <https://cfpub.epa.gov/si/si_public_record_Report.cfm?Lab=OAP&dirEntryId=335095>

⁴⁵ U.S. Environmental Protection Agency. *Multi-Model Framework for Quantitative Sectoral Impacts Analysis: A Technical Report for the Fourth National Climate Assessment*. (2017). at <https://cfpub.epa.gov/si/si_public_record_Report.cfm?Lab=OAP&dirEntryId=335095>

Shipping through the harbor of Duluth-Superior is also vulnerable to climate impacts, with damages including lower profits for shippers and lower revenue for port authorities. Research on Lake Superior showed that decreasing lake levels with climate change will increase shipping costs, because lower water levels reduce cargo capacity in ships.⁴⁶

The Power System

One of the most direct energy security impacts of major storm events is power outages. Power outages result in indirect costs, such as lost business and tax revenue that would otherwise accrue to the State, and health impacts from loss of electricity and air conditioning.⁴⁷ Minnesota's more frequent storms will likely increase these costs.

Increased extreme heat days also put stress on the state's electricity grid, by requiring increased air conditioning. State agencies are playing key roles in overseeing energy assurance and resiliency in Minnesota; climate change will increase the cost to provide these assurances.⁴⁸ State-operated buildings will see an increase in air conditioning demand by as much as 300% by 2100, with increasing costs for state taxpayers.⁴⁹

Storm Sewers, Wastewater, and Groundwater Infrastructure

Increased average annual rainfall and the increase in the severity of extreme precipitation events will damage water and sewer systems. As a result, costs will increase for local and state authorities who fund operations and maintenance of these systems. In response, the National Oceanic and Atmospheric Administration updated its key technical document that provides rainfall data for every county in every state, relied upon by engineers to design stormwater sewer systems, to reflect more frequent and larger rainfall events. The former document was known as "Technical Paper 40," and the updated version is called "Atlas 14."⁵⁰

Wastewater management costs will also increase. Many wastewater systems in the state are located in floodplains to take advantage of gravity fed flows. Increased flooding will more frequently exceed infrastructure capacity, overwhelming and submerging infrastructure,

⁴⁶ Millerd, F. The potential impact of climate change on Great Lakes international shipping. *Clim. Change* 104, 629–652 (2011).

⁴⁷ *Adapting to Climate Change in Minnesota*. (2017). at <<https://www.pca.state.mn.us/sites/default/files/p-gen4-07c.pdf>>

⁴⁸ *Adapting to Climate Change in Minnesota*. (2017). at <<https://www.pca.state.mn.us/sites/default/files/p-gen4-07c.pdf>>

⁴⁹ MPCA Climate Adaptation Framework (2018).

⁵⁰ Kraker, D. As climate changes, cities grapple with big rains. (2015). at <<https://www.mprnews.org/story/2015/02/04/climate-change-infrastructure>>

including pipelines, wastewater pumping stations and treatment systems. Treatment systems and pumping stations will require upgrades to withstand future conditions, and the Metropolitan Council has already begun requiring resiliency analysis as part of major wastewater treatment plant permit reissuances.⁵¹

Inflow and infiltration (I/I) of groundwater and stormwater into the wastewater systems can cause overflow of wastewater systems and discharge of untreated sewage into waterways. Increased rain intensity can contribute to increased water flows and I/I challenges. The Metropolitan Council has been working to reduce I/I of the wastewater system by stormwater and groundwater. Between 2007 and 2015, the Council spent \$205 million on improvements to regional interceptors to reduce I/I, and they have seen success in reducing annual wastewater flow despite increases in rain events. There is uncertainty about the future costs of these investments because of climate change, but costs could increase substantially.⁵²

Costs associated with extreme heat events, increased allergen exposure, increases in asthma attacks, and exposure to vector-borne disease

Increased air temperatures and changes to the hydrologic cycle associated with climate change have resulted and will result in public health impacts for the state of Minnesota.⁵³ The state of Minnesota has incurred and will continue to incur expenses in planning, preparing for, and treating the public health impacts associated with climate change. Health impacts of climate change, and associated damages and costs, include impacts from extreme heat, increased challenges with allergies and pollen, asthma, and vector-borne diseases. It is a challenge to determine how many and what portion of these impacts can be attributed to climate change because reporting requirements vary for different diseases and because humans take action to adapt to climate change, which affects health impacts. But advances in the science make these attributions increasingly possible.

Extreme Heat

Extreme heat in urban centers like Minneapolis and St. Paul, Minnesota can cause dangerous living conditions.⁵⁴ Data from the Minnesota Department of Health shows that between 2000-2011, over 1,000 hospitalization visits, 8,000 emergency department visits, and nearly 40 deaths

⁵¹ *Adapting to Climate Change in Minnesota*. (2017). at <<https://www.pca.state.mn.us/sites/default/files/p-gen4-07c.pdf>>

⁵² *Adapting to Climate Change in Minnesota*. (2017). at <<https://www.pca.state.mn.us/sites/default/files/p-gen4-07c.pdf>>

⁵³ *Adapting to Climate Change in Minnesota*. (2017). at <<https://www.pca.state.mn.us/sites/default/files/p-gen4-07c.pdf>>

⁵⁴ Hondula, D. M., Davis, R. E., Saha, M. V., Wegner, C. R. & Veazey, L. M. Geographic dimensions of heat-related mortality in seven U.S. cities. *Environ. Res.* 138, 439–452 (2015).

directly attributable to heat exposure were recorded in Minnesota. In 2012, there were 1,715 emergency department visits and six deaths due to extreme heat.⁵⁵

The Minnesota Department of Health is planning for the likelihood that more Minnesotans seeking emergency help on hotter days. Vulnerable populations such as the disabled, the elderly, children, people who live alone, people of color, and less-resourced communities are more likely to suffer health effects from high air temperatures. The state of Minnesota, through the Minnesota Department of Health and local health agencies, has provided public education to some vulnerable communities about central cooling centers where people could go for relief, and has incurred costs educating the public about what to do in extreme heat.⁵⁶

Allergens and Asthma

U.S. asthma rates have increased from approximately 8 to 55 cases per 1,000 persons to approximately 55 to 90 cases per 1,000 persons from 1970 to 2000. While these increases are not entirely attributable to climate change, warmer temperatures due to climate change are predicted to increase ground-level ozone. Ground-level ozone contributes to breathing problems.⁵⁷ Climate change is also predicted to result in increased wildfires and increase in the pollen season. These factors, especially a combination of heat and high pollen are predicted to increase the number of asthma hospitalizations.⁵⁸

Data from the Minnesota Department of Health Asthma Program shows one in 14 children (7.1%) and one in 13 adults (7.5%) currently have asthma, adding up to around 408,000 Minnesotans estimated to have asthma in 2016. In Minnesota in 2014, asthma cost an estimated \$669.3 million, including \$614.9 million in direct medical expenses and \$54.3 million in lost work days. In 2014, there were 21,800 ER visits and 3400 hospitalizations for asthma across Minnesota. In 2015, there were 61 deaths due to asthma.⁵⁹

⁵⁵ *Minnesota climate and health profile report*. (2015).

⁵⁶ *Adapting to Climate Change in Minnesota*. (2017). at <<https://www.pca.state.mn.us/sites/default/files/p-gen4-07c.pdf>>

⁵⁷ Wu, S. *et al.* Effects of 2000–2050 global change on ozone air quality in the United States. *J. Geophys. Res.* 113, D06302 (2008).

⁵⁸ Cakmak, S., Dales, R. E. & Coates, F. Does air pollution increase the effect of aeroallergens on hospitalization for asthma? *J. Allergy Clin. Immunol.* 129, 228–231 (2012).

⁵⁹ Minnesota Department of Health. Asthma Quick Facts - Minnesota Department of Health. at <<https://www.health.state.mn.us/diseases/asthma/data/quickfacts.html>>

In the Twin Cities, data from the MPCA in 2008 showed that about 2,000 all cause deaths, 400 hospitalizations, and 600 emergency room visits were attributable to air pollution from ozone and particulate matter. Ozone pollution is predicted to worsen with rising temperatures.⁶⁰

Vector-borne Illnesses

Climate change is expected to shift the geographic range and the distribution of disease-carrying insects and pest, exposing more Minnesotans to ticks that carry Lyme disease, and mosquitoes that transmit viruses such as West Nile.⁶¹

Incidence of tick-borne illness (Lyme disease, babesiosis, and human anaplasmosis) in Minnesota increased by 742% over a 16-year period, from 278 cases in 1996 to 2,063 cases in 2011.⁶² In Minnesota, increasing temperatures and the expected accompanying changes in seasonal patterns are expected to result in earlier seasonal tick activity and an expansion in tick habitat range, increasing the risk of human exposure to ticks.⁶³

West Nile virus is the leading cause of mosquito-borne disease in the United States. Climate change will increase human vulnerability to this potent virus. The Minnesota Department of Health (DOH) details the fluctuating but steadily increasing course of West Nile Virus disease with a total of 782 cases from 2002-2017. The DOH is concerned about the impact of climate change on vector-borne diseases and is tracking the human disease case numbers.

According to the projections by the fourth National Climate Assessment, “Annual national cases of West Nile neuro-invasive disease are projected to more than double by 2050 due to increasing temperatures, among other factors, resulting in approximately \$1 billion per year in hospitalization costs and premature deaths under a higher scenario (RCP8.5; in 2015 dollars). In this same scenario, an additional 3,300 cases and \$3.3 billion in costs (in 2015 dollars) are projected each year by the end of the century. Approximately half of these cases and costs would be avoided under a lower scenario (RCP4.5).”

Under any likely emissions scenario, prevention, monitoring, and reporting costs, borne by the Minnesota Department of Health and other authorities, associated with the spread of vector-

⁶⁰ Bael, D. & Sample, J. *Life and Breath: How Air Pollution affects Public Health in the Twin Cities*. (2015). at <<https://www.pca.state.mn.us/sites/default/files/aq1-61.pdf>>

⁶¹ *Impacts, Risks, and Adaptation in the United States: The Fourth National Climate Assessment, Volume II*. (2018). doi:10.7930/NCA4.2018

⁶² Robinson, S. J., *et al.* Disease Risk in a Dynamic Environment: The Spread of Tick-Borne Pathogens in Minnesota, USA. *Ecohealth* 12, 152-163 (2015).

⁶³ Dumic, I. & Severini, E. “Ticking Bomb”: The Impact of Climate Change on the Incidence of Lyme Disease. *Can. J. Infect. Dis. Med. Microbiol.* 2018, 1–10 (2018).

borne illnesses will increase.⁶⁴ Similarly, state costs for mosquito abatement to control vector-borne diseases within the state will likely increase.

Costs of responding to, managing, and repairing damages from climate change to the forested lands of Minnesota

Minnesota contains large acreages of state forests and state parks that provide significant economic, ecological, and recreation benefits to the state's population. These forest resources are being and will continue to be impacted by climate change. Climate-change-driven shifts in precipitation patterns, altered disturbance regimes, and increased frequency of late-season moisture stress amplify the effects of existing forest stressors such as invasive species, insect pests, and plant diseases.⁶⁵

As just one example, "As of 2017, the Minnesota Department of Natural Resources Forest Health Unit reported that more than 440,000 acres of tamarack were in some stage of infestation by the eastern larch beetle." 172 square miles of tamaracks are already dead, and a total of 688 square miles of tamaracks are dead or expected to die. "The absence of an obligatory overwintering period, combined with longer growing seasons brought by warming temperatures, may allow for multiple generations per year on a consistent basis. This switch in life history results in faster spread and increased tree mortality. Warmer winters are also presumably causing less winter mortality for overwintering beetles. In addition to the exploding populations of beetles, warmer winters mean less access for loggers to manage tamarack stands, which typically require frozen ground to operate machinery."⁶⁶

The DNR is beginning to replant tamarack, but those costs to the state for forest replacement will increase over the next decades with increasing climate change

Minnesota's natural resource managers are incorporating climate adaptation into land management, for example, taking steps to address these issues by increasing the diversity of trees and introducing species suitable for a sustainable climate. But this diverse suite of planning and implementation actions comes at significant cost to the state.⁶⁷

⁶⁴ *Adapting to Climate Change in Minnesota*. (2017). at <<https://www.pca.state.mn.us/sites/default/files/p-gen4-07c.pdf>>

⁶⁵ Swanston, C. *et al.* Vulnerability of forests of the Midwest and Northeast United States to climate change. *Clim. Change* 146, 103–116 (2018).

⁶⁶ Hartshorn, J. *Eastern Larch Beetle Outbreak Keeps Going When Winter's Not So Cold*. *Entomology Today*. (2018). At entomologytoday.org/2018/04/18/eastern-larch-beetle-outbreak-keeps-going-winter-not-cold/.

⁶⁷ Ontl, T. A. *et al.* Adaptation pathways: ecoregion and land ownership influences on climate adaptation decision-making in forest management. *Clim. Change* 146, 75–88 (2018).

Cost to analyze and evaluate the future impacts of climate change, the response to such impacts, and the costs of mitigating, adapting to, or remediating those impacts

Minnesota is undertaking extensive planning efforts across state agencies, as well as funding independent research efforts, to assess the State's vulnerability to a broad range of climate change-related impacts, and to develop adaptation and resilience strategies.

Since 2009, fifteen Minnesota state departments and agencies (Administration, Agriculture, Commerce, Corrections, Employment and Economic Development, Environmental Quality Board, Health, Military Affairs, Natural Resources, Pollution Control, Public Safety, Transportation, Water and Soil Resources, as well as the Metropolitan Council and Minnesota State Colleges and Universities) have been collaborating on climate adaptation through the Interagency Climate Adaptation Team, including sharing information on the hundreds of agency research and planning projects that help Minnesota evaluate, analyze, mitigate, and adapt to climate change.⁶⁸

According to survey completed by the Minnesota Pollution Control Agency completed in 2016, 17.5% of state agencies, local units of government, and tribal governments have at least one type of plan or planning effort that addresses climate adaptation.⁶⁹

MINNESOTA
JUDICIAL
BRANCH

⁶⁸ *Adapting to Climate Change in Minnesota*. (2017). at <<https://www.pca.state.mn.us/sites/default/files/p-gen4-07c.pdf>>

⁶⁹ *Adapting to Climate Change in Minnesota*. (2017). at <<https://www.pca.state.mn.us/sites/default/files/p-gen4-07c.pdf>>

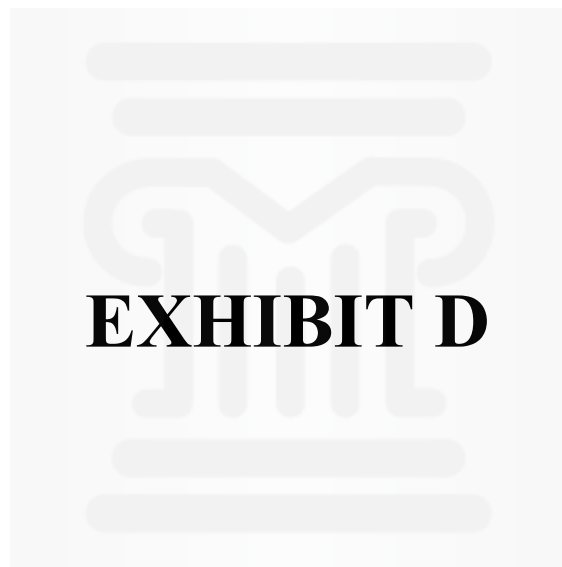


EXHIBIT D

MINNESOTA
JUDICIAL
BRANCH

UNIVERSITY OF MINNESOTA

Office of the General Counsel
360 McNamara Alumni Center
200 Oak Street S.E.
Minneapolis MN 55455
Office: 612-624-4100 Fax: 612-626-9624

Dan Herber
Sr. Associate General Counsel
Direct: 612-626-2716
herb0089@umn.edu

January 5, 2021

VIA EMAIL ONLY

Andrew W. Davis
Stinson LLP
andrew.davis@stinson.com

Re: Data Request Center Nos. P003673/P003676

Dear Attorney Davis:

Your colleague Attorney Noteboom has sent various University employees and former employees correspondence regarding your above-referenced request. Know that the University is diligently processing your extensive request as clarified by you in compliance with all applicable laws and will provide responsive data as soon as feasible, including a partial release of responsive data today via the University's Data Request Center (portal). You will receive a link via that electronic portal where you may view and download the data.

I have reviewed the various correspondence of Attorney Noteboom purporting to set forth the legal obligations of the University in this matter. While the letters do not set forth an entirely accurate understanding of the responsibilities of the University under Chapters 13 and 15 of the Minnesota Statutes, I see little point in arguing about the points therein since the University is fully complying with its legal obligations and will respond to your extensive requests in a timely matter. The more extensive a request, the more effort is required by the University to ensure it complies with its obligations to protect the privacy of data as set forth in Chapter 13.

Please direct any future correspondence regarding the above-referenced matters to me.

Sincerely,



Dan Herber

DH/djh