



**CBS NEWS
MINNESOTA**

Communicating Climate Change with CBS

JOUR 8205: Capstone Research and Planning Report

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Situation Analysis

After decades of human-influenced climate change being a taboo topic for local news stations, CBS Minnesota (local call letters: WCCO) is finally striving to become the local news leader on the subject. Since this is uncharted territory, the station is investing in numerous resources both on the local and network level. These include a network environmental team, local environmental (E-team), and an emphasis on airing more human-influenced climate change stories. Broadcasters are now making the rule book regarding the ideal communication methods for such a science-intensive topic. To do so, WCCO should address the best vocabulary terms to clearly and quickly describe human-influenced climate change, discover who the news audience trusts the most, figure out how to cover such material in a short period of air time, understand what topics are most confusing and of most interest to a news audience.

Organization Purpose and Goal

WCCO recently launched a new brand campaign for the weather team called “Next Weather.” With the recent launch, producers are putting more emphasis on weather segments in each newscast. The station even hired a fifth meteorologist to help present more weathercasts in different community locations. One of the goals of the new branding includes bringing more human-influenced climate change content to news viewers so they can easily understand the science and how it impacts their lives. Current initiatives include pushing human-influenced climate change stories on all modes of media, but the best way of communicating these stories has yet to be established.

Research and Findings

Through quantitative and qualitative research, this study attempts to find the best communication tactics for human-influenced climate change. Quantitative analysis includes an online survey using Qualtrics software posted on the professional Facebook page: *Meteorologist Lisa Meadows*, Twitter page: *LisameadowsCBS*, and Instagram: *metlisameadows*. It consists of 923 responses from anywhere with access to the *Lisa Meadows* professional social media pages. Most surveyees were from one of the TV markets of Lubbock, TX (TV market 142); Champaign-Urbana, IL (TV market 83); Sacramento, CA (TV market 20); or Minneapolis, MN (TV market 15). The survey responses were collected April 3-8, 2023. Data analysis (see Appendix D) was conducted by myself.

The following questions and answers are listed in appendices A and B. This survey aimed to find best practices for broadcast meteorologists explaining human-influenced climate change. The first question inquired about the surveyee's opinion that climate change is at least partly human-influenced to gauge whether most responses applied to the study. The answer was 87% yes. R2 compared the terms "Climate trends," "climate crisis," and "climate change," where 60% of the respondents chose "climate change" as the most uncomplicated phrase for understanding the topic. Question R3 was, "which phrase is easiest to understand when it comes to human-influenced climate change?" The term "rising global temperatures" beat out "global warming." The results of R4 indicate that more than half of the surveyees (52%) favored the term "increased global precipitation" over "wetter climate."

The next group of questions aimed to form an understanding of the TV-viewing audience's thoughts on how media covers human-influenced climate change (found in appendices A and B). When asked if the surveyees thought human-influenced climate change information presented by the media was confusing, 51% said yes, while 40% said no (9%

unsure), according to R6. The survey results indicate a need for more human-influenced climate change reporting, with 49% of those surveyed feeling the media do not relay enough information (R7). R8 inquired if WCCO did enough human-influenced climate change coverage, to which the answer was 45% yes, 41% no, and 14% too much.

Digital news sources such as web streaming services and station websites continue to become more popular in the news industry. It is beneficial for local news stations to know if viewers will utilize these resources for human-influenced climate change stories. When asked if they would follow up on a local news station's website for more information on a human-influenced climate change story they saw on the news, 56% of respondees said yes (R9) (see Appendix B). 53% of surveyees said they would go to their local news station's online news stream to watch an expanded human-influenced climate change story they saw on the news (R9) (see Appendix B).

A news reporter's story is only as good as the information relayed by the expert to the reporter. It is also crucial the audience feels this is a trusted source for the science behind the news material. R5 asks who the respondents trust the most for human-influenced climate change stories (see Appendix A). 42% said the National Weather Service (NWS) (see Appendix B). The following highest percentage was unsure at 21% (R5) (see Appendix B). Local news meteorologists came in third with 15%, and State Climatologists were fourth with 12% (R5) (see Appendix B). The last two responses were NASA at 7% and college professors at 3%.

An open-answer format was used for the last two questions of the survey. While answers surrounding politics were often the most common, these answers were not considered among the top three in data analysis since this study focuses on science over politics. R11 inquired about what viewing audiences found most confusing about climate change (see Appendix A). The top

three topics were variability (how we can have extreme cold/snow storms while the climate is warming), the cycle of natural climate change, and what an individual can do to help (see Appendix C). The cycle of natural climate change compares repeated patterns of mini ice ages and mini heat ages. The complete list of topics are listed in Appendix D.

R12 stated, “what matters the most to you when it comes to human-influenced climate change?” (see Appendix A). Again, politics were not considered in the top three responses to this survey. The top three answers were the impact on humans, what we can do to help, and the effect on the Earth (living and non-living things) (Appendix C). The full list of answers can be found in Appendix E.

Competitive Assessment

WCCO competitors include KARE (NBC), KMSP (FOX), and KSTP (ABC). Looking at Nielsen ratings for Thursday, June 8th (Appendix E), WCCO was rated first in the 4:30 AM and 9:00 AM shows. WCCO came in second for the 5:00 AM, 6:00 AM, 4:00 PM, and 10:00 PM shows. The WCCO News at 5 PM was rated third. KSTP is the station’s most significant competitor in the morning, while KARE leads ratings at night. KSTP beats WCCO at 5:00 AM and 6:00 AM; while tying the station for 4:30 AM and 9:00 AM. KARE wins over WCCO at 4:00 PM, 5:00 PM, and 10:00 PM; while tying the station at 6:00 PM. These results are typical of current station ratings.

There needs to be a specific station leader in human-influenced climate change coverage in the Twin Cities TV market. When a popular human-influenced climate change story breaks, all stations will likely cover it. Reporters are known to cover many human-influenced climate change stories in their careers, especially those who find themselves on the environmental beat. Still, there has yet to be a station that schedules a specific segment regularly. WCCO could use

this to its advantage by setting a goal of producing a certain amount of human-influenced climate change stories each month, with a specific segment airing at a designated time. The WCCO Next Weather Team can also help make the station the local news leader in human-influenced climate change coverage by adding information to their weather hits in newscasts.

Current Situation: SWOT Analysis

<p>Strengths:</p> <ul style="list-style-type: none"> ● Well-educated meteorologists. ● Reporters who want to cover climate change. ● E-team. ● Understanding the need for climate content. 	<p>Weaknesses:</p> <ul style="list-style-type: none"> ● No plan for regular climate programming on air or digitally. ● Few climate change stories are airing. ● The weather team not regularly covering climate topics. ● Unclear understanding of important topics to viewers.
<p>Opportunities:</p> <ul style="list-style-type: none"> ● Become the leading local news channel for climate change coverage. ● Use the E-team to find local climate stories. ● Use the U of M’s research for local stories. ● Expand the interview pool. 	<p>Threats:</p> <ul style="list-style-type: none"> ● How is our competition doing on coverage compared to us? ● How is competition beating us on topic digitally? ● Viewers lack of climate change understanding. ● Climate change deniers.

Problem Statement

Human-influenced climate change communication needs to be clear enough for TV viewers with no scientific background to understand how it impacts their lives and what they can do about it. There has yet to be a set plan for covering this material under such a limited news time span, an idea of the best terminology, or suggested topics to be covered. There needs to be a plan to implement better human-influenced climate change coverage on TV or digital media platforms.

Addressing the Problem Outcome

Broadcast news television is all about ratings. High TV news ratings and digital metrics lead to better sales for the station. Human-influenced climate change will continue to be critical to creating a well-rounded news program now and in the future. The communication of this science-heavy topic must be easy for TV news viewers to digest. By producing more human-influenced climate change content, the station can bring new viewers and, therefore, higher ratings to the station. This leads to an increase in revenue for WCCO.

Communication Goal and Objectives

The main goal of this campaign is to clearly present human-influenced climate change information in a way easily understood by TV news viewers. One objective for obtaining this goal is to have a list of vocabulary terms that are suggested for use in human-influenced climate change stories based on the survey. A list of specific words are suggested for use by reporters and meteorologists. The terminology should help explain human-influenced climate change stories in a scientific yet understandable way.

The second objective is to improve certain aspects of human-influenced climate change stories by reporters and meteorologists based on survey and interview findings. Two qualitative analysis questions on the survey include what is most confusing to the news audience and what they are most interested in knowing on the topic (Appendix A). These are the topics that WCCO should take into consideration when developing their stories. The other question about what respondents cared about the most will be beneficial when reporters choose their news stories. When employees are choosing their interviewees for their stories, it is important to keep in mind the professional agencies that are considered most trusted by the news-viewing audience (R5) (Appendix A).

As TV audiences turn even more to digital forms of news viewing (digital news streaming and website stories), the survey suggests respondents want to see expanded forms of TV climate stories on these other media formats for more information (Appendix B). This third objective will allow for more detail and explanation of these stories for the viewer thanks to the longer time allowance. There is also an opportunity for cross-advertising the stories between TV and digital. For example, the short-form piece can air on the TV newscast with an anchor promoting the full report on the digital stream or web at a specific time.

Brand Positioning

WCCO positions itself as a “mother” brand in catering to its audience's needs in news content. Producers purposely choose news stories that will satisfy the wants and needs of broadcast news viewers. This mother brand includes keeping human-influenced climate change stories local. The station can use its newly developed Environmental Team (E-team) to do so. Environmental reporter David Schechner explains, “I think that's what we're working on right now with the E-team, is trying to get local news to cover human-influenced climate change as a

story that impacts local communities” (Appendix H). The Innovation Lab is led by Schechner and is the network’s way of creating more human-influenced climate change content that is released to its affiliates. The local way WCCO is catering to the want for more human-influenced climate change coverage is through the local E-team trying to produce more local human-influenced climate change content.

As the study shows, an increase in human-influenced climate change coverage will enhance the brand position of WCCO amongst competitors, as this is a topic viewers want to see more of. It is important that any of these stories be communicated in a way that the audience finds easy to understand. A way to cater to the audience's needs would be to present stories on human-influenced climate change topics of interest going forward. Not only presenting those topics, but also giving examples of how we, as the average human being, can be able to help in our own way and do our part was an important result of the study. While competitors may present plenty of human-influenced climate change content, the WCCO brand can differentiate itself by covering the “what to do” topic in every story.

Part of the WCCO mantra is that it cares for the community. The brand prides itself in airing stories that the community cares about, can help the community in some way, or is a positive story about the community instead of some of the more common sad, hard news often produced. This plays into the mother brand position in how WCCO relates and cares for the consumer, which gives the station an advantage over its competitors. The brand will continue to excel in ratings by continuing this mantra in the community and playing into it with its human-influenced climate change coverage.

Brand Narrative

CBS News (owned by Paramount) is one of the oldest news agencies in the United States and prides itself on its values of putting trustworthy journalism above all else. “CBS News is the news and information division of CBS, dedicated to providing the highest quality journalism under standards it pioneered and continues to set in today’s digital age,” says the CBS News website. While some media companies focus on revenue over journalistic integrity, CBS has continued to uphold these standards over the decades. CBS provides critical news information 24 hours a day on the national and local levels at its affiliated stations.

Value Proposition

WCCO is unique in that it airs stories by the network E-team on a regular basis. By increasing the amount of human-influenced climate change stories presented on newscasts via TV, streaming, or presented on the website, the station could become the local news leader in human-influenced climate change coverage. This would entail a collective effort from station meteorologists, reporters, and producers to be sure these stories are prioritized in the newscast. The task given to meteorologists and reporters will be to be able to tell these stories in a manner concise enough to fit the three-minute news story mold. By doing so, the station would bring a new incentive to watch WCCO over the competition.

Brand Personality

While station competitors often rely on hard news to fill up all of their newscasts, WCCO is unique in that it throws in feel-good stories to not relay all doom and gloom across the news during every newscast. While each broadcast is serious, with the most hard-hitting news that is a necessary component of broadcast news, the entire show is usually not made up of negative stories unless it is a very busy news day. Like any person, it is great to have a personality

balanced with strength and sternness, showing leadership when necessary and peaking interests with feel-good stories.

Brand voice

CBS News is the “news and information division of CBS Corporation, dedicated to providing the highest quality journalism under standards it pioneered and continues to set in today’s digital age” (CBS News, LinkedIn). CBS stands for Columbia Broadcast System, which was incorporated in 1927. The company prides itself in its journalistic integrity in a day and age which has seen other news companies engage in practices that are predominantly chosen to engage in for financial reasoning. This “classic” brand voice can be seen in how the current CBS and WCCO logos are very simple (Figures 1 & 2).

Figure 2

CBS News Logo



Figure 3

WCCO News Logo



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Audience Analysis

According to Nielsen ratings, the WCCO key demographic is 25-54 years old. Both men and women make up the majority of viewers, with women slightly beating out men. An example of the station brand personality is Fanny Seabeeus. She is a 34-year-old stay-at-home mom who watches the news in the morning to be sure to catch the bus stop forecast and is a big fan of the 9:00 AM lifestyle show. Fanny is married with three children. Her hobbies include gardening, running, and pickleball. She cares about the environment and wants to leave the planet a better place for her children and future grandchildren.

Based on the survey results, the audience will want to hear more about the impact human-influenced climate change will have on them and their family. They also care about the environment and the negative impacts humans have on the planet. Viewers have a fair amount of trust in broadcast meteorologists, so their weathercasts and statements on air about human-influenced climate change impact the TV news audience.

Figure 1

Fanny Seabeeus



Credit: Getty Images/iStockphoto

Plan Launch

Qualitative Analysis Suggestions

To further understand the solutions to human-influenced climate change communication, a qualitative analysis was performed by interviewing two Minnesota state climatologists and a network reporter. Some of their suggestions were implemented into the communications plan. Blumenfeld stated that while giving a speech in Republican-dominated counties, the simple switching of words from “climate change in Minnesota” to “the changing climate in Minnesota” helped keep the audience's attention despite such a politicized topic. This suggests utilizing the

recommended vocabulary from this study in congruence with rewording some of the more politicized phrases surrounding human-influenced climate change to extend the TV viewing audience to a broader audience.

Dr. Pete Boulay, also of the Minnesota State Climatology Office, suggests tying climate-related stories to local water and land issues we see in real-time, “I’ve had the best of luck talking to an audience (about) what they can see,” (Appendix G). The fourth most popular concern about human-influenced climate change, according to R12 was the impact on the Earth (Appendix A). This suggests reporters find stories related to human-influenced climate change impacts on local land and water sources. Being a local news station, this is the most recommended way for news reporters and station meteorologists to approach these stories.

CBS network has created its own specialized group called The Innovations Lab. This team consists of head climate reporter David Schechter, who travels across the world shooting human-influenced climate change stories for affiliates like WCCO. His recommendation via interview is that “tone and style (of climate change stories) don’t have to be all doom and gloom, doesn’t have to be a doomsday report,” (Appendix H). Schechter suggests starting with an eye-catching, positive introduction to the story before getting into the science behind how human-influenced climate change negatively impacts the topic. An example would be starting a story showing the beauty of sea turtles before relaying the impact human-influenced climate change has on them. Schechter believes taking certain steps like these will put WCCO ahead of the game compared to the other stations. “Can we differentiate ourselves enough, like we can be a station that is talking about climate change when the other ones aren’t,” says Schechter (Appendix H).

Recommended Strategy

Human-influenced climate change recommended vocabulary should be sent to reporters, managers, and producers of WCCO in an email with an explanation of the data supporting these changes. These words include *rising global temperatures over climate change*, *increased global precipitation over wetter climate*, while the terms *climate crisis* and *climate trends* should be minimized in stories. Qualitative interviews of government climatologists suggest even the rewording of phrases (i.e., changing climate of Minnestota versus Minnesota climate change) may help keep the audiences attention because it makes the topic sound less politicized.

There are many things WCCO can do to improve human-influenced climate change stories. An email providing these suggested objectives should also be sent out. This includes the list of NWS meteorologists, state of Minnesota climate office climatologists, and suggests our staff meteorologists are also a good source for interviews. Hopefully, following the recommendations in this paper will help improve viewers' trust in the WCCO NEXT Weather Team and help them move up the list.

The WCCO digital team will be instrumental in improving human-influenced climate change coverage on web platforms. A clear explanation of this objective needs to be explained to the digital team, including a request for their help in analyzing web and streaming metrics. They will need to be in the loop when certain climate stories air that have longer production pieces meant for the web or digital stream. According to R9, 53% of TV viewers respondees would go to the digital stream to watch an extended version of a climate story they saw on the news, and 56% would turn to the station's website for a more extended version (Appendix B). Climate stories would need to tease these opportunities once the story is airing on the news, and the time of air on digital needs to be coordinated with the producer of the TV news program.

Recommended Key Messages

Key messages resulting from this study include adopting new language in storytelling at WCCO, different ways of approaching story pitches at newsroom meetings, and utilizing specific interview sources for human-influenced climate change stories. A change in the vocabulary will improve the understanding of the science behind human-influenced climate change for the news audience. Specific story pitches will attract more attention to the newscasts. Using a list of recommended interview sources will gain the credibility of the audience. In turn, this should eventually help gain more credibility for the WCCO Next Weather Team.

Tactics

WCCO has already started including more human-influenced climate change coverage by implementing the E-team and airing more stories produced by David Schechner from CBS network. The station can improve its current tactics by producing even more human-influenced climate change content through reporting packages and having meteorologists present more content. This can be made easy by utilizing Climate Central's free graphics and information released to local news stations. The station will also benefit by using the suggested communication practices outlined here.

While the study shows that the majority of news viewers believe humans are at least partly to blame for human-influenced climate change, there still may be some who would benefit from the less politicized wording suggested by this study. Trustworthy journalism is defined by presenting the facts, in this case, the science, and letting the audience decide how to feel about the situation. By using less politically charged wording, WCCO is following through on this promise.

R5 shows the trust viewers have in the National Weather Service meteorologists as their number one choice for human-influenced climate change information, while broadcast

meteorologists come in as number three behind “unsure.” WCCO should attempt to increase trust in its Next Weather Team by viewers regarding human-influenced climate change. A start for this would be to have the team cover more topics during their weathercasts and be interviewed by reporters for their climate stories. When covering a human-influenced climate change topic, it would benefit the storyteller to interview trusted NWS employees. While this lends credibility to the report, it would benefit the science community as a whole to try to gain more credibility for NASA, climate scientists, and college professors regarding viewership trust. One tactic for doing so would be to use these sources for some of the less controversial scientific topics covered by the news.

Utilizing different mediums is a great tactic to expand WCCO’s human-influenced climate change coverage. As TV continues to be a dying medium, digital news streaming has become more popular. CBS Minnesota is a 24-hour free streaming service that airs WCCO newscasts and other content around the clock. Since there is a time limit to how long a climate story can run on a TV newscast, airing an extended version on live stream or on the station’s website may be beneficial. News reporters are required to write a web story for their TV news piece already, so it will add a little more work for them by requiring the extended news piece. That being said, many newscasters enjoy utilizing all of the footage/interviews they capture with this allowing them not to let that go to waste.

Media Channels

TV is the main media channel utilized by WCCO, but other channels are becoming even more popular in recent years. Live streaming of movies, TV shows, and sports has become a competitor for cable news worldwide. The impact on broadcast news is no different. In response,

WCCO has a free live stream on many streaming devices called CBS News Minnesota. This channel is available 24/7, with live newscasts airing during WCCO News.

Cross advertisement of WCCO TV and CBS News Minnesota (live stream) is already an ongoing priority for the station. Implementing another cross-advertisement will be an easy task for producers. While reporters are only given one minute and thirty seconds for an average news story, they often have way more content they wish to add to the piece. By utilizing the news stream medium, reporters can create stories that are as long as they like and air these on the stream. A producer of the TV newscast can then promote watching the stream by adding a promotion following the news piece stating to “watch the full 30-minute version on CBS News Minnesota at 3:00 PM.”

Print media is valuable for human-influenced climate change information on the station’s website and social media accounts. Reporters must write a short web article accompanying a video copy of their story each shift. These web pages are often shared on the station and the reporter’s social media pages. Sharing these stories on the web allows the author to expand as much as they would like on the science behind human-influenced climate change since the reader can read as much or as little as they would like. By posting as much human-influenced climate change content on the web as possible, the station is covering its bases on as many media channels as possible.

Digital mediums provide many opportunities to use the PESO (Paid, Earned, Shared, Owned) marketing model for advertising. For earned media, all of the on-air employees at the station have their own social media pages that they are encouraged to use to promote their segments. In a way, they are influencers in that each employee has their own fans and can promote these topics to their followers. Owned media suggestions include promoting web

stories of human-influenced climate change. A weather blog could be one solution that could incorporate many human-influenced climate change stories. Shared media options include cross-promoting human-influenced climate change stories across different media platforms, like using social media to promote a report on the web. A paid media marketing option includes advertisements on Twin City transit buses advertising the WCCO Nexrt Weather Team and human-influenced climate change coverage.

Implementation Section

The data and results of this study will be shared with all parties of WCCO News. It will be up to the managers or station employees to implement the suggested changes. Whether or not the changes will be required is up to the management staff. The information will be disseminated via email to the news department, with highlighted instructions specific to each department. This study's author hopes that positive climate change communication practices are adopted by WCCO staff and lead to the want for positive personal human-influenced climate change initiatives being adopted by viewers.

Communication Theory

Social judgement theory is an “attitude theory that emphasizes people’s subjective judgements about social issues. People do not evaluate the message purely on its merits, but instead compare the advocated position with their own attitude, and determine, on this basis, whether they should accept or reject the message” (Perloff, 2021, p. 530). Many people already have an idea as to whether or not they are going to accept a human-influenced climate change story before they even see it. A specific political view is often ingrained within the family unit; if that view is Republican, the likelihood of rejecting the story is higher. Younger generations especially have been exposed to the potential problems human-influenced climate change has

posed and are usually more accepting of these stories. Others do not have a preconceived idea and fall upon the latitude of non-commitment.

Trustworthy journalism is about telling the facts of the science to viewers and letting them decide how they want to use that knowledge going forward. That being said, there are ways to utilize social judgment theory to assist a viewer in understanding how their values line up with such a topic. It is rare to find a human who does not care about the Earth they live on. For now, we only have one planet to call home, so it is vital to take care of it. For those within the latitude of acceptance, taking the necessary steps to help the environment based upon suggestions from experts on human-influenced climate change should be natural. Those within the latitude of rejection may change their opinion after repeatedly being shown the scientific facts behind human-influenced climate change. This is why there needs to be more human-influenced climate change stories consistently aired on TV news. One area in this theory can work in the broadcaster's favor by positively influencing those within the latitude of non-commitment. By repeatedly producing scientific content that is easy to understand and gives the viewer a solid reason to want to change their environmental habits for the better, one may be able to convince those on the fence about the topic to at least look into these stories a little more.

Timing

Information obtained from this study will be presented to managers and staff of WCCO by August of 2023. This will be in the form of short emails specific to each department based upon the recommendations for their staff. Each email will have the main paper and PowerPoint attached in case the reader would like to dig into the data. It will be recommended that the suggestions are presented to the staff within the department by the end of Septemeber 2023. This way, the staff can read, understand, and implement these suggestions before the November 2023

Nielsen ratings month. Nielsen ratings months occur every February, May, July, and November. These markers can be used to evaluate how human-influenced climate change initiatives impact station viewership.

Budget Implications

The best part of this entire study and the implementation of the results of the study is that doing so is entirely free. Except for the cost of attending the University of Minnesota and obtaining the knowledge needed to conduct and write this study, all improvements in human-influenced climate change communication cost absolutely nothing. That being said, WCCO managers can choose to continue education in this field of study by offering employees an opportunity to attend American Meteorological Society conferences throughout the year, which present new information like that presented in this study to better one's understanding of best climate-related communication practices.

Proposed Staff

The main staff of this study will be managers, reporters, producers, and meteorologists. The managers will have the choice of utilizing this study's information to better their communication within each department and require or recommend new practices based on the data. Reporters and meteorologists may use this information to improve their reporting on human-influenced climate change segments. Producers for WCCO TV and CBS News Minnesota digital stream may choose to cross-promote these stories or air some of the long-form pieces.

Evaluation Section

Measurement of communication objectives could be achieved by analyzing TV ratings, web/social media response data, staff interviews, and viewer interviews. An increase in ratings or

digital metrics, especially during human-influenced climate change stories, would suggest the communication initiatives have helped. An increase in the amount of human-influenced climate change stories produced or aired by reporters, meteorologists, and producers would also indicate an improvement in attitude toward proper human-influenced climate change communication. It is suggested that one year after the initial launch of communication changes, the ratings during those segments be compared to those of the same timeframe from the year before to see if there is any improvement in rating numbers. It is also suggested that another survey be conducted of the general TV audience inquiring if WCCO viewers have noticed a difference in the amount and clarity of human-influenced climate change coverage over the past year.

Measurement

There are three different metrics for the three different mediums to measure the plan's success. TV ratings are calculated using the company Nielsen. The Nielsen rating company has a tool called Nielsen Local TV (NLTV). This tool allows the user to view the audience's responses in minute-by-minute increments. By using this tool, WCCO can see if people who start viewing a human-influenced climate change story continue to watch throughout the entire segment. Another way of measurement is by airing a human-influenced climate change story (whether a local or network story) at the same time on the same day each week. The station then can compare ratings of that time frame with those of the previous year to see if there is an increase in ratings. This result would mean success for the segment.

The digital metrics can be measured based on streaming minutes of human-influenced climate change coverage. This metric aims to increase streaming minute amounts by 0.5 million viewers. Streaming of human-influenced climate change stories can be measured by comparing the viewing minutes of these stories versus streaming minutes when these stories are not aired.

Google analytics can be used to measure how human-influenced climate change stories are being received on the station website. One way to do so is to measure “page views” of climate stories from a year ago versus the same time period when the communication plan has been implemented. The goal is a 10% increase in page views of human-influenced climate change stories.

Next Steps

No matter the response from lawmakers and human beings in their effort to curb human-influenced climate change, it will take time for any implementations to start chipping away at the damage already done and pull us back toward a greater outlook for humanity. Human-influenced climate change stories will become more prevalent going forward, so communicating these stories effectively will only become even more critical in the future. While this study just scratched the surface of the best terminology and topics for broadcast news to cover, other studies could help clean up the explanation of the science so viewers have an easier time understanding these news stories. Along with vocabulary improvements, expanding into even more climate-related topics would be the next avenue for many local news stations. On the topic of human-influenced climate change, an answer from R11 states, “why does it always have to be a negative connotation? Seems to be many benefits as well. (Appendix C)” The benefits far outweighed the cons of human-influenced human-influenced climate change. Still, there is a wide variety of new “green jobs” that could be reported upon, and even more are set to come with the invention of new technology with hopes of saving our planet for generations to come.

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Appendices

Appendix A-Survey Questions

Research Questions:

- R1. Do you believe human actions at least partly influence climate change?
A. Yes
B. No
C. Unsure
- R2. Which phrase is easiest for you to understand?
A. Climate change
B. Climate crisis
C. Climate trends
D. Unsure
- R3. Which phrase is easiest to understand regarding climate change?
A. Rising global temperatures
B. Global warming
C. Unsure
- R4. Which phrase is easiest for you to understand regarding climate change?
A. Wetter climate
B. Increased global precipitation
C. Unsure
- R5. Who do you trust the most to give you climate change information?
A. National Weather Service
B. State Climatology Office
C. College Professors
D. Local News Meteorologists
E. NASA
F. Unsure
- R6. Do you feel the information the media provides about climate change is confusing?
A. Yes
B. No
C. Unsure
- R7. Do you feel local news stations do enough coverage of climate change?
A. Yes
B. No
C. Unsure

R8. How do you feel WCCO CBS News Minnesota covers climate change?

- A. Too much
- B. Just right
- C. Not enough
- D. Unsure

R9. Would you go to your local news station's website to read more about a climate change story you heard on the news?

- A. Yes
- B. No
- C. Unsure

R10. Would you go to your local news station's online news stream to watch an expanded climate change story you saw on the news?

- A. Yes
- B. No
- C. Unsure

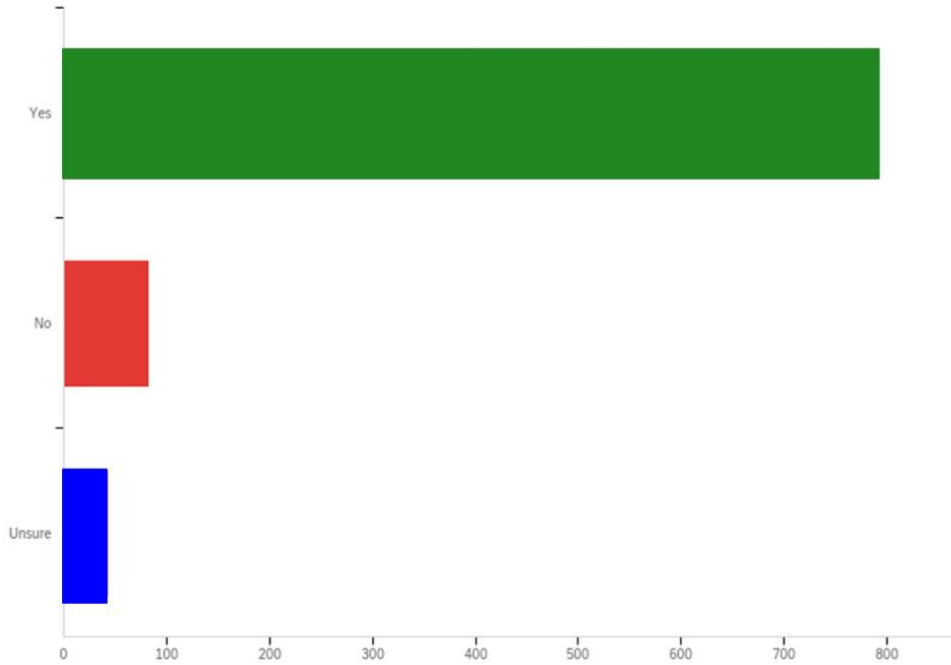
R11. What part of climate change is most confusing to you?

R12. What matters the most to you when it comes to climate change?

Appendix B-Survey Charts (X-axis: People, Y-axis: Answers)

R1. Do you believe human actions at least partly influence climate change?

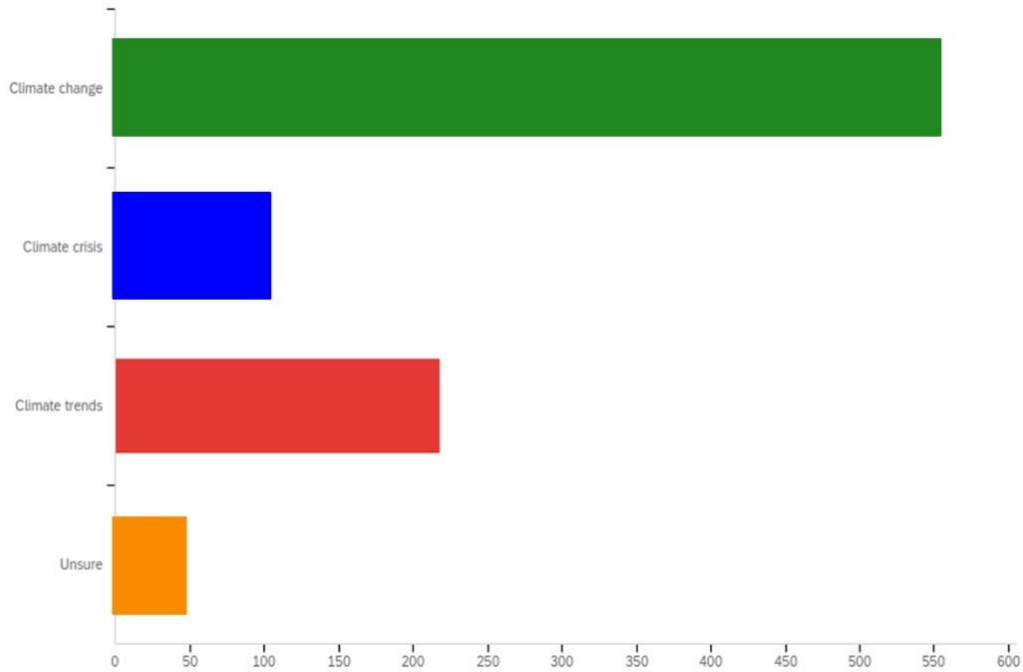
- 1. Yes
- 2. No
- 3. Unsure



#	Answer	%	Count
1	Yes	86.27%	792
2	No	9.04%	83
3	Unsure	4.68%	43
	Total	100%	918

R2. Which phrase is easiest for you to understand?

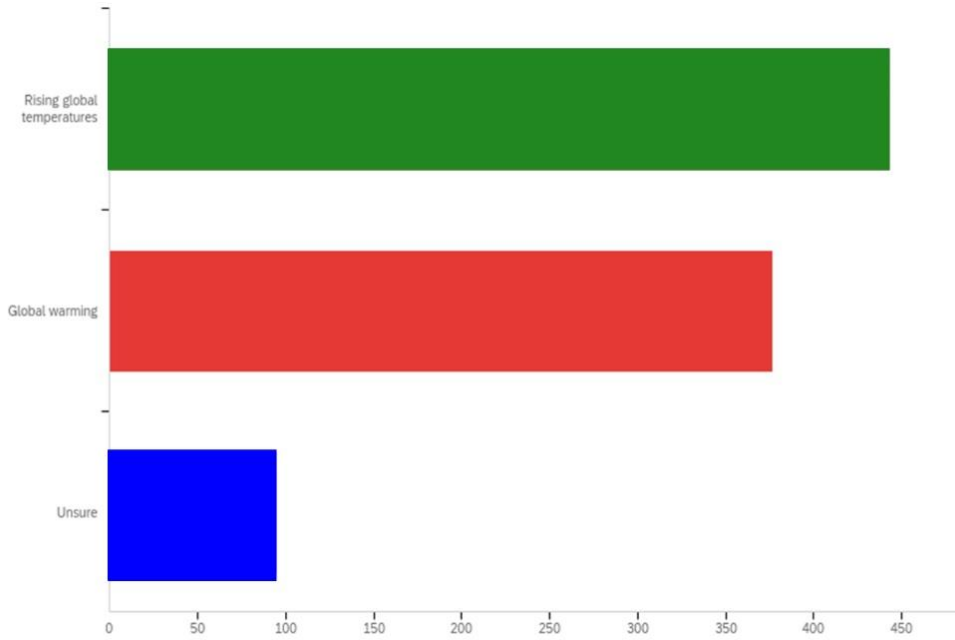
1. Climate change
2. Climate crisis
3. Climate trends
4. Unsure



#	Answer	%	Count
1	Climate change	60.02%	551
2	Climate crisis	11.22%	103
3	Climate trends	23.75%	218
4	Unsure	5.01%	46
	Total	100%	918

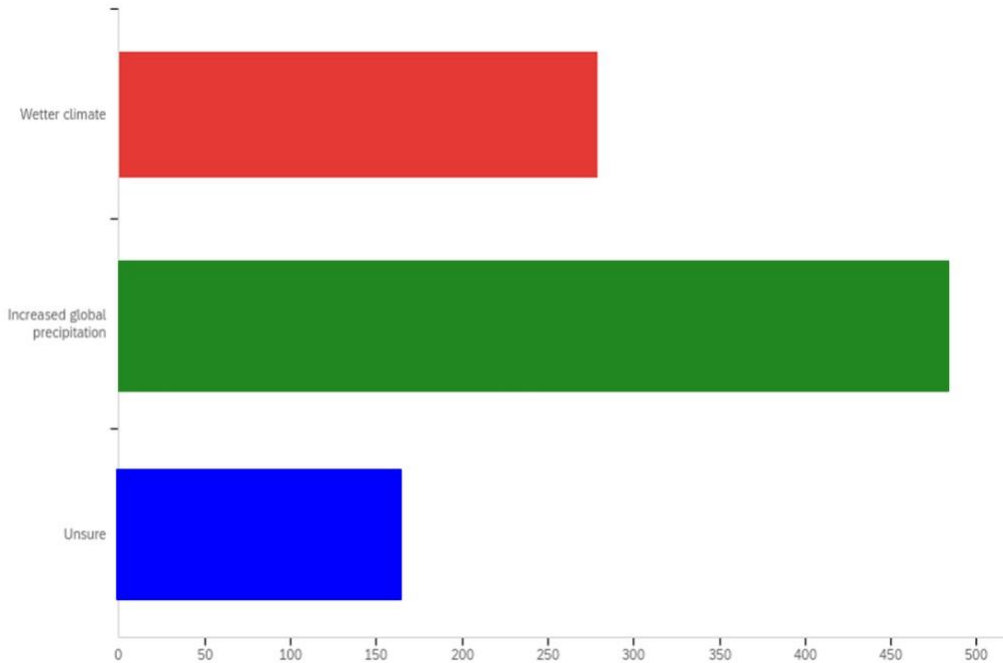
R3. Which phrase is easiest to understand regarding climate change?

1. Rising global temperatures
2. Global warming
3. Unsure



#	Answer	%	Count
1	Rising global temperatures	48.42%	443
2	Global warming	41.20%	377
3	Unsure	10.38%	95
	Total	100%	915

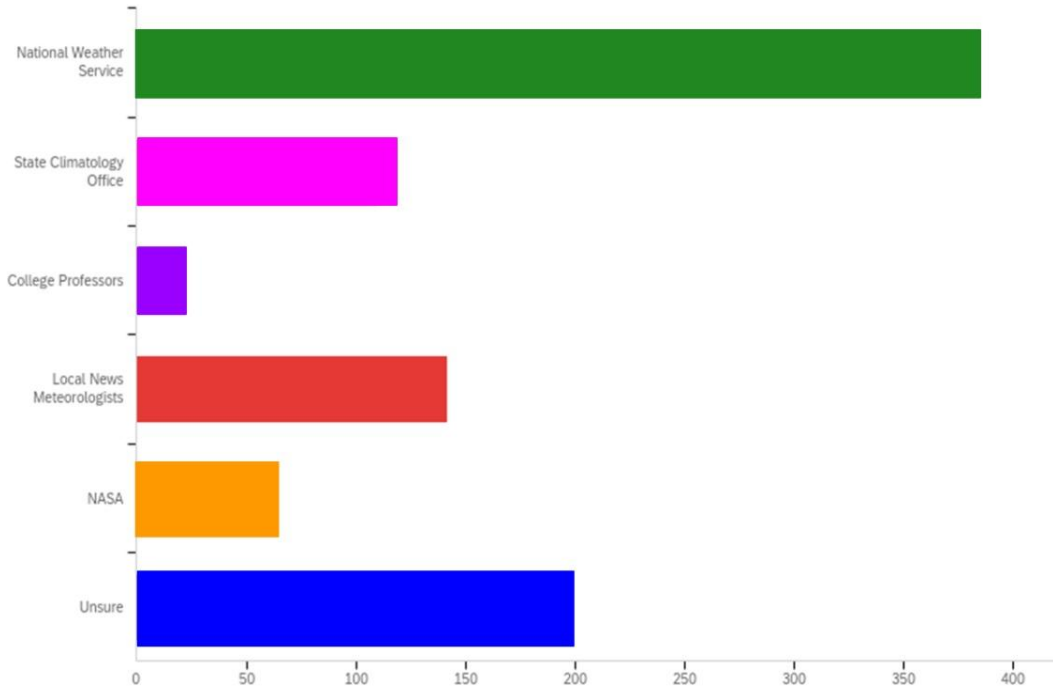
- R4. Which phrase is easiest for you to understand regarding climate change?
- A. Wetter climate
 - B. Increased global precipitation
 - C. Unsure



#	Answer	%	Count
1	Wetter climate	30.49%	279
2	Increased global precipitation	51.80%	474
3	Unsure	17.70%	162
	Total	100%	915

R5. Who do you trust the most to give you climate change information?

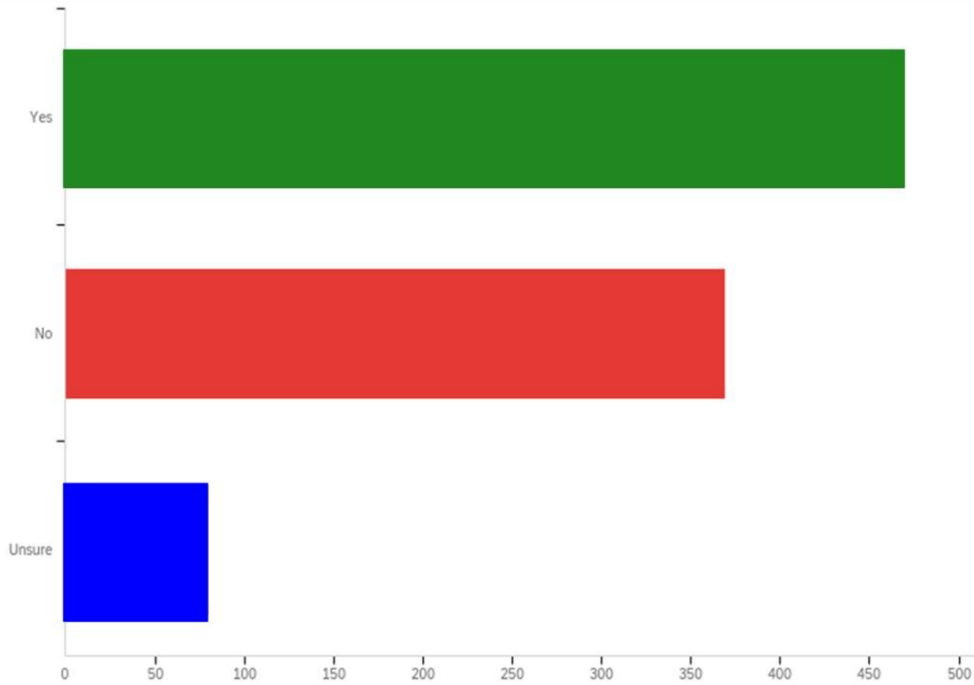
1. National Weather Service
2. State Climatology Office
3. College Professors
4. Local News Meteorologists
5. NASA
6. Unsure



#	Answer	%	Count
1	National Weather Service	41.83%	384
2	State Climatology Office	11.87%	109
3	College Professors	2.51%	23
4	Local News Meteorologists	15.47%	142
5	NASA	6.97%	64
6	Unsure	21.35%	196
	Total	100%	918

R6. Do you feel the information the media provides about climate change is confusing?

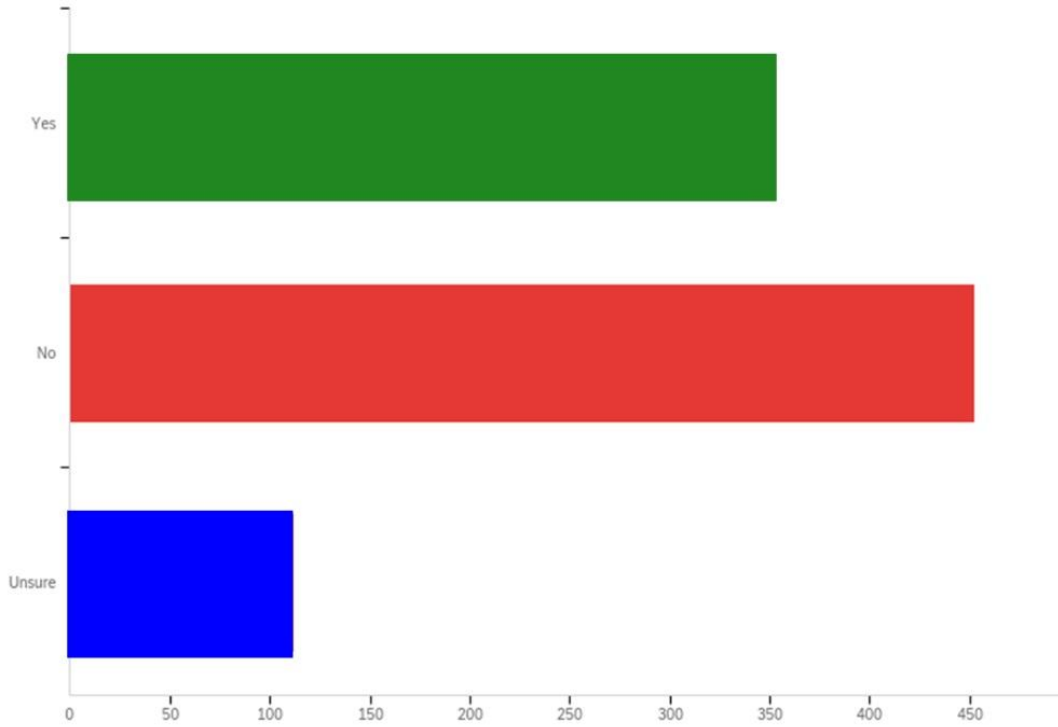
1. Yes
2. No
3. Unsure



#	Answer	%	Count
1	Yes	51.04%	468
2	No	40.24%	369
3	Unsure	8.72%	80
	Total	100%	917

R7. Do you feel local news stations do enough coverage of climate change?

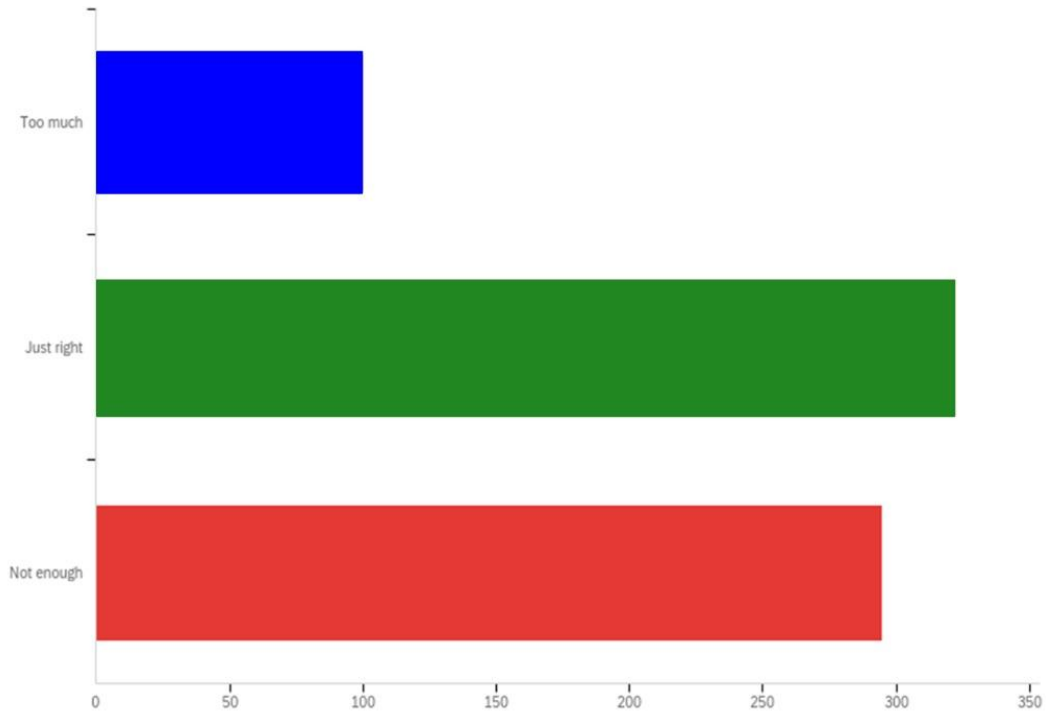
1. Yes
2. No
3. Unsure



#	Answer	%	Count
1	Yes	51.04%	468
2	No	40.24%	369
3	Unsure	8.72%	80
	Total	100%	917

R8. How do you feel WCCO CBS News Minnesota covers climate change?

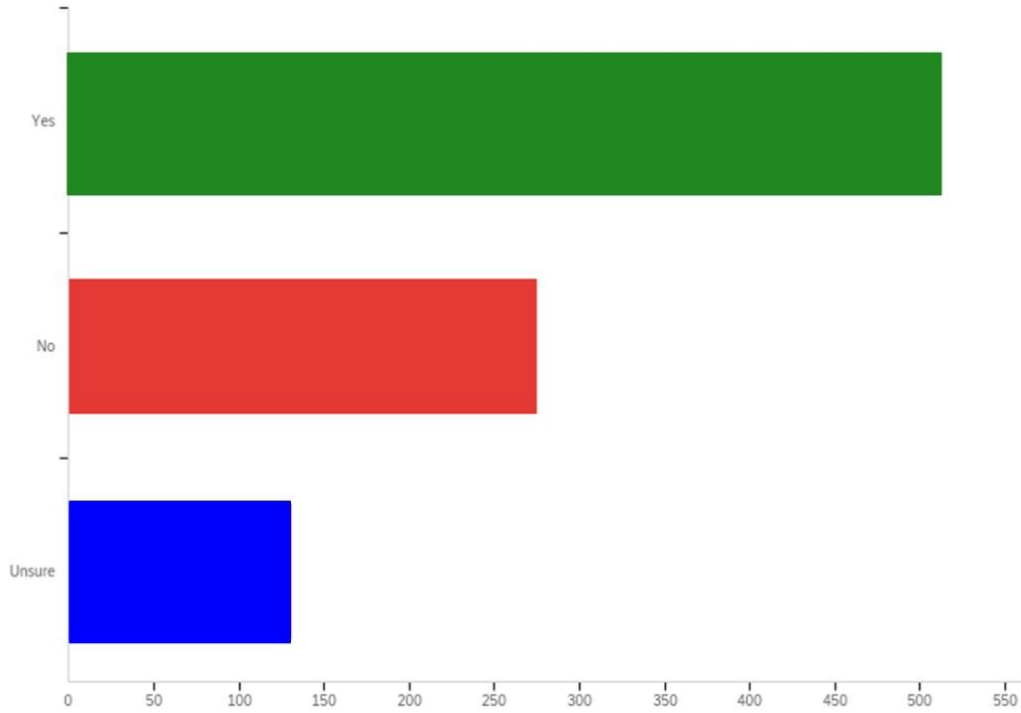
1. Too much
2. Just right
3. Not enough
4. Unsure



#	Answer	%	Count
1	Too much	13.95%	100
2	Just right	44.91%	322
3	Not enough	41.14%	295
	Total	100%	717

R9. Would you go to your local news station's website to read more about a climate change story you heard on the news?

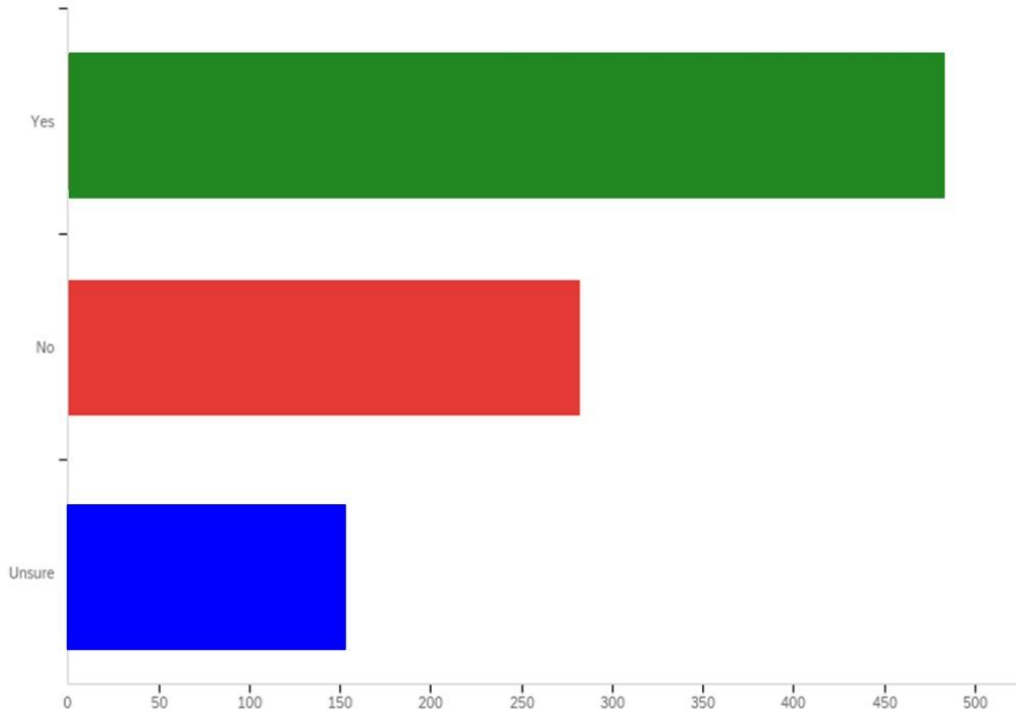
1. Yes
2. No
3. Unsure



#	Answer	%	Count
1	Yes	55.77%	512
2	No	29.96%	275
3	Unsure	14.27%	131
	Total	100%	918

R10. Would you go to your local news station's online news stream to watch an expanded climate change story you saw on the news?

1. Yes
2. No
3. Unsure



#	Answer	%	Count
1	Yes	52.56%	482
2	No	30.75%	282
3	Unsure	16.68%	153
	Total	100%	917

Appendix C-Open Answer Survey Questions

R11. What part of climate change is most confusing to you?

To get people to understand that this is a major problem in the US and we need to take more action like Europe is doing. People don't think it's an issue here in the US.

Inconsistent opinions on causation. While some are pretty clear, the overall consensus is not so black and white to someone who is not in the scientific field. It makes it much more difficult to know what is fact and what is opinion. Research can be complicated by who is funding it, which further causes controversy on what is biased and what is neutral fact based research. To the average consumer, people don't know what to believe and makes it difficult for everyone to be on the same page.

The over use of "Buzz Words"

Conflicting reports if it is real...

What part is naturally occurring and what part is man caused.

How much it is politicized.

That some people think it isn't happening.

The earth spins in space.. how can climate not change? Mother Nature...

The misinformation in the fake news can get a bit confusing with all of the mixed messages one can hear regarding the topic.

After the worst winter in history, warming is not reality here at least. Next ice age is more likely.

I believe that the planet goes through climate change about every 100+ years or more. Look at the prehistoric times when there was a normal climate for a particular region and then the planet went into the ice age.

conflicting reports from various 'reputable' sources

Is it a natural trend or is it caused by humans (or flatulent cows?)

We have been in global warming since the ice age.

None really. I'm just concerned about the aftermath.

unsure

Why anyone bothers

Why fossil fuel CV companies get away with lieing.

HOW MUCH IS CAUSED BY MAN, AND HOW MUCH IS CAUSED BY NATURAL GLOBAL CHANGES.

How to deal with people who are deniers and spew false info and won't listen to anything you have to say

None

Facts are lacking in most discussions.

the rhetoric and politicization of it

All of it.

Everyone has different stories. Who do you believe.

The cause is not clearly understood

That there are any climate change deniers out there.

The true effects as a whole.

Why is it so cold and why is it so hot.

Why is climate change a political issue?

Not really sure

It feels like some of the information is politically driven. Give the facts.

How people think it's not real

what is most confusing or really not understanding the carbon print

Why are winters more drastic if there is global warming?

human affected or not

Why is it changing so much faster

There is a total lack of knowledge by people in general about the complexity of changing to a carbon free energy system. It seems both politicians and the news media gloss over the incredible huddles we face on our road to sustainability.

Climate goes in cycles?

Nothing

That there are fewer tornadoes than 10 to 15 years ago but they now are more intense with higher wind speeds!

Why conservatives are so clueless about it.

While I believe humans contribute to climate change, I don't believe any of the specifics that are communicated about it by the government or media. Both have lies so often, and have been so wrong in the past, that they have no credibility on the topic, or on most topics for that matter.

People need to stop acting like it is causing the end of the world. Scientists and politicians lose credibility when it gets overstated. If we believed Al Gore, we would all

be under water. When AOC says the world is going to end in 12 years, we all laugh and tune her out.

Why people do not believe it is happening and how to get them to believe it is happening.

Some media says there is climate change and other media not much change.

How it will affect our seasons in the future.

The willing ignorance of the people concerning the problem

Which areas of the USA do not easily absorb rainfall

It's difficult to know what really matters in terms of trying to take action. It also feels like we've been told for like 20 years that the world is coming to an end and this is absolute doomsday, and it's gotten to the point where I find that kind of hard to believe. I do think it's important, but I don't know how much of a threat climate change really is because it's been like hyperbole for so long.

The real cause of climate change as it change from population, to agriculture, to deforestation, to pollution, and so on.

Biggest scam next to covid

How geopolitics has so much influence.

Colder and heavier winters negating the global warming theory.

Nothing really

That not everyone understands the crisis.

How it affects not just temperature but precipitation

na

Is it really a cycle? We've had ice ages and warmed up! Idk

Human influences versus natural evolutionary change of our planet.

Nothing. It's all been spelled out pretty clear for me.

It is a money market years in the making

People's resistance to accepting it.

Not sure

The whole idea of how people can change the climate by changing their daily habits seems a bit unreasonable to me.

How to control it

The different impacts that different sources produce.

There is a lot of politics associated with it; there is also a lot of science but I feel politics get in the way.

How to communicate that climate change is all connected and has causal relationship with everything we do to people who think climate changes is not real.

The most confusing part all the scientific terms.

None of it.

Who is actually contributing to the issue vs small changes every day people are being asked to make.

Too much finger pointing and not enough taking blame and working together to help slow the process.

Some solutions (nuclear fusion, carbon extraction, etc) are presented as exotic, fantastical solutions, while less exciting but more practical solutions (plant more trees, live more sustainably, electrify your energy use to the maximum extent possible) see less coverage.

It's really not. Agree with NASA. There are 3 factors in climate change and pollution is only 1 of them. The earth's temp has always cycled through history. Alarmists use it control and rip us off. This does not mean of course that I do not want legitimate energy saving technology development.

Is confusing the right word here, ah no. It's not confusing, it's just that you only have 150 years of actual data and pretend to know the actual reasons why climate changes

The part where money will help make changes to the climate.

More severe weather.Lack

How to stop it

Do we consider the loss of trees and acres of land that were once "wilderness" is now developed. The loss of vegetation and trees has to have some reaction on the weather.

Why Republicans don't understand human driven climate change.

Why anyone would even be concerned about climate change. The world has had constant climate change ever since it was spoken into existence. It is a regular part of life promoted by those who wish to exert power over others.

Denial from the population of earthlings.

That people don't understand or care

How much is a long term trend and how much is caused by human action. What can we/should we be doing?

The reasons why

How we are really going to be affected in the next 10 years.

I don't understand how we shifted from "global cooling" to "global warming" to "climate change" over just a few years. And what caused the earth's global warming/cooling cycles prior to the existence of modern humans & the combustible engine.

The short time frame we are basing climate change on, look at 2020 the world shit down for a few months and everything in the climate began to correct itself, ozone layers, streams cleared up, etc... how do not know this is not a natural cycle of the planet

Isn't all weather cyclical? We are just going through a warming cycle ?

I believe emphasis should be on quicker climate change than is normal. Our daily weather changes from day to day instead of week to week

How to react to the news on climate change.

None. Based on science and not politics, there is no climate change. There is a finite amount of water on this earth that rotates around the globe. We do not lose water to space. The planet is a living breathing entity that fluctuates all the time. While glaciers disappear in some areas, years later they return in the same area. Unfortunately, politics run the narrative of climate change to promote their programs and "plant saving" agendas. While I promote looking for alternative ways to power everything, there has to be real perspectives on how to achieve that. Feeding people a brand or agenda, does not get us closer to alternatives in energy or living. But providing the good with the bad provides perspective that others understand.

None

Getting others to understand and not be called names

Differentiating what's true and what's made up.

Why the media makes suggestions to individuals on how to cut carbon emissions even though major manufacturers contribute an overwhelming majority of it. We could all drive electric cars and eat a vegan diet but that wouldn't come close to fixing the problem. Stop making us feel guilty and explain how the problem should actually be solved.

The fact of the sun's influence on our weather and everyone forgetting to mention it.

Too much contradiction

The variables.

It has been happening for millions of years this is nothing new. Why are people so upset?

What is the most noticeable change

That we wrap climate change into weather.

Things we can do as individuals to help I don't think it's talked about enough

Long term measurements

That people still don't believe it exists

What we can do about it!

The part where many people still don't get that this is happening.

Has this happened before .. is it a cycle?

I'm not sure it's not a result of the earth changing, that there really is anything we humans can do about it.

Most of it, reminds of of acid rain back in the 70s

Why or how

Skin money

The general inability of so many people to acknowledge it and/or accept responsibility for it, at least to some extent

Why we worry so much about it, when two thirds of the world does nothing?

To me it is pretty understandable. I think there should be more info on how to address it

I don't really find any part of climate change confusing.

I'm not concerned with the climate CYCLE.

Waste management

All of it

That people don't recognize that our weather patterns are becoming more extreme with each passing year!

Everyone talks about warming, but it also means colder colds--switching of climates, not just everything getting hotter. More natural disasters due to unstable temperatures, etc. You don't hear enough about that aspect.

The planet has always gone thru warming and cooling phases (think the Ice Age). How do we know this is not just part of that?

conflicting messaging ... driven by corporate/\$ interests.

When people say "global warming" but it seems like it's getting colder, or when referencing climate, it's just about temperatures, but it seems like more extreme weather events like tornadoes and hurricanes are happening more. But then you'll see that it also happened 100 years ago...so is it cyclical or is it a new thing?

Long term effects

How much is caused by humans. Reporting suggests 100% is caused by humans.

That nobody talks about the history of our planet and that climate change is cyclical. The biggest problem is that those who lecture us on climate change are the worst contributors of fossil fuel emissions, mostly in private jet travel. It's hypocritical at best.

The cause of it is all over the board depending on who you talk to. Getting reliable information is difficult.

It's not mentioned on the news/explained

melting polar caps

weather history and other parameters that we don't know about today.

Is it really climate change or the earth just running in cycles. Looking back at the 30's 50's and 70's. It runs in cycles. Also the earth changing its axis a little bit moved weather to central U. S. Instead of western states. So is it really climate change.

El Ni~no vs El Ni~na

Rising sea levels, contaminated air, more violent storms

It depends on who is giving the info, which side of the story is given

Climate change deniers.

only present histor changes seem to be followed. past trends of the world for centuries need be listened to

Global warming vs. climate change when it's not always about rising temperatures.

not sure

Could it be a natural warming cycle that happened many times in earth history? What percentage is human actions?

That there are people who do not believe that climate change is a real threat.

Long term expectations and impacts. Obviously it's still unclear.

The way it's not necessarily noticeable temperature difference but how it's affecting the severity of weather

Is there anyway to affect change? Is there any hope of helping the situation?

How it occurs

The high and low temperature. Global warming, then it gets very cold.

I don't believe it's confusing. I understand trends and how patterns are formed and also how it's connected to "extremes" and surpassing "one-hundred year" marks.

Our Health and Environment

Not sure.

Remembering wide spread climate is not the same as specific weather events

What are the top 3 contributors to climate change? That would help me understand it better.

The idea that man can change the climate.

How it can be denied.

Nothing

Misinformation from multiple sources.

Too politically motivated anymore.

The over emphasis on anthropogenic causes of the current global warming . Particularly when compared to the Altithermal period

Sorting out science and politics

Contradictory and untrue information coming from deniers of climate change.

Increased global participation

There isn't anything that come to mind that would be confusing, however there could probably be more widespread information/news on it to heighten awareness.

Not True

Just about all of it!!

I want to know what I can do about it. What should we all be doing? How can we prevent it from happening?

Conflicting reasons

It's not confusing.

Use gas and pollute or mine what is needed to make batteries for electric vehicles. You still need to charge batteries....

How it went from Global Warming to Climate Change

The speed of which it is happening

I don't understand how people can deny the effects of climate change

Weather patterns that seem to repeat themselves from 20 or more years ago

Why government doesn't seem to care

Past history

How we can make changes to slow the change and extreme weather.

Why some people continue to deny the reality of climate change.

The initial term "global warming" seems not to have been accurate or appropriate, and now there is skepticism of the succeeding terminology

Too little info on what we need to do to help

Short and long term effects. What are some of the current signs of climate change?

I hear people talk about "global warming" when it is cold outside or they mention the ice age. What people experience day to day (weather) and what is happening to the climate longer term is hard for people to comprehend - when the weather is cold they say "yeh global warming, where is it now?)"

Global warming is a part of climate change , the the whole

Honestly? That people aren't adequately concerned, that they are not connecting the dots with what is happening around the country/world, and that politicians and the media aren't treating this as the most important issue facing civilization.

I would like to know more about atmospheric rivers

It's cyclical and not caused by Humans

the extremes

Nothing confusing, it's been happening since the beginning of time and will continue

The extremes

I believe its a distraction from the bigger issues of the world. Weather/climate won't matter if there is a war or other political ramifications! China/India/etc does not care about Climate Change they care about \$ and power!

The concept that even though the earth's climate is continuously changing, and has been for its entire history, we base it on the most industrialization of our history and feel we can change it. The earth is going to do what the earth is going to do. Man is minuscule .

Trying to understand it without the political references

Is it real or just a cycle of the earth.

It's not what confuses me. But I think what is not clearly understood. What happens at any given moment, at any given location is not necessarily indicative of climate change. It's patterns, historical changes, on a broad area. It's macro, not micro.

the info

Global warming.

Effect on wildlife

For so long it was referred to as global warming, and now some people struggle with the idea that increased severe cold weather systems and storms are also part of the consequence. Tired of people scoffing at the idea of 'global warming' when it's cold outside.

Why so many refuse to believe it exists

Why it seems like it is a U.S. only effort.

None. I also believe that climate has cycles and some of what we see now is a cycle in weather patterns that's being claimed as global warming problems. 2nd global warming / climate change is a giant money grab. Follow the mass amounts of money and see where it goes. The elites who truly care about climate fly on private jets to tell us common people what we need to do about fixing the environment.

How the confidence is so high with only 150 years of data on a 4 billion year old planet. It's just like the ozone layer 30 years ago. It was a big crisis now the hole is closing up on its own. Let some more data command -keep studying-before we start sounding the alarm.

Melting ice pack

When it's colder than normal.

How people can't accept what's happening without making it into a political issue.

Scientist need to communicate the science of climate change better to the public in perhaps language more suited outside of the scientific community.

It is not confusing to me.

The dust bowl years

It is referred as global warming; however, many times people name cold spells, too little rain, too much rain, and other weather phenomena on the same tag line.

The 10 feet of fucking snow we still have in April

Why we are not acting faster to help combat the ever evolving problems

How to stop it electric is not the answer

The true cause as it is too politicized to know the truth.

How much humans can affect it

Nothing, the earth warms up, the earth cools down. What is the average temperature supposed to be?

Why only parts of what the climate is doing is called climate change/crisis. There is talk about ice shelves breaking off, but not thickening snow packs inland. Nothing is said about solar activity related to climate change or the historic ebb and flow of warming and cooling the planet naturally goes through.

How to fix it

It's confusing to see the opposite extremes occur within a year.

The doomsday reporting that cycles through media. The economic forces at play and really focusing on Net-Green Energy production. Nuclear energy has been bashed and abandoned yet being one of the most green fuels. People who deny this are lazy. We have been fed a bad narrative and the US has only built a few Nuclear power plants in the 21st century. It's because of this smear campaign and DoD spending (which defense emits the most carbon) that really upsets me. So hypocritical of our representatives to say they care about climate but are supporting the biggest source of carbon emissions.

The fact that it isn't always completely explained that "global warming" is still legitimate in the event of weather events in which the weather is colder in areas it isn't normally as cold.

The whole misinformation/disinformation going on the internet about climate change

Why it's so downplayed. Why does no one take it seriously and leave it for another generation to solve. Apparently there's more than 1 earth.

That people don't "believe" in it

The warming of the oceans

The Domino effect of it all. The late winters for farmers, the effect it has on mosquitos, and the fall out from that.

Why politicians are so afraid to do what's right for our environment

That we continue to make things worse.

The variability of weather

The climate has always been changing. So saying climate change seems redundant and misdescriptive.

None of it - it's fake made up propaganda

How it's gotten so bad,,so quickly affecting our weather

Why are we suddenly hearing about climate change in the present instead of 10-20 years ago?

What people can do to help keep it from getting worse.

That it is politicized

When did climate change start happening worldwide?

None. It's a scam. Follow the money.

Effects and time frames

Why government does nothing

That it is not recognized as a global crisis.

How small temperature averages are very significant and can affect polar ice, sea levels, etc.

Really understanding how to help it or what is the major causes and is there anything we can do to change things?

Why people only blame it on oil and like items. They don't talk about over population and other things that affect it

Regional trends and impacts

Probably the end result.

Carbon capture

Nothing, the climate has ALWAYS changed and ALWAYS will

The inactions of countries to face this crisis.

How most humans do not understand the severity of what is happening to the globe and how it will impact human existence in the near future.

Making it relatable, showing affects now vs in 30 years

Its a CULT! Climate change is a bunch of bullshit run by a fuckin cult! Just ask the swedish teenager who had to delete her tweet from 5 years ago, because none of us died from global warming!!! Ask the glaciers in Glacier Ntl. Park that didnt melt, 20 years later! Ask Gusty'aHack to explain the COLD weather late into April for the last 10 years or more. Why is abnormally cold weather, "just the weather" but a few hot days in summer is global warming???

Climate change always occurs. Whether we affect it noticeably is unsure. As a scientist, I cannot say with good faith there is a man made issue.

Why others are not getting the seriousness of the problem and the ease of the solution.

Nothing. I feel I have a good grasp of the concept.

For me, I sometimes wonder if certain aspects get covered more than others and that what is covered may not be the things that are having the most impact on climate change but are just more alarming or that someone decided it was a better story to promote. So I feel like I need to drive deeper to satisfy my cynical side and find proof on my own.

Why we are not doing anything to make the change we need to

The media never saying that our climate has been warming since the last ice age. When an ice cube gets smaller, it melts faster.

The increase in variation from the normal (colder wetter winter to hotter drier summer etc)

Ocean temperatures

The extremes in temperature (some so low and some so high) and so many serious storms.

The politics

I studied climatology in college, not confusing at all.

What can be done about it.

Local impacts on strength of storms and temperature patterns..

How it is so political.

The range of possibilities.

I'm really not that confused about it as I once was.

The way some of the world 🌍 is attempting to slow 🗣️ climate change ...

Why a good portion of folks are unconcerned

Are we really getting wetter and warmer? Seems like some areas are dryer and colder.
Are we really overall warmer over the whole earth?

The portrayal of controversy in American media outlets. Admittedly this a greater evil in other markets.

Why educated people with the power to make changes won't believe what is happening right before their eyes?

It is a farce, and people are being brainwashed. I am most concerned about our children and the fact that they have such hopeless prospects for the future when, in fact, climate change is inevitable.

Rising ocean levels. Doesn't Seem Like there is enough ice in comparison to the size of the ocean to raise levels as high as they predict.

If we're having climate change, how are we having a winter like this?

How to fix it. Conversely what to expect.

Different comments/facts from different to match their personal agendas/rhetoric...

The cause What We can do to slow it Or stop it (I have tried to find your WCCO
Link where I can get more info on Stories that interest me I can never find it I'm a
Sr Citizen

The political part

Nothing really.

I see different stories about glaciers melting, volcanic activity, atmospheric changes, global gases all affecting change. It gets confusing how it all or not affects climate change.

They say warming but it seems colder, I appreciate the term change not warming. Different people use different terms

How we adjust and adapt to the unusual and intense weather circumstances

By partially caused by humans I am saying minimally caused by humans. I really don't feel global warming is a disaster waiting to happen.

I don't get how people can't understand the science behind it. There are clear indicators being ignored.

Historical patterns/evidence of climate change, for example how did the invention of the car effect the climate, or temperature 100 years ago compared to now and why.

Not sure

I believe a lot of it is politically driven. It's hard to know what is true out there and what is driven by an agenda, sadly.

Earth cycle as example there is a change in climate about every 10,000 years and we may be in a 10,000 year cycle or we may be in 100 year cycle. Do we know for sure what the cycles are?

changing patterns

How can we slow the progression

How it affects in different ways, sometimes in conflicting ways or so it seems.

Historical doomsday predictions that have not come true yet NOW we're telling you the truth. NOW it's science.

The climate has changed throughout history, is this a natural cycle?

Celebrities and politicians flying private jets to climate change conferences. Zoom is a good option.

There is a lack of context in terms of cyclical change - history records seem to not matter. There is change happening but how does it historically compare to other trends? Also - how does MN and the US compare and fit into broader global trends from other countries? MN passes important new goals but don't hear how that connects into other countries.

We can't change what God has created.

This winter has been the 3rd snowmelt and has been pretty darn cold. It's hard to believe that we are experiencing Global Warming when we have winters such as this one.

Why there is not more coverage

I'm not sure why climate change is politicized. It's happening but no one talks about the real reason it is happening or what we can do to stop it. And I'm not talking about "recycling" because that's such a small fraction of things that could help. It's our politicians being paid off by the companies that most pollute our world, yet nothing is done about it. These politicians get away with killing our planet and people, but right wingers don't care to change it, and the people in power only make more money when we pollute our earth more. So unless WCCO will get to the real reason climate change is happening, I wouldn't read your story because it would just be fluff. I cannot hear another story about a 1st grader starting a recycling program for her school. Give me a hard hitting story or don't write one.

Who to believe?

The length of time studied

Understanding what is changing and how that increases precipitation.

Not sure

Increased precipitation

That so many people disregard that it is happening.

What to expect in the near and far future.

climate

Causes and effects

The refusal to acknowledge that political beliefs effect climate expertise on both sides.

Why we has the United States when China and India are the biggest contributors to climate change

That we can stop climate change.

Cold winters

It has become so political—how can you deny it?

What exactly is causing all of the disasters our country has been facing?

The extremes we can expect to see.

Temperature extremes. I would like to see more information on climate trends vs one month of data and how trends look over time to help people understand the impact of change.

How much money it's worth

Climate studies

Differing views and reports by non-experts

How it can change so quickly

Different terms

Why people don't believe it

Not for me, but others who say things like, it's global warming but we are having more freezes. They don't get the concept of global warming and how it has an effect.

The trends in the weather and what causes it to make it so extreme.

How do we know this is not natural

Nothing at the moment

N/A

Not confusing to me, but I think what confuses people is the initial "global warming" mantra. While true in total, an individual's experience within their own geological climate may be impacted in a way in which they experience colder than normal years or more precipitation than normal.. thus running counter to the initial "warming" nomenclature.

Climate change vs Global Warming. It's easy for doubters to say "see? There's no global warming!!!" When it's 20 below. Just call it a climate change and do away with the "warming".

How some people can possibly still believe it isn't real.

How can any live human see the crazy weather patterns and still deny it is happening

N/A

Understanding climate change and comparing it to historical climate patterns.

That it is always treated as settled science in news stories yet there are frequently other scientists who publish questions that don't seem to be answered directly.

The long term implications

The lack of human accountability. The loss of green space for hard space; urban development with the loss of "green space".

How climate change is different than weather and if it impacts weather at all. In MN with the cold and snow this year it's tough to buy into global warming when the weather tells you it's not warm.

Why many politicians refuse to accept science.

If the planet is warming why does it seem winters are lasting longer. Also if we get more snow or rain why wouldn't that lower the temps of the planet.

Im not confused but I can see how others can be because the emphasis has long been on "warming" vs all the other weather changes such as larger tornados, hurricanes, fires, ect...

Panic.

All the contributing factors

How we can't get comprehensive legislation to slow it...

It's an agenda to tax and control the people of the planet. Weather is cyclical. It's is directly a result of sunspots, coronal ejections, emp, and any solar activity. The earth was warmer before and it is coming out of an ice age. Thus our temps are rising. Increasing CO2 is beneficial to the planet for crops and plant life in earth. Plant breathe CO2 and as such human benefit from increased oxygen on the planet and warmer temps. The Antarctica was once habitable.

Solutions to the problem

Statistics show Earth is getting warmer, however it's only a few degrees. How does that small temperature rise affect us, the weather, climate etc? Is there a way to explain how the small increase in temperature does make a difference?

How we can have such cold snowy weather and temperatures are raising

We've been monitoring the climate for maybe 2,000 years. The planet has existed for billions of years. Seems like we are conflating compounding numbers. Even in the last 10,000 years the weather has drastically changed.

That people don't listen

Why it is politicized!

That the trends are any different than normal ups and down over history

Historical climate change versus what is happening today.

Flooding vs drought

What really works to reduce impacts of humans on climate.

That people give it credence.

Historical context

Climate has changed for millions of years, why is it different now?

I think the story changes as to the cause.

The manner in which empirical evidence is skewed to fit denial narratives.

I have a difficult time understanding how this is all the sudden such a huge crisis. No one discusses how during Covid when the world was shut down it so rapidly accelerated

Recorded weather patterns have been kept for what, a hundred years? Seems like an incredibly small sample size given the earth is 4.5 billion years old?

Whether climate change is cyclical or if human behavior has impacted it as much as some outlets claim.

The impact of agriculture

Is the change statistically significant? Trends or normal (common cause) variability over time?

None

The effect on weather The El Niño et such

Brief use of data and numbers. If climate change is going to impact “generations”, then use hundreds and thousands of years of data. Not the last 10-30 years. That’s comparing apples to oranges.

The politics!

Climate change versus "weather".

I think most people don't understand how the overall rising global temperatures affects climate or is causing overall global climate to change.

Why we're not doing more to stop it

Deniers

The lack of urgency on the part of the U.S.

The facts! Do they actually prove the "end" is near and inevitable? And the fact there is such a push in the USA and blind ignorance of other countries.....China! And the belief that fossil fuels can simply be replaced with wind and solar. And EVs are overly dependent on fossil fuels.

How much is caused by humans.

Reality vs hype. What is proven? What is cyclical--ie has happened in our past?

What appears to be a lack of standard measurements over time. In my own business experiences, you define KPIs and continually measure to those to see what your trend story is.

The fact that so many know so little about climate change and that, like the news, claim everything fake that doesn't fit their narrative.

That people will ruin our current lives over it. Live the planet is going to reset over something.

How it will effect every day life in the future.

How it's become such polarizing political discussion.

How people can disagree that we're experiencing some sort of climate change.

All of the people who think they understand the cycles of a planet that we only have data for the last 200 years

Why is it happening... What is the reason? Is there a definite answer to this question?
Sorry I can not answer this.

Why this is political!!

None of it. I've been reading about it since the 80s.

People struggle with hearing about global warming and then seeing record snowfall.

It seems to me that we're reaching some kind of global threshold, and there is pressure for the nations of the world to take action, and yet people keep kicking the can down the road and there seems to be no urgency to take action. Are we running out of time or not?

Why others don't understand how critical this issue is.

Some people's complete denial of it.

Ocean temperature changing the jet stream to influence precipitation into a 'river' in the sky.

The moving of the goal posts. We were all supposed to be dead by now.

New weather patterns such as the South getting so many more severe storms.

Media bias

The climate has always changed

Our collective global ability to effectively alter the impacts through changed behavior.

Why does it always have a negative connotation? Seems to be many benefits as well.

How we supposedly have issues but it's been a long, cold winter and we get plenty of snow and ice.

I don't really know that I'm very confused about climate change!!! I just think that there's more to be learned about climate change!

The urgency of the situation. Laws and policies are very much “go get” rather than immediate requirements. Feel as though given how dire the situation is based on some national studies, laws and policy would be more focused on immediate changes.

Why the liberal media is dishonest and why they politicize the issue and don't allow any alternative perspectives. We are supposed to take what they say as gospel. They have created an echo chamber of similar voices and never offer conflicting views for thoughtful debate

The reality of what our weather actually is

Why people don't think it's happening right now

Half of the population say's it true and the other half say's it not a problem.

Why people refuse to acknowledge it.

How people don't think that people are at least somewhat responsible.

How hard scientific fact is treated equally with partisan gaslighting in the media

Whether or not the current weather is a result of climate change or not.

Historic, ongoing natural climate change vs Modern day climate crisis

None

The extremes of weather.

The rate at which climate change is happening, and which weather patterns are tied to climate change.

That the climate has been constantly changing , yet there's no discussion about that

It's not.

The reporting.

Carbon levels

I'm confused by those who deny climate change

That people don't get that it's real.

Estimated impacts and most viable solutions.

The part where it is made up.

Greenhouse gasses

So many different meteorological "events" are verbally reported as being "linked to climate change, such as, but not limited to: Forrest fires out West; Snowstorms out West, Snowier winters and snowstorms in the Midwest and New England area. Is it all of these events, or just some of them?

Declining ice flow

Sometimes drought is a factor and sometimes too much precipitation

Why people don't care

Is it just we are in a 100 year cycle of good and bad.

Local insights from scientists nor easily identified or sourced

How do we slow it down.

Conflicting experts! No one agrees on anything.

Fossil use impacting weather trends

always changing thoughts and reasons.

Political noise

The fact so many people say it is not humans who are causing our climate change issues!
Wake up, people!

Guys like Darrel Richison saying it's a 18 year weather cycle. Climate change doesn't exist according to some.

It's a reality but news is sporadic. It involves whole world. I don't even know if a world agency exists.

The audacity that man has the power to change the climate!

The truth in measuring the temperature change

Why so many people do not see this as an issue when there are so many indicators that we have a problem.

Really haven't been following it much.

Not confusing but it has become political where one side believes in it and the other doesn't.

How do we stop it?

Actually, all the things we do that we're unaware hurts our world until all of a sudden you hear about an organization working to end it!

How half the country doesn't care

What all the factors are that is causing it so dramatically

Why Republicans insist in burying their heads in the sand. Why we let corporate America destroy the environment.

All the assumptions

There is too much disinformation out there. We need to counter this.

I here about it but I think just the whole climate change itself is confusing, would like to hear a more in depth, in plain words and explanation for more non weather people to those of us who not not weather people

Colder winters

That people still don't understand it's happening

Not me, but I see too many folks that confuse weather and climate. "Global warming" has become a joke term on the right because it's not explained well for many people to understand.

People using incorrect terms in explaining climate change, which should be shown over long periods of time.

Global warming. Aren't there cooler places also. As a "closed system" if there is more moisture in the air there should be less on the ground. No one addresses the closed system discussions.

Validity of arguments that climate change is not a crisis

Why we don't take it more seriously.

Haven't there been climate changes throughout history?

The hype compared to damage. Seems damage should be worse in such a crisis.

How so much bad weather is happening all over the US. What about the rest of the world?

Not sure.

Global warming.

How people can close their eyes to the threat.

That no one takes it seriously

The politics of it. Why some are allowed to continue with fossil fuels and why we have to give them up.

I don't know anyone who is confused

It's not confusing

N/A

what can be done to help slow things down

That people deny it exists

Greenhouse gases

It's not!

Not enough information.

Knowing which reports are really accurate and truthful!

What we can actually do about it, given our increasing population and. Dependence on technology.

Why it has exceledated so much in the last few years.

How people deny it

Which media outlets can you best trust to provide accurate and informative information

The bias. It seems like many of the news stations have an agenda or cult like message.

When the so called experts can't even agree.

Melting at the poles and effects on animals

How to change, how to stop.

Only telling one part of the story to fit a specific narrative

The climate is always changing it's called the seasons for a reason

warm temp

How do we get the money out of addressing climate change- meaning that right now, most of the actions we take as society are only done if it financially beneficial with no opportunity costs cannibalizing current methods that may not be climate friendly.

That half the population doesn't believe it is real.

Is it climate change or global warming or both?

The increase in severe weather outbreaks

all the things that that effect climate change. Years ago you never heard the term.

We had global warming in the year 1000. Who do we blame. We've had 5 ice ages. Who do we blame? It's gotta be someone's fault. When I was in high school and college they said we were heading towards another ice age. They were wrong. Then acid rain. Wrong. Then the depletion of the ozone. Wrong. Sorry if they confuse me.

Climate change versus global warming. Those get used interchangeably

Long-term precipitation trends—not sure if anyone knows 50+ years out.

How to stop or at least slow this climate change from further occurring .

The inconsistencies of where climates are changing.

The lack of planning for future events

How a warming climate can cause more polar vortex type cold spells

Where is all the water from Global Warming melting the Polar Ice Caps? Also recent droughts in the Midwest so the water isn't here. Is the Atmosphere growing? Is that thinning the Ozone layer vs CO2 emissions etc?

How temperature changes things

People claiming crisis when it had been an evolution throughout time.

The political agenda behind much of it, thus having no idea who to really believe.

Short term weather changes versus climate change

It's not confusing. It's plain and simple. Way more green house gases release. Hence rising temperatures and stronger weather patterns than ever before (tornadoes, wildfires, hurricanes)

Politics about it

The reality of CC. Clear simple definition. Some say the world weather patterns are cyclical (e.g. 5 yr, 7, 11) and thus the seasonal weather patters will change after each cycle (e.g. more/less snow, rain, shorter/longer Spring, Winter etc) . If cyclical, what's the big deal?; if otherwise, is the world really beyond the point of no return?

The part where people value inanimate objects like assault rifles over human lives

How it happens

What it exactly is.

Antarctica

What is contributing to rising sea levels (besides melting Arctic ice) and how this impacts climate besides coastal cities

It was supposed to be a LaNina year so California was supposed to stay dry. Obviously that didn't happen so what changed?

El Niño or La Niña

The ignorance of the general public to not recognize that climate change exists and unwilling to acknowledge actions need to be made to mitigate climate change.

We don't seem to here exactly how we can change

The why.

not exactly sure what to think when California is in a drought for several years then just like gets hit with weeks and weeks of rain and monster amount of snow in the higher elevations idk just strange

Varying reports from the media

Nature itself can be confusing, however, I believe I have a fair understanding of climate change.

The role of the quasi-biennial oscillation

Why it is so controversial — it's become politicized

Too much happening that is out of the considered norm. the future fit

The conflicting sides of the subject.

How much information is media hype and how much is fact?

None

Is it factual and who's reporting it.

Understanding weather vs climate

What an individual can do to affect change.

Why some in our society don't believe that climate change is real and affecting our planet's future.

Why not all countries take it seriously.

Those who listen to the evidence in disbelief.

Why it is not recognized as true by everyone.

Intellectually I think u understand why it causes things like worse storms, more drought, etc but it's still hard for me to truly understand it. The symptoms, if you will, seem so different. I think a lot of people struggle with this if you don't really understand the science.

That going electric is better but in reality that it's more harmful to harvest the metals to make batteries and the batteries have a short life span and how to get rid of the batteries when they are no good anymore.

None

We don't have enough history

None. The world evolves.

Really, just why, are there many factors to it, or just some main reasons

National and local media have lost people's trust on this issue. Just tell us what the forecast is for the week and leave it at that.

Global

What the actual cause is

The most confusing aspect of climate change is the attitude some people have that climate change is "fake".

Best practices to reverse climate change and what affect my actions have.

Rain

why don't more people understand or care about making changes

People who don't think it's real. Our weather is getting more extreme and the evidence is right in front of us.

Too many different opinions and statistics from seemingly trustworthy people.

Not

Why isn't the amount of daily cloud cover increasing correspondingly with the increase in temps and relative humidity?

That other people do not believe it's man made and it is happening.

How are the experts defining what is normal with only a few hundred years is recorded as historical? It would need at least a thousand or 2 to see trends.

How it affects our day lives

All the various descriptions for climate change.

If this has happened before, or if this is the first time our earth has seen an event like this.

Not sure

I don't think most news agencies know what or how to convey the seriousness of the situation.

People don't understand that climate change and weather are different. Climate change is more than just getting hotter.

Daily weather as compared to climate change

How taxes can help?

All of it, because it's fraudulent. It's called the seasons.

The real truth about it.

How it can be so cold here if the ice caps are melting

All Of It

None

The part that has been twisted into a "belief system".

Why other people can't grasp the concept.

It isn't confusing. What it needs to be is more convincing for those that don't believe it is happening.

None

past records that are compared to today's weather

I am not confused.

All of the people and companies who profit of hysteria around global warming.

Why a lot of people think it's bullsh*t! Makes me angry.

It's not really confusing, it's just you get a lot of people trying to add their opinions on the matter and those can be conflicting with known research. Which then makes you question is this new information or is this just complete opinion.

Many areas can be colder when you mainly hear about warming.

The fact that the climate has always been changing

How much is human induced and how much is natural cycles of Earth

How do you know that climate change is not just part of the earth's climate cycle and it has happened long before records started being kept

It's fake. We are a BLIP of the timeline. Climate has nothing to do with cow farts or fossil fuel.

The impact/potency of different greenhouse gasses.

Why people would claim it's false.

Lack of consistency as far as what is the truth. I still can't believe that people still DON'T believe in climate change, they are so blaise. It's maddening.

The ongoing disagreements over what should be done. Why isn't there consensus on the first thing to focus on fixing?

Understanding everything that causes it.

How as much info is out there, people still deny

Why we aren't more concerned about it.

Why is it more common now?

How it can be both hotter and colder, wetter and drier.

I do not understand how climate change is not the high priority, at least at federal government levels, that is should be. It should be the top priority.

Does it run in cycles? Do we really know since there is no 300 year history?

None

The truth!

Why a lot of people don't get it

Global warming

Also I understand how it affects coastal areas but how does it affect interior states & locations

When the sun rotation comes closer to to earth which happens people come up with the crazy stuff

Solutions.

Most confusing is how republicans deny climate change

I don't find it confusing. I think it needs more coverage nationwide.

I don't find it confusing. I think it is a natural occurrence helped along a bit too much by us.

The fact that earth goes through atmospheric changes more rapidly than ever before.

Warmer winters. Less snow.

No one discusses significant climate events throughout history as well as external factors. It has just become a point of political division and nonsense.

How it came about so quickly. Most of the things that are the leading causes haven't been around that long. Especially cars.

Cause

extreme hot and cold.

Melting polar caps and its effects on oceans

It seems inconsistent

The information we receive seems like it conflicts.

I think I understand the basics.

What we can do about it

Thickness of the ozone

You hear different views and I would like to hear the truth.

Why people deny it's a real problem given the data proving it.

When everyone has their own opinions, and we don't know the real answers. Or facts.

Pretty much every thing

The unequal actions being taken (or not) to mitigate climate change.

Can it be slowed down or reversed?

How anyone can deny it

its a hoax

No answer

How people see it as false

Overhyping every bad weather day lessens the impact of climate change and real, sizeable trends and concerns

The earth is 7 billion years old. It goes through cycles. For ever one person that says climate change is a problem, there is another that will disagree.

Not telling people that the xxxx is due to xxx. This is an example of xxxx.

Why direct action isn't being taken to mitigate it.

It's not. It's real. It's happening.

R12. What matters the most to you when it comes to climate change?

What matters the most to you when it comes to climate change?

Our planet and how it affects the water(oceans/seas/lakes) and land as far as forests/wetlands. Pollution in our air and water.

That activists take a responsible approach to spreading the message; Otherwise, everything will fall on deaf ears.

Curbing the damage we our currently afflicting on nature.

What processes can we change to slow the rapid growth of global warming.

Impacts to daily life. Ex: longer allergy season, more flooding events, etc.

How much information is not discussed. It has become way too political and the science is being smothered by politics.

An open conversation and understanding of the facts.

clean water

What we can be doing now to combat climate change.

Seasonal differential plus ocean temperatures and tides.

Warm up please.

Melting of Icebergs and starvation of animals that live in the frozen North.

consistent and accurate information about what has happened, what is happening, and what will happen should changes not be made

Can we stop or slow it...?

Wild life and the impacts

The weather is cyclical. It fixes it self.

Heat waves, intense storms, rising sea levels, droughts, floods wild fires, hurricane. All of these play a direct part in our society. A lot of loses and resources vanishing right before our eyes.

Increased storm problems

Not banning traditional fuel powered machines

The truth. Stop the corporate polluters. Put fossil fuel exec's into jail for deceiving people.

HOW MUCH WATER PEOPLE GET, AND STORM DAMAGE

Accurate explanations of real impacts that affect people where they are, not just the seemingly fictional impacts far in distance or time

Deniers..!

It seems to be a political football and each side argues about if climate change is real. Just report facts and let each individual decide.

unbiased, fact-based information

Plants and animals caught in the aftermath of human technology and growth

The impact on living beings.

Better understanding so we can change.

The truth

Moving away from fossil fuels. The development of alternative energy sources should be a priority across the globe.

exactly what we can do to slow it down

Loss of human lives.

Getting practical info on the big and small things that can be done to address climate change.

Not sure

Harm it is causing to the Earth.

Ways to reduce our carbon footprint

weather changes all over the country ... storms occurring more often in places where they usually don't occur

Precipitation levels and the threat of drought/flooding

rising sea levels

Governments around the world not doing anything

It seems we are racing headlong into mandating being fossil free by certain dates. I think we need to do this correctly and realize what it will take. For example, most people seem to think that the electrical grids can be converted by simply putting up more solar panels and wind turbines. They don't connect the dots to understand that so far, we have almost no way to store the power we need at night or in times of calm winds. The idea of using batteries with the technology we are currently using will cause massive amounts of mining with the environmental impact that goes along with that. Not to mention that solar panels and wind turbines do not have a significant lifespan. Very little of either can be recycled at the end of their useful lives. We do not want to get into a situation where we live with brown/black outs, just because the weather has not been cooperating with our energy production.

Polar ice shrinking.

What we need to do to change it from happening. (The steps we can do ourselves and what the government needs to do.) The temperature that is the point of no return.

That we have to invest in more solar and wind power!

How it will affect us down the road.

Reducing carbon

I would love to see an actual breakdown of the science and a frank analysis of the incentives involved, especially for climate alarmists.

Realizing the climate has been changing as long as Earth existed.

How it will effect the area I live in

How to slow it down and stop it

Severe weather causing tornados, hurricanes and other catastrophes.

What the average person can do to help preserve our environment.

Making changes

Arctic air masses in winter and flooding

The human health effects of climate change, and specifically the health inequities that climate change creates.

How do we solve the problem and or problems? What will take to force a solution?

Nothing. Live your life and quit worrying abkut things we cant control. And yes humans arent going to change it

Extreme weather

Survival of polar bears and other wildlife that live in the arctic climate

The fact that climate always changes, it's cyclical

Providing accurate information so people believe it is occurring right now.

That the season are so off course.

Doing my part to not contribute to it.

Rising tides and droughts

How it will affect things like the cost of goods and daily life, like how it has been so snowy this year

Na

How it is affecting everything on the planet!!

Our planet's future and avoiding an end result, similar to the planet Mars.

How slow we are to realize it's real.

Not paying more for another lie

Killing off the food supply or systems that support it.

Global warning

I am not that interested in climate change. Possibly I am being short-sighted, and should learn more about it.

Saving the climate for our grandkids for years to come

Loss of natural habitat

Temperature and various storm damage

Communicating efforts we on an individual level can take to reduce/slow or revert the effects of climate change

Seeing how it affects daily life

That data is reported and represented correctly. That data not manipulated to drive regulation that will be ineffective or inappropriate as an actual solution.

The future of our planet and it being habitable.

Weather itself

What solutions exist today that can be implemented with current technology

That the government, globalists and other hard left organizations stay out of my life. I know I'm dreaming.

Science - not hyperbole

I'm unsure how humans can change the climate.

Getting governments all over the world to make changes.

Lack of drinking water. Increase in temperatures.

The coast that will be lost to rising water levels

Replacing the environment back to grasses and trees that were destroyed.

How much longer our lives will continue as we have become accustomed before climate changes create life altering circumstances.

Continuing to adapt to the natural changes as needed while not being hysterical about it.

That there are changes to correct and reverse the changes.

What I can do to reduce carbon emissions

What can I do to make a difference?

Actionable steps to reduce impacts

How we can fix it

It threatens millions of lives as well as the world economy.

Long term issues.

Temps will rise

Honesty. I believe that is currently missing.

The fact that we can't come together as a planet to solve these Issues, some countries work at it others thub their nose at it and keep chugging along

Polar bears.

There's \$\$ involved so I doubt it will be accepted by most

If it is really that critical to have to react as society as a whole.

Get the facts straight and not politicizing the message.

Animals

My life

Taking rapid steps make change ASAP.

Explaining how it's happened and how it's changing the future

The future

Cleaning up the earth (picking up trash) reducing our carbon foot print, learning about realistic and easy ways people can help reduce climate change.

Not much.

Generic statements lead people. Stick to specific data correlation.

Survive

My grandchildren—what will their world be like?

Acknowledging it is just part of the cycle

Keeping current

Storms

Human migration north.

Having a safe healthy beautiful earth where all living things can live and breathe peacefully

Future climate, grand children

What more can be done to help the situation

That when I leave the planet I tried to leave it the best I could for the children

Ultimately the severe weather, which seems to occur more and more often and is more severe is the greatest concern.

We must correct it if we still can.

Being aware of the changes over time

The truth

What can we do to change it?

Plates 

That we can all come to general consensus on the causes and impacts of climate change so that we can move forward more effectively in search of real world solutions.

True facts about where we are and if we can turn it around

I think of my grandsons, their kids etc. Want them to have a good life

Correct language (words are important). Climate change vs. environmental changes? Smog in LA? A River catching on fire? Humans can ruin their environment. Climate change is implying man can change the earths climate/weather on a global (or near-global) scale. That is unproven by science (too much bias or falsified data). So what matters most to me about climate change? Fighting the narrative that it exists. What matters most to me about the environment? Protecting it.

I'm sick and tired of people lying about it.

Is there anything we can do to make this world better for our future kids?

Drought monitors

Accuracy

Governments need to do more about the pollution created by corporations. We can all do our little parts, but it doesn't create a dent in the damage done by larger companies. Unfortunately, we are governed by corporate greed and lobbyists.

What we can do every day to help change for the better.

There seems to be an increase in severe weather situations. I think people need more education on how to deal with and prepare for these events

my children's future

Not over-dramatizing it. Just facts.

The future

How much is natural occurrence, and how much is human caused.

We rely too heavily on China for almost every product we use. They are the worst contributors of environmentally damaging waste including fossil fuels.

Accurate information.

Being aware of the situations and do what is best to control climate change

Warmer winters and even warmer summers

comparing historical photo to today like finding a 300-mile lake in California in old maps where today there no lake just farmland and houses

CO2 in atmosphere. But is it really the cause of climate change.

Future outlooks

Future generations

Glacial ice

Survival.

how much precept is coming and how it relates to food growth

Convincing those that don't believe it's happening or that it's man made.

Critical decline of a healthy planet.

If human actions are the main cause, then overpopulation is a big issue. How is that going to be addressed?

Action. Corporations, governments, and people around the globe need to step up and work together to make progress.

What I can do, if anything, to help slow it down.

Ecosystems and animals dying

How will it effect my area? Will extreme weather events (tornados, hurricanes) get worse? Stabilize? What do we know, what are modern predictions?

Changing it

Increasingly strong storms and damage.

I'm scared of the extreme weather that we're seeing...longer droughts, stronger hurricanes, etc. Can our insurance companies remain solvent to help everyone?

Health and Economic

Global warming. Global warming

What can be done as an individual to help restore climate conditions

The future problems it causes, many people don't believe in it. Make it simple to understand. My grandsons matter the most and their future.

That people in leadership want the citizens in the US to bare the costs and inconvenience of trying to curb the use of fossil fuels while the worst offenders like China and India do nothing.

The rising temperatures.

That we try to do something about it.

Seeing results from work done towards climate change.

Future

Accurately peer reviewed scientific analysis from multiple viewpoints.

It is real and that message seems to not be strongly received

Factual information and things that I can do to help as one person.

Learning about the changes before they happen

The first thing that comes to mind is how it will affect our local areas and what can/will be done to combat it.

Nothing

Reducing our ecological footprint as a nation. As an individual there is only so much we can do but not enough people are on board with eco-friendly options.

What kind of world we are leaving for my grandchildren and their children.

The lives that are lost due to climate change. We need to prevent this.

Changing our behaviors before it is too late

I don't think about it.

Increased cost of heat, fuel , cooling homes, worry for my grandkids.

Being given examples of how it's changed

Suggestions on how to better my home or ways of living to help

How it will affect future generations

The further

Maintaining polar ice

Climate has been changing in the past

What it means to life as we know it.

The effects on generations to come.

Minnesota's North country - it defines our state and we must preserve it

The future , the wildlife and forests

What can I do to do my part in helping slow or control it.

That the science keeps getting better and the communication to general public gets better and more consistent. I think we need something like "Silent Spring" for climate change to capture the public will to address it.

Sustainable wildlife climate

That politicians and the media make it a priority to communicate the urgency of the climate crisis.

That people treat Mother Earth as the living spirit that she is and take care of her

live and let live

Resetting the mentality that there is no reason to do anything about global warming.

We quit overemphasizing in our schools the dire consequences of our forefathers manufacturing factory practices and embrace our history as a necessary progression for the betterment of man, while at the same time taking care of our environment through less pollution

Resetting the mentality that there is nothing we can do about it.

Look at history, things changed and will change! What are you going to do about the BIG countries that could care less about climate change?

Why the US is being duped into lowering their standard of living for the sake of “climate change” while others are not being held accountable too. China? Russia? India?

Every day ways to help and why

Governments should not have a knee jerk reaction and make decisions too quickly.

The future for my grandchild not yet born.

warmer temps

Inability to get everybody, meaning the world to agree or acknowledge this is real and it's scary

Lots of attention is being given to rising water levels, which is a significant concern. But too many people in the Midwest are indifferent, and they need to learn about how this will impact agriculture and transportation- Midwest economics.

How it will affect my children's future

That it is overly politicized.

Nothing see above.

How it's presented in the media. I would like to be sure that we're not using it to advance a political agenda and that is truly based on science.

Temp..

How it affects our weather.

Communicating what's happening.

The methods to prevent and perhaps reverse what is occurring.

How communities/countries are going to slow climate change.

It appears as though Overall pollution has been ignored for “climate change”

Consistency in the message.

Everything - how it's truly effecting our earth, what to expect for MN and the world.

Ice burns melting

A better planet for the future

That a sustainable environment is available in the future

The well being of my grandchildren. And the survival of the animals on this planet

They need to stop with the doomsday rhetoric and just provide facts.

How will it impact MN

The sun rises. The sun sets.

Lack of hysteria. We've only got 10 years to turn this around has been the mantra for the past 50 years.

Preservation of our earth

Growing seasons, severe weather and the possibility of a sudden extreme long lasting change.

Efficient energy production is what I would like to see more and it would be interesting to read about. As someone in Minnesota we will most likely have more of a reliance on fossil fuels. The winters here pose an engineering challenge for solar and EV vehicles. An increase in public transit and more methods of travel (building out the Light Rail & introducing trains) could also lead to less emissions. I'm sick of billionaire philanthropists flying private jets and emitting more carbon than an American family does in a year, just so they can jump on the News to tell the general public to take the problem seriously.

Proper explanation on how global climate change is the cause of events like ice storms in Texas, because with the term "global warming" people become skeptical about the globes warming temperature when there's an event where it's colder than traditionally average.

Storms on the Gulf Coast.

People waking up to the severity of it all.

The extreme weather patterns. Like tons of rain or huger temps

For people to realize the real world impacts it is already causing and will be causing in the near future

Our children's future

How it will effect crops, bees, and third world countries.

Preserving our Mother Earth, expanding the use of renewable energy

That we aren't doing enough to make a difference. We had a gas shortage in the 70's and there was talk of alternative fuel/energy source/improving car performance but almost none of that has happened in the last 50 years.

The impact on people

Maintaining quality of life.

Nothing as it's just as fake as covid - our weather is always changing and it's not because of people

That not enough is happening to slow or stop climate change. Corporations are not held liable for climate change abuse. Public Awareness of how People can make a difference

Will there be a world that will be able to withstand the future generations lives?

That it doesn't get worse.

Factual science

What can we do in our everyday lives to slow down climate change?

Who's making money off of the scam called "climate change".

Irreversible or not

Ice caps melting and arctic animals losing habitat and going extinct

The lives that will be lost because of climate change.

How climate change is affecting us now... it's not just a problem for the future. How we can make a difference now to help reverse the trends (if we can).

Wanting to leave a planet that will be ok for my kids.

Not sure

Increase in extreme weather events caused by climate change

Is it really possible to stop

Slowing it

Not listening to you alarmist

The melting of the polar glaciers.

Making changes to reduce the human impact on the habitability of the Earth.

What is in our control where we can make a difference

You disappoint me Lisa! Ask Al Gore why he has a multi-million dollar mansion only a few feet above sea level in Marthas Vineyard???

Truth, honesty and non-biased data that supports trends at these lengths of intervals.

Reduce Carbon Emissions.

That my actions have an impact or there are actions I take that can have a tangible impact.

Trying to sort through the bogus political rhetoric to get at the facts.

My grand kid have to clean up the mess

Severe storms

Effects on everyday life (storms, floods, fires etc)

Weather extremes

Slowing it down and if possible reversing it. If we can how do we deal with it in the mean time.

The future

That both sides of the story are heard.

How it will change weather. Mow hurricanes, etc .

Short term impacts.

Safety

How do we enact policy internationally to do something.

That more people need to take this seriously.

Rising sea levels Drought

Flooding

What effects will this have locally on food supply?

Who. An we trust to give us accurate info?

Severe weather



My grandkids planet

It isn't influenced by special interests who will stand to profit billions from certain decisions. Also concerned for the lack of concern to developing countries and the exploitation of resources.

The increasingly violent weather. It seems that it is more widespread and almost year round now.

Temp increases & water shortage out west.

Rising ocean temperatures.

Long term and short term affects and expectations.

Fact based facts from real weather meteorologists/scientists, not personal opinions.

The Effect On the Worlds People

Science not politics

Temperatures rising, change in natural habitat.

How it effects upcoming seasons.

Real truth on what can or needs to be done or changed

That we (globally) reduce carbon emissions to NOT hit the 1.5 degree increase in average temperatures.

Nothing

A future for my children to be able to enjoy the outdoors the way I have.

What can we do to slow climate change.

Accurate information and continuous discussion.!

Learning ways to stop it.

I believe it goes in cycles and that we don't affect it. If we do affect it, it is only minimally. I could be totally wrong though too, but as I mentioned, it's hard to know what information out there is factual. With all that said, I guess God hard facts is what matters most to me. lol

We must acknowledge earth cycle changes that happen between 100 years and 10,000 years and pull her shifts that move up to the 15th of a degree, which could change the temperatures up to 15°!

Protecting our planet

people involved

Protecting our Earth and animals that call it home.

That we take it seriously and try to combat it in some form.

Coverage/acknowledgment of the existence of bias, historical prediction failures, and modeling/trends based on objective data.

Impact on grandchildren

We are all in this together.

Less hype, more context, and admit when predictions are wrong. the UN has a history of predictions of impacts by different deadlines that have not come true. Can weather people say here's what we think will happen but then admit they were wrong when it does not happen?

It is what it is.

What can I do to help. Little things. Big things. What things can I teach my child or my students to make. What happens if we DONT make change. Where are best credible sources to learn about climate change.

I think j has always fluctuated and will continue to. What goes up also goes down.

The future where we are heading

The truth. Actions we can take today to slow climate change for the next generation.

What we are doing to our earth?

The Here and Now

The future of our planet and how the countries will change behavior to hopefully reverse the effects.

The future.

The efforts behind made to slow down the effects of it.

Increase in temperatures

Clear relevant data with comparisons that lead to changes .

To maintain our beautiful vegetation and animals

water

How it might affect our lives

The truth.

Keeping other countries responsible for their misdeeds

Accepting the change realistically.

Proof

Changes in extreme weather disasters

Disasters

What are things we can do as individuals to help change it?

The impact to Minnesota- trees, wildlife, storms, water levels. For people to make a change to their habits, they have to understand “what’s in it for me” or how climate trends will impact their children and their grandchildren.

How big the industry has become

How to take care of the environment

What we can do to help for the future

How rapidly changes are occurring (glaciers melting)...

Ways to change the effects of climate change

That everyone gets on board to do something about it

Contradicting disinformation from people who don't trust data

Food, water and human migration.

Taking care of the land and water that we have.

Unsure

Preservation of natural resources

Impact on environment and animals

That my government- state & federal- is taking meaningful steps to address it.

Taking action to systematically reduce carbon emissions ASAP

How it can and does change our lives

Understanding that climate change does not require an emerging alarm as climate change is merely history repeating.

Recognition that while the climate is warming the proof that humans have an overwhelming responsibility for it does not make logical sense when we see the changes that occur naturally as nature evens things out on its own (CA drought that now is full lakes and water supplies, Lake Superior low levels one season and back to normal or above the next, etc.)

How it will affect my grandchildrens future.

The lack of accountability, the development of land, drain tiling of wetlands without a thought to their loss and the ability of the land to recover. There is the hypocrisy as well, people flying private keys preaching how they want to save the planet.

Real examples how we can stop or slow it that aren't electric. Electric shifts are not the long term answer and they are super expensive. Solar panels are unaffordable and don't break even for 20 years for cost.

The effects of climate change and the effects on the human population.

We need to do something now.

Could the planets climate change to the point that it would become uninhabitable?

Fresh water access for all people.

Facts.

Kids & grandkids future

The expense and devastation of intense weather disasters (my answer would likely be different if I lived on the coast). The loss of critical habitat for wildlife is big, too.

Nothing. It's rigged. Hypothesis. Humans do not contribute to climate change. It's a hoax. Anyone who believes it is man made is an idiot.

Balance between the solution and the cost of the solution

What can we do to help reduce climate change?

Trends that they see year to year

Actual facts.

Too much water, lack of water, produce/ food

The science, taking it seriously.

Loss of livable conditions

How it will impact everyday living.

Severe weather outbreaks

Doing more to reduce our impacts

Saving our planet; no one aspect greater than another. All action must happen now and in unison.

Getting people to wake up to what the green initiatives are doing, which is nothing

Historical context

The shift in weather patterns. Seems like the weather is happening at different times than it used to.

Following the science and providing factual information consistently to the public.

Accurate fact based information not driven by political agenda. Today there is very limited information that is accurate. All information shared only supports one side or another no one seeks the truth

Climates always changing- the human race will survive

Giving this planet and it's species the best chance to survive

Talking about small steps to reduce your footprint and connecting it to real savings, not just tax credits

Availability of clean drinking water - i for one appreciate the record snowfalls across the West as I now live in Las Vegas..

Changes to weather patterns. Maybe re severe storms.

Human effect on the climate

How it affects growing times / and how it affects farmers growing our food

I'm not worried about global warming, I'm worried about global cooling. THAT has a better chance of causing millions to die; no crops, no heat, etc.

What we can do to make a difference

The predictions for the future.

How to reverse it

Time. We're way behind

Solutions that everyone can use to make changes in their own behavior.

The destruction to the landscape and the loss of wildlife.

Many things...

The truth and it is not being told to the public. Come on Lisa.....do better!

Proof and concise.

Facts and not opinions. What changes are we currently seeing (such as more/different bugs and plants).

Top 3-5 things large building owners could do, households, academic institutions, etc. making simple efforts have meaning. Small steps are best for human change management.

That we transition from fossil fuels.

I do not want any restrictions on things I use or that will cause my cost of living to increase

That we take steps to mitigate its effects for my grandchildren.

Personal responsibility

Planning and implementing earth healthy technology to combat climate change

The truth, the earth and nature run in cycles

There is and will be significantly more actual financial cost, not to mention the human toll but I think the financial impact WILL have a huge human toll. Increasing insurance costs for everyone for one

Mitigation of suffering.

How it affects nature as we are so dependent on plant, insect and animals for many of our daily foods. A mild temperature change could kill off many different species.

I'd like to see society be a little more proactive when it comes to dealing with climate change. And maybe monthly updates about where we are if we have a doomsday clock for one thing perhaps we should have one for climate change.

The future for my grandchildren.

Doing what I can to lower my own carbon footprint.

Is this the beginning of the apocalypse so many movies have shown us our future holds for us.

Reasonable conversation. There's too much fear mongering & when their predictions don't come true they move the goal posts. It's hard to take many of them seriously.

Hotter summers in the corn belt.

Research and peer reviewed literature

The fact that the US cannot do this alone. Also the push for electric cars without the infrastructure and able to tolerate winter is a joke.

What will happen and when and importantly how could we change behavior to mitigate those impacts and what could those improved impacts look? like.

Not as much research into benefits it seems.

I want our Earth to be healthy and people to be safe.

I don't know what more I could know about climate change!0

Better world for future generations.

Stopping the liberal agenda and focusing on real, common sense solutions

Nothing really

Reducing carbon

The absolute facts.

Reducing emissions and adapting to the impacts. Educating others.

Doing what I can on a personal level to control my footprint. Overall to just do my part.

Trust in and action based on the factual data that exists

Water supply, impact of climate change on impoverished communities.

The facts mam, just the facts

Getting the right information out there to the people.

Rising oceans.

How it will affect my family.

Less drama more facts

Immediate action. Any reporting that doesn't urgently convey the existential nature of the crisis is complicit in the destruction of the planet. No half measures.

Accurate reports and taking the time to report it.

Temperature rise

Rising temperatures

Survival

Trying to reduce it. I've always maintained we've overpopulated our habitat.

The money we want to spend to "fix" it.

The future of our planet

Will our air be breathable 100 years from now?

My personal safety

How it brings on such catastrophic events

Idk, living

What my children will be left with

The future impact on my children and beyond

That the changes do not completely disrupt life on earth as we know it.

How the United States does more than enough to help the situation but other countries aren't held to same level

Saving animals including whales and dolphins

Who can we trust with a political football.

Food security

The amount of trees and land that are going away by building this, that and the other to satisfy those who are money hungry!

Nothing they say global warming when it is colder than shit

Understanding ways we changing practices to help to hopefully but slowly reverse climate change. Little things we do now I would hope change things for our grandchildren.

Get peoples' attention, find a way to get EVERYONE informed and involved.

That the US hasn't spent enough money to combat climate change. Meanwhile China and the third world do what they want

Stopping the use of diesel or making it cleaner , the fumes are horrible coming out of vehicles

Trying to educate people in terms that they understand, we only have 1 planet and we need to save what we can

I don't know enough about it.

Knowing what I can do to reduce my carbon footprint and not add to the problem.

The habitats for animals.

Knowing what the average person or their family can do to slow down climate change.

Stopping the damage to the earth and loss of animal species.

Being good stewards for future generations

How it's going to effect us long term

Having a planet worth living on for our kids and their kids.

Accurate information

Science based research and information being used to educate people about how their actions affect the climate and what solutions we can use to help combat global warming.

Not sure

The earth my grandchildren will have to live on

Irreversible and harm to earth ecosystem

The masses learning that the extreme weather events are symptomatic of the issue.

Everything. What humans do to affect change, both increasing and decreasing change.
Also, natural changes affecting climate change.

How it will affect my grandchildren. What will they do to survive

That political will to take action occurs very soon

To do the best I can to improve the situation, to do my part.

Speed of change of life style

Countries not taking climate change seriously (China, India)

Relating damage to a specific reason.

Destructive weather patterns that are affecting nearly the entire nation...and the world?

How it's affecting us now, in predictions for the future.

The changes it can cause to humans.

Future generations

That there is more awareness about climate change and how it is affecting the planet.

Animal populations

The effects on severe weather events and resulting damage to communities

We must act now

The impact the climate crisis has on the health & welfare of humanity & all living creatures.

leaving a healthy planet for my children and grandchildren

Implementing solutions

Unpredictable weather

Explaining the science so we understand how to preserve our beautiful planet for our children and grandchildren.

Why it's happening.

That we are informed with correct info!

How it will affect life for my grandchildren.

What's gonna happen next? Are we ready for it?

Accurate information

What is the impact to people, oceans, etc

Getting a holistic view of the data. Show what the deniers are using as data. Don't show last 50-100 years when data for a larger set shows greater fluctuations.

Unfortunately the world 70 years ago when I was born has been affected by over population and chronic waste of resources.

How it will effect the world my grandkids will be living in

The planet.

Facts and historical comparisons

Nothing Mother Nature will take care of it we waste too much money on something that doesn't exist

need lower temps

Climate change needs to be addressed globally, not just by a handful of developed nations.

Getting the message out.

We don't need to make drastic changes, just little ones will make a difference.

The ignorance of people not believing it's a real issue

how we, as humans can try to control it.

The false predictions these "experts" keep making. They never seem to be correct.

Weather extremes happening more often they become the norm.

Doing what we can to minimize it.

Future generations have to fix or live with this problem.

Would like to see or have access to a graph that illustrates annual climate change for MN starting in the 1960's &&&.

Warming oceans

Passing on a safe and beautiful world to my grandchildren

It is important to be informed but not frightened.

How it impacts the world we lived in

Acceptance and absence of blame.

Learning from sources that are telling the truth and have actual knowledge.

I would like to keep breathing clean air, have less melting of the polar ice cap and less severe weather everywhere.

How we know it is really climate change and not just a seasonal occurrence

What would be really nice is for main stream media to be actually objective about the topic. One time it was extremely frustrating to see a so called "debate from CNN about climate change. There's nothing to debate. It's real!!!! So they need to stop taking this ridiculous "neutral" stance

Understanding how actions individuals can make that might actually make a difference. Too often I hear about how all the countries who are large contributors are not meeting goals and in fact are getting worse. Is there anything an individual can do?

How does my lifestyle choices and use of consumer goods exacerbate climate change?

That 🐧 have safe homes

Our environment

Drought, fires, earthquakes, floods. All have been happening.

Future generations

My grandchildren and their grandchildren.

Exaggerated, unfortunately.

Human activities that impact our climate

Severity of storms

Glacier melt

That climate change is recognized by the powers that be and those powers continue to work towards protecting our climate.

What can I do to have an impact

Increasing deadly storms. Hotter weather.

living in minnesota i dont think it affects me much

How it affects daily life

Our life as we know it.

Managing a balance between quality of life, sacrifice in the developed world, and allowing the developing world to grow

That we take immediate and sustained action to prevent bad things from continuing and save the planet

The future generations

That we get it under control now.

Saving things that are becoming extinct

Controlling it.

Severity of storms

Preserving water and keeping it clean

Educating citizens and convincing businesses to put the issue ahead of profit.

What will happen to future generations.

I think it's even more important to keep up with local weather updates because of climate change.

Doing whatever we can to preserve the planet and its' wildlife.

All life on the planet! All species.

The future of mankind

The intensity of storms caused by it

Are we just going to continue to heat up overall

I'm cheering for climate change. These winters are getting snowier and colder. Sorry maybe you are passionate about climate change , but the agendas and hypocrisy from media and government are killing the chances of any reasonable person listening to what our local weather people have to say on this issue.

I am looking at a documentary atm on how climate change is affecting the lives of people in Bangladesh 🇬🇧, it's real and it has millions of victims. Just because it doesn't affect you doesn't mean that it's not happening.

Recycling using less energy

Immediate issues

Getting updated information from a variety of reliable sources.

Leaving this world better for the next generation according to God's plan!

Wind

Legitimizing it. It's real, so there's no need to talk about it like it's a theory.

Real solutions not electric cars and short term things that don't really effectively address the problem.

Global warming

Storm intensity and frequency...

That we find a way to stop it.

Not to over react

Daily weather

Doing my part to help slow down climate change.

How it affects the Earth's surface and weather patterns

Rising water levels

Reduced carbon emissions and less chemicals being produced and used on food.

Animals habitat

1 Water resources - dwindling and unreliable 2 agriculture and future food sources 3 social and economic impacts

To stop it

That they stop mining with big diesel equipment to get what they need to go electric.

Our wildlife.

A grain of salt...

Drought

How it has effect on the severity of our weather

- How state and local governments can implement infrastructure changes to handle a wetter climate - how federal government can encourage and support communities to make changes that can slow climate change - how it is affecting our local weather patterns

Earth, and the life on it.

What it will be like when my grandchildren are my age.

Future generations

future for are children

What are the steps we are doing to help slow climate change and what can we do to help.

All facts, not just those that push a narrative.

Drastic changes in hot and cold weather creating an over abundance of snow, rain, etc.
All dangerous WX related disasters.

What the future holds in terms of both near future and well beyond.

Can we make a difference when it's a world problem and other countries aren't trying to solve the problem.

I farm, so adapting to sustain my business

Being aware of the different types of weather.

Minimize human effect

Ozone issues and polar icecap melting

Stop the lies. The left wants so badly to protest against something they make shit up.
Worried about the earth, try worrying about the people on the earth when Mad Max movie becomes a reality because we look for solar, wind, to replace fossil fuel. Timothy Brown

Would like to see local impacts - should be having strengthen building codes for more severe storms; yard waste pickup - is it happening later? My tree dumps it's leaves after the last city yard waste pickup.

What are we doing to minimize it? Seems too Little to late to matter.

Trying to make the future better for all by investing in the present. Much like the National Parks were, but on an even grander stage.

Changes to Minnesota's environment.

Making sure I am educated on what is happening and how I can do something about it

That government takes it seriously and doesn't harm wetlands and other natural areas.

Locations with weather changes not common to them.

Precipitation distribution

Preventing large scale death.

The polar areas melting!

Affects on lakes, forests, and wildlife

The truth!

Quality of life for us and future generations

Will we see less snow over time

Being more prepared for increased storms & risks to coastal areas

Wish it get warm in Minnesota so much for your warming

Death

Life 25 years from now

Getting it under control

The overall impact is having on severe weather globally. Droughts, flooding, increase in storm severity, etc.

Being prepared for the progressive natural change

The health of our planet!

Saving the earth.

Rising temperatures

Not concerned.

Truthfulness. Don't push an agenda. State the facts.

Effect

severe storms are getting worse.

Drastically slower human contribution

How we can slow down it effects

We need the facts.

Extreme weather swings

Weather extremes

Information

Extreme conditions

My children and hopeful grandchildren some day to make sure they are safe

The opposition by conservatives to help develop the solution.

The earth, animals.

The temps

The world we leave future generations.

Survival.

Future viability of the Earth as a home for humans

how much the media lies

the impact on our lives and futures.

That people don't understand it.

Making a meaningful change

Current trends, no speculating, no predicting

Nothing. Earth goes through cycles.

How our growing seasons are not going to adapt quickly enough to feed us.

How climate change will continue to alter the seasons in Minnesota

Knowing where to live in 20 years

My children's children's children's lives.

Appendix D-Topics of “what is most confusing” In Order

1. Cycle of natural climate change (tie).
2. Variability (how there can cold/snow storms despite the climate warming) (tie).
3. What can humans do
4. What is climate versus weather
5. Buzzwords
6. Natural versus human-influenced climate change
7. Impact on precipitation
8. Speed of climate change
9. Carbon footprint
10. Seasonal impacts

Topics of “what matters most” In Order

1. Impact on humans
2. What humans can do
3. Impact on Earth (living and non-living things)
4. Extreme/severe weather
5. Impact on precipitation
6. Seasonal impacts
7. Cause (tie)
8. Natural versus human-influenced climate change (tie)
9. Variability (how there can cold/snow storms despite the climate warming) (tie).

Appendix E-Ratings

[15] MN - Minneapolis-St. Paul : NSI : Live+SD W35-64 : Thursday - Jun 8, 2023 : 668 In Tabs : 1.486% US

Prfm	WCCO+CBS(4)	KARENBC(11)	KSTP+ABC(5)	KMSP+FOX(9)	WUCW-CW(23)	WFTC+IND(9)	KSTC+IND(5)	OTHER												
LT	TH	RT	SH	LT	TH	RT	SH	LT	TH	RT	SH	LT	TH	RT	SH	LT	TH	RT	SH	
2.0A	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41
4.0A	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
5.0A	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
6.0A	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
7.0A	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
8.0A	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41
9.0A	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
10.0A	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39
11.0A	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
12.0A	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
13.0A	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
14.0A	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
15.0A	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
16.0A	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
17.0A	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
18.0A	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
19.0A	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
20.0A	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
21.0A	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
22.0A	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
23.0A	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
24.0A	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
25.0A	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
26.0A	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
27.0A	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
28.0A	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
29.0A	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
30.0A	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
31.0A	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
32.0A	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
33.0A	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
34.0A	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
35.0A	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
36.0A	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
37.0A	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
38.0A	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
39.0A	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
40.0A	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
41.0A	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
42.0A	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
43.0A	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
44.0A	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
45.0A	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
46.0A	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
47.0A	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
48.0A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
49.0A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50.0A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix F-Interview Transcript: Dr. Kenneth Blumenfeld

Kenneth Blumenfeld, Ph.D. 3/14/23
Sr. Climatologist | State Climatology Office

Lisa Meadows

What specific topics or impacts? Do you think broadcast? Meteorologists should cover on television?

Blumenfeld 1:38

How current events, meteorological events actually fit in with what we understand about the climate, that seems and how the climate is changing. That, to me seems like very low hanging fruit. So for example, you get a huge rain. Right now, we know that Minnesota has always had huge rains. So we can't say this rain was because of climate change. But you could say, because this is also true. The research and all of the data analyzed, you know, here in Minnesota by our own climatologists show that precipitation and heavy precipitation events are increasing in frequency and in magnitude. And so this particular event might not have been caused entirely by the changing climate, but there's a good chance it was influenced by it, something like that, I think, some kind of a tie in, when it's appropriate, to be able to say, you know, like, just to impart a little bit of education, so that that would be one that I think is really easy, because it's a match between the work that you do as meteorologists where you're summarizing what just happened, you know, before you get into the forecast, or what's happening right now. Or even to an extent, maybe if maybe if a big event is forecast, you're kind of tying that in with a larger area of climate science in a way that's totally faithful to both sciences. So that, to me seems like the easiest one is just, you know, and that would require a little bit of learning for everybody, because I don't, I mean, you know, it's a little different. Now, there's more broadcast meteorologists who are really interested in climate and really interested in talking about it, as, you know, as the scientific problem that it is, versus a 20 years ago, and it was a very taboo topic among many.

Lisa Meadows

How long or short, do you think climate stories should be on television?

Blumenfeld

Yeah, I think it depends. I've seen some really interesting stories and read some really good in-depth ones from your friends in print journalism. That sort of surprised me with the depth that they could add to a story whether it's longer by adding some human element. So I think, you know, I think a news source that really prides itself on not just delivering the news, and not just reporting the facts and the science, but also maybe going a little bit farther than would be expected and a little bit deeper, I think it would be fine. If you did either a multi-part story or a long-form story, that was, say, maybe up to 20 or 30 minutes but has not just a sledgehammer of

climate science because I think people do have a limited appetite for that before they want other types of material.

6:29

But I also think that there's a sweet spot that remains in that, like, three to five-minute range, where you can pack a lot of good information in and show enough interesting angles and keep it from being too deep.

6:58

And still, kind of tell the story that needs to be told. So kind of a lightning, you know, is that it's more like what we call a lightning talk, where you have to deliver the high-level information, but I don't know, that seems like, you know, aside from your 30 seconds, or 20 seconds, or add-ins where you, you know, show a graphic or whatever, during your segment. I think for separate stories, you know, three minutes to five minutes is a sweet spot. But I also think there's room for building a lot of credibility and telling really interesting, enriching stories at that 15, 20 Maybe even 30 minute level if it's done, you know, skillfully.

Lisa Meadows

How do you feel CBS or just TV is doing with covering climate change?

Blumenfeld

Much better. I mean, you know there's work to be done. And I think that news outlets are always going to struggle with time versus content. Right? I mean, this is kind of a deep story, right? It's not easy for people to understand. It involves, as you know, complex, fluid mechanics of motor, you know, equations of motion, and heat transfer and radiation and this three dimensional rotating planet. I mean, it's difficult, so there's only you can only go so deep. And I think it's pretty clear that like, where the difference should be between, say, CBS WCCO and like PBS, which has just a longer tradition of having that deeper, those sort of deeper dives. But I have to say the last. I'm not a huge TV watcher. But in the last several years, from what I've seen, there's been a real uptick in just climate-related content in general. And I know in our office, we do a lot more longer form stories with people. But I think it's really improved. You know, I've worked with a number of different people at WCCO, particularly usually, it's related or frequently it's related to the good question, but that always and I would just say in general, there's been a lot more engagement around climate and climate change in the last few years, and I think that what's left to improve is really kind of finding your natural footing and I don't mean yours.

Organizationally, finding a natural footing seems like if I stand back and look at what every organization has done as it's embraced climate, it sort of starts with these things where there that someone thinks we should do a story. But it's clearly new to the organization. And it doesn't have a real natural feel because it's only important to the person working on the story and doesn't necessarily have the organization's backing. And then slowly, it becomes more ingrained culturally into the organization, and it starts feeling more natural. And I think what's sort of left is for part two to be more, you know, like, I mean, it's not a controversial topic, right? Like the

science isn't controversial. The solutions are sure, like exactly how you do it. Like, that's the controversy, but everything that people believe about the climate, so-called debate is made up, it's not real. And I think when the when a news organization sort of accepts that, and embraces, you know, embraces the science as fact, and doesn't worry so much about what certain people think are the comments that they're gonna get, and just sort of treats it as news.

11:17

I think there'll be more natural footing. But in my sense, I couldn't, I guess, couldn't say exactly if, you know, the CBS local is there. But we've certainly had a lot of interest from folks working at WCC O, where I think that there's been a broad enough group of journalists contacting us about the climate, that I could say it's at least more cultural now than it was, you know, three, four years ago, for sure. So it's improving.

Lisa Meadows

What do you think is the most misunderstood thing about climate change?

Blumenfeld 11:57

There's quite a few. I think one thing that's misunderstood about it, is that it has some sort of an on-and-off switch. That, you know, if it's cold, it's not climate change. But if it's warm it is. Or if it's raining really hard, it's climate change. But if it's dry for a day, it's not. I think that people don't necessarily intuit or understand that the climate is, you know, you look at a place like Minnesota anyway, where the climate varies all the time, it goes up and down, whether you're talking about temperature or precipitation, whether you're talking about from one part of the year to another, or from the same part of the year, to the same time, the next year, multiple years, you know, you have these huge swings. And that is true, while the ongoing trends towards changing climate conditions are also true. So I think that one of the things that's really misunderstood, and I mean, I'm sort of both sides by people who, whose claimed to embrace the science and, you know, are sort of climate friendly. And also the people who would would say that they're either skeptical about the science or they don't understand it, which is usually what it really is. But I would say on both sides of that diversion, people tend to confuse, you know, like trends or tendencies with variability, and that makes them think that there's times when the climate is changing, and times when it's not. And the truth is, the global temperatures constantly rising. And that is the main driver, that is the driver of what we call climate change. And so just because we're cold, it doesn't mean that the climate stop changing that week, or that climate change has nothing to do with it. It just means that, you know, it's it's a variation away from the trendline. But we know we're going to vary the other way above the trendline soon enough, so that would be the main thing. I guess to restate it. I think people think that climate change is like an event that just happens sometimes. And that you can only detect sometimes when really it's always I'm going in the background. And it's just sometimes it's more relevant than others.

Meadows 14:40

Which climate change topic do you think is the most important?

Unknown Speaker 15:08

I guess, you know, because professionally, I just want people to understand, you know, like the basic talking points. But personally, I think that we get extremely comfortable with things that we perceive to be progress, technological breakthroughs, or innovations. And I think it's important in reporting to emphasize that we, we've made some huge improvements in how we consume energy, right, we've made big changes in light bulbs, and in car and fuel economy and in how we power our grid, but because we've continued to modernize and invent new technologies that require that power, and because the global population continues to grow, and we continue to consume more resources, we actually haven't really moved the needle on what needs to be done. And so I think it's important that, like, this is hard, hard, hard work to do to fix this problem that we started, that we didn't start it on purpose. But this is hard. And we sometimes pat ourselves on the back pretty readily say, I gotta, you know, we've developed now we have electric trucks. Well, as I'm sure you've read that electric trucks, they have a questionable benefit to this whole issue because they require so much heavy mining and so much energy intensiveness to run. And so sure, I guess it consumes fewer resources than if they were just gas-guzzling large vehicles, but we're still consuming more resources than we have. And we're not really solving the climate problem when we can do that. And so I think just being honest about how resource intensive our lives are, and, making sure that we all understand that the progress that we've made so far is great, and it should be celebrated. And it has hardly affected the outcome at this point.

17:46

Look at carbon capture, we were just gonna save us. And nobody's been able to capture anything more than like, one one, billions of the carbon deep to capture. So we're not even close. And what was the technological innovation that people were talking about about a month ago? You know, there's another one who I knew technology was developed, it's going to be I don't know, it probably had to do with hydrogen. Again, I'm sure it was a hydrogen, it's always hydrogen. But it was, it was, you know, one of these. So when I was giving a talk, people were like, well, do we even have to worry now that there's this new invention? I was like, Yeah, this thing has not been scaled up at all. It is not market ready. It has, it only has the potential if it can be scaled up, and we lose sight of that. And we keep thinking.

19:09

Why are we putting all of this on this, like a hypothetical teenager, instead of solving the problem, we're just assuming that some hypothetical teenagers gotta have it all figured out.

20:22

I try not to actually, as I'll be fascinated to know what your experiences, but when I'm communicating, I find that if I'm telling someone, something's important, they're far less interested in it, versus if I just show them through evidence, how it's important to them. So that

they have to sort of articulate like, wow, this is important. But if I say it for them, the winds out of their sails, and they'd start to out, you know, I've got something important to tell you. So I actually don't tell people that they should believe something's important. And when if someone pushes me, and they asked me well, okay, well, why do you do this, then? And I'll say, I'll tell you why I do it, because so many other people have said that this is important to the, to the way of life, or to the community that they make decisions about, or for the budget, that they're managing for some kind of future investments, that this is a collectively sort of important issue. Right? We society appears to have agreed that it's important. I mean, you know, so professionally, I just tell people that there's extremely high demand for this information, because people see the changes that are happening in their communities, and they want to be able to a protect themselves from the changes that are happening and that are coming and then be they want to be able to prevent further changes. That's, I'd say, the gist of why it's important.

22:56

We're in the midst of huge changes, some of which are triggering extinction, some of which are triggering changes, and what can grow where and what can live where and where some species, including people can and cannot survive. Those are important changes.

23:13

So I hope that distinction. I mean, I just was saying that distinction to be clear that when I'm, you know, yeah, in the DNR, working for the DNR, I don't tell people that it's important, I just let the evidence kind of speak for itself. But obviously, personally, when I have these conversations on the side, which I do, I've had a pretty firm grounding and why it's important. And it has to do with all those things I just mentioned, that's really interesting.

Meadows 23:40

And so I'm trying to come up with the different lists of like, you know, the different words or different phrases that I could ask them like, which would you prefer? Or do you think you'd understand more? Or, you know, can you think of any

Blumenfeld 24:41

Yeah, so. So I do in certain audiences, they don't even bother with the term climate change. And that, I think I kind of this is another wish that I had. I wish we could talk about some of these things as the fact that they are. Because it's those names that become misunderstood and politicized. And once something is misunderstood and politicized, we are going to make no progress on it. And, you know, so when I come to parts of the state where people are pretty skeptical about this climate change topic, they really, really are. And so I don't mention it. I go out there, and they talk about how, you know, here's the current climate conditions. And here's what last year was like. And now here's some longer term trends that we have observed. Over the past few decades, you've probably seen this too, because, you know, you're out in the fields all the time, and you've probably noticed some longer growing seasons, you've probably noticed that it tends to rain a little bit harder than it used to. You may have noticed, it's, you know, sometimes

unless you've added a lot of drainage tiles, you may have noticed that it's harder to shed the water that's in your fields after a really rainy period. That's because we've been getting more. It's because it's been getting warmer. It's because we've got more moisture available for passing weather systems. I just say that those are the same talking points. When the DNR says like, here's what climate change means. Those are the same talking points. I just kind of made them conversational. But I just strip out the climate change thing, say those exact same things. And I'm telling you, I've got farmers with red hats, and crossed arms nodding along saying like, Oh, yeah, that's right. I have seen that. I've had, I can't say, I don't know, if we're flipping people when this happens. I don't know what's happening. But they're not disagreeing with those foundational facts. They, and I've even had some of them say to me things like, hey, this thing you're talking about that? That made a lot of sense. Now, what do you make of climate change?

27:09

I know from people who really want to embrace the message, and they think we should, we should be full-throated, about how we embrace the messaging and the terminology they get, they kind of get bristling at this notion of maybe using an alternative vocabulary. But honestly, in my experience, those people have made far fewer inroads in sort of turning people on to these ideas than then those of us who've been willing to maybe just try some different vocabularies. So I use, I'll just say, one, one is recent or long term trends kind of depends on what you're talking about. But long term trends works out pretty well. It's a very neutral term, right?

Unknown Speaker 28:40

I have found rising temperatures, is like its own magical term. With this you usually don't have to say climate change, rising temperatures are rising global temperatures. Now you're actually back at the root.

Appendix G-Interview Transcript: Dr. Pete Boulay

Pete Boulay 3/21/23

Climatologist | State Climatology Office

Lisa Meadows 0:00

Okay, how do you feel local media is doing covering climate change?

Speaker 2 0:08

Oh, I think here in Minnesota, we're we're doing a good job. I know, I've seen climate change on just about every network. So it's interesting over the years, how much more weather takes up a nightly newscast. Right, you have weather right at the start now and so all the networks are doing that. Climate change to me, when that comes up, we know it, you know, it's like a special story. You know, the, it's not just the weather forecast or something like that. This was some, you know, somebody worked, worked on a special feature. So I think that, in general, in the Twin Cities

here, we're doing, you know, everybody's doing a pretty good job. I've seen very, very cool stories on it.

Lisa Meadows 2:31

What do you think the most misunderstood thing about climate change by the public?

Speaker 2 2:41

Oh, that's a good one. The the number one thing we hear is that the climate is always changing. You know, that's the argument you hear from people that really aren't on board with the idea of climate change is that they say, well, it was such an such so long ago, or I remember winters being such and such, you know, and it's funny how people's climate memories are short, and they don't really always remember things. I mean, I'm not saying they don't remember things, right. But sometimes they're often their statistics. I'll say that. So said, yeah, there's kind of the, I don't know if it's the mistrust of scientists. Or it's a political thing. It it varies. It varies from place to place. Yeah, there's a lot of people there that don't don't think it's real. And Kenny and I do Kenny does the most, but I do we do talks and I probably give a climate change, ask. And I delve into it a bit, you know, myself a little bit as I've seen it. And it's, I don't know, I think Kenny is a better communicator and kind of talking to a hard audience than me. You know, we both use training.

Lisa Meadows 4:31

What is the most misunderstood thing of climate change?

Boulay 4:59

And then the other one there is the people, in a similar vein, who believe in cycles. Now this climate stuff is a repeatable cycle. And I, that's the one I usually shoot down pretty quick. What do you say cycle? cycle theories fall apart fast. Because if you're saying, You're sure it's a cycle, that means you could predict the next storm coming or they predict that it's gonna be warm this summer cold, you know, it's like, it's not, you know, weather patterns go up and down. But it's not that predictable cycle. Now you can, you know, like, I mean, you could get into the basics, I like the dog walking trend, where it's going up, but the dogs walking back and forth across the trend, you know, it does go up and down, but it's not a cycle. It's not repeatable, you know, because they want to tie in sunspots or something like that in with it, you know, like the old days, you know, they would try to prove something with the sunspot cycle. And it falls apart.

Lisa Meadows 6:02

What topics do you think broadcast meteorologists should cover when it comes to climatology?

Boulay 6:09

Well, oh, there's so many things. I mean, for me, I've had the best luck talking to an audience is what they can see. And, you know, but then again, this is the easy stuff, there's a lot of harder things with climate change, easy thing to see if it doesn't get as cold anymore. Except this winter, we don't get snow on the ground. We use it, we just don't keep that snow on the ground. One thing I always tell people, and this is in all my talks is there's winners and losers in climate change. And and we do have a longer growing season, there's a winter there, if you want to grow whatever, you no longer this corn or something like that. The flip side is now your corn pests can survive winters and they couldn't before. So the good example, depending on where you're at, you got to look up the tests or your area like around in the Twin Cities, emerald ash borer is an easy one, because it's so everybody's being affected by that, and they see their dead trees now. You know, Japanese beetles, you know, there's some corn bores, I think, too. I mean, there's, there's all kinds of things, there's bad bugs that'll survive and plants to buckthorn, you know, so some things couldn't survive, but we still got down to 30, below zero, are going to make it now. So there's just one, it's just one of many things, when that would affect people. So I try to steer it for things that are affected people like that. And there's many, many more things, you know, like weather, you can you can tie into it than that, you know, I try not to, I try not to put the head of the forecaster out when I talk to people I'm trying to look at what has already happened is trends. But you know, we look at things and seeing what's changed in the weather to, you know, getting more snow events, you know, more liquid precip in the winter, that affects people, you know, there's a lot of a lot of nuances to it. So that's, you know, it's just a start.

Lisa Meadows 8:17

I'm going to try to put together a project with the best practices when it comes to broadcasters communicating climate change. So part of that is trying to come up with the best terms, the best like vocabulary terms.

Boulay 9:44

Yeah, the safest words that we've used here would be climate trends. Okay. Easy to prove. You know, we have the data. We have some great stations that have long records, so you know that trends are what they are. And sometimes we have people challenge us on those things. And that's pretty easy to debunk and say that we have the data, we have many stations and you know, we'd like to keep it local here, if we can, you know, in Minnesota, we're kind of provincial that way where we don't traipse outside the boundaries too much. You know, so we try to make it all about Minnesota. And, you know, I didn't like the global warming, or climate crisis, even though it could be that, you know, that's certainly, you know, not saying it's not truthful, it's just, if you see some things people might shut down, climate change is pretty much the other. This is an interesting thing. It might be just my beef with it is that nowadays, when people hear the word climate, they're, it's like, they're shortening. Climate change should just be climate now. And it's unfortunate that people are doing that, that climate is not necessarily about climate change, because there's more to climate than the change. And to top off and in state-level things. Other

things are, they do this to where if they just talk climate, they're only talking about climate change, but they're not they don't use the change part anymore. And that might be part of what you're saying is to try not to trigger people by saying climate change. So they just say climate, but us old climatologists are like, no, no, there's more to it than just that, you know, there's more to talk about, you know, than then how it's changing. We want to talk about, you know, what has happened to you and it's it's an interesting dilemma. And it's definitely happening more, I would say in the last few years than it used to be like, your websites, just having the word climate in them, but they're all about climate change. You know, that's, that's kind of thing. But you know, I don't know that's just something I picked up.

Lisa Meadows 12:07

And then do you have any thing else you want to add when it comes to either questions or comments when it comes to broadcast meteorologists trying to talk about climate change on TV?

Boulay 12:20

Yeah, it's good to use experts. You're good to refer to that they some experts, and, you know, there's a lot of good ones. You know, it's trying to think of climate change stories over the years that I've seen on TV. Usually, they're sometimes they're tied into other things. You know, who does the true viewer trust the most? That's a good question. And I you know, and I don't know you, you probably have the research there. I'm curious of what what people you know, it's funny they own everybody gripes about weather, but they're still gonna watch the forecast. Right. They're still coming back for more it's we all do it, you know.

Boulay 14:34

oh, that'd be fun. I curious how that state climatology office with Yeah. Just just a state climatology office. Overall one place, you know, you could put DNR, Minnesota DNR state climatology office, you want to make our bosses happy. Because people think we're at we're with you, even though we're sitting at the you know, but, but we're DNR and that's probably a good week. Good job. You know, we get lumped in with, like Mark Seeley and, you know, people like that, you know, do you have? Do you have radio on there too? As one of the questions of people trust, I would put radio still on there. Okay. Yeah. Used to be the old days TV, like the print, the radio, the TV, web, and then, like, into the US or something like that, you know, the main sources. I don't know how many people look at print anymore for weather. Maybe they still do? I don't know. But probably not like they used to.

Appendix H-Interview Transcript: David Schechner

David Schechner 4/4/23

CBS National Environmental Correspondent

Lisa Meadows 0:02

How has coverage of climate change changed in news media over recent years or in your career?

David Schechner 0:14

Well, I think that's what we're working on right now with the E team, is trying to get local news to cover climate change as a story that impacts local communities. But I think over the years or so I would speak of it in terms of the kind of fear that newsrooms would have been covering this topic because they didn't want to get in the middle of what they consider to be a controversy or make people mad, or also didn't really have the expertise to, or confidence to even talk about it in a way that seemed knowledgeable. So I think that a lot of that stuff is eroding, I think there is less energy being put into from I want to say skeptics. There is less of the negative attention towards news outlets about whether climate change is happening. And is more so about being confusing or arguing about solutions or just putting up defenses that are frustrating for people. But I do think there's been there's been a change and like, there was a time this thing that we just don't "discuss" in this newsroom. It's not even discussed, right? So we're so afraid of it, we're not going to do anything about it. I do think that there's an emphasis now on tackling it.

Lisa Meadows 1:54

How do you think that we could improve or expand climate change coverage in local news stations?

David Schechner 2:20

Well, I think that's what we're trying to do with the E-team. We're trying to provide enough basic training. So news, local newsrooms, local journalists, and meteorologists need some basic training in the science, not a ton, you don't have to be an expert, just a basic understanding. And then enough sort of support from other journalists that are also doing it to be part of a community. And, then concrete examples of how you could draw a connection between politics, local politics, local, transportation, local weather, look, you know, and then make a connection to climate change. Where can you make connections? Where can you not make connections? So just like a kind of a pretty basic checklist of understanding those things. And, yeah, I think it requires some very strong local support or corporate support to help people get started and realize this is not taboo. Here's how you can do it. It is possible to tell a story that is about climate change or is possible to tell a story that has a connection to climate change, and just reference that in this larger story about ranchers or farmers or like, doesn't have to be all about that. But if there if yields are down and climate is a factor, then you're doing a story about farmers, then you should reference that in your story.

Lisa Meadows

Are there different vocabulary terms or different words or wording that we could use that maybe would be able to grasp more of an audience and still convey the science correctly?

David Schechner 4:44

I think saying the changing climate of Minnesota seems like a little bit of a fail. Okay. I think it's more in the tone and style of what you're doing. It doesn't have to be a doomsday report. You don't have to start off by saying, by 2100, Minnesota is going to be nearly unlivable. Let's talk about turtles or whatever, like; why don't we just talk about turtles? You know, turtles are cute and cuddly and whatever, and they can go up on the beach, but they're also struggling with a thing. Because it's getting warmer because of climate change, you know, it doesn't have to be its tone and style; to me is the way to do it. And that way you're not hiding the ball. But just moving the ball a little bit later. It doesn't have to lead off with doom and gloom as it's a terrible story. It is doom and gloom. And it is the same as local crime or a fire that took out someone's house or lead paint in someone's window. So like, those are horrible, too. But we don't start a story by saying lead paint is about to kill 600 Americans this year like you don't have to do that.

Lisa Meadows 5:53

Why is it important to cover climate change in local news?

David Schechner 6:07

I just think we reach a lot of people and local news. And all research indicates that people actually, most people, like a large majority of people care about it. And ultimately, climate change is a global story. But it's also a local story. And it has local impacts. And until we start paying attention to those and creating stories around those and sharing those back with people they don't necessarily see in their world. But there is a local connection to climate change to what's happening with the winter we just lived through or you know, how hot it was last summer? Or you know, what an abnormality that was and how that affected life.

Lisa Meadows 6:57

Have you guys talked about, even at a corporate level, what you're going to do moving forward with covering climate change, say on the digital streams, or web?

David Schechner 7:15

I don't think, I mean, there were we don't we're not prescriptive in any way about how stations should do anything. So I think it's up to a station at station level to decide how much of an initiative this can be, you know, frankly, a business case like can we make? Can we differentiate ourselves enough with, you know, I think there's a local decision to be made, like we can be a station that's talking about climate change when the other ones aren't. And we know people want to hear about it. Now. We're putting together a 30 minute streaming special for Earth Day. And I don't know where it'll end up. But like, Yeah, I think that we need to get the content to every

single corner of the CBS universe period. And I think CBS thinks that way too. I think it's hard. That's a really hard thing to do. And so it's going to take some time to figure that out. But you know, what WCCO does with its climate coverage, and where it puts it is totally up to WCCO, we will provide I think opportunities to collaborate or, you know, integrate our stories with local stories. So like I was just talking about a story about climate change and algae blooms and the Great Lakes. And you know, I can see WCCO doing a Lake Superior story about it and WBVM in Chicago doing a Lake Michigan story about it and and Detroit doing a number of Great Lakes stories about it. So I think there's there's going to be chances to work together on projects. But again, that'll be voluntary. And I think we're just trying to make the case like, this is a smart business move. People want this information. And we can provide it to them and provide a really great journalistic service.

Lisa Meadows 9:21

Last question, what do you think is most confusing to the average person or the TV viewing audience when it comes to climate change?

David Schechner 9:30

I think probably almost everything. I think that it's you know, all of it is science. It the causes, the impacts, I think, aren't, are not necessarily confusing. But some of the underlying science just requires a patient hand and sort of description like, what is the Keeling Curve? And we did that and we never called it the Keeling Curve. You know, we took the name out of it, but like We went to the top of Mauna Loa, and we showed you the guy taking the measurements. And then we showed you the curve. And you're like, Oh, that's not good. But I think I think people are understanding like, I always like to say, what do we know? And how do we know it? So we know carbon dioxide is on the rise. So how do we know that? Well, basically, because these guys take the measurements on top of this mountain. And I think people you know, I think it's satisfying for people to get some underlying, but really well explained simple explained explanation about the science, because I think that's, that's, it's not hard to understand. But it does require skillful sort of distillation of what the science is, and then presenting it in a way that's entertaining, I think and digestible. So that's why I like climate reporting, because it's like, that's a big challenge. I like to do that.