

MIT ENVIRONMENTAL SOLUTIONS INITIATIVE

# ENVIRONMENTAL SOLUTIONS JOURNALISM FELLOWSHIP

2021 IMPACT REPORT



## OVERVIEW

In the spring of 2021, the MIT Environmental Solutions Initiative (ESI) launched its inaugural Environmental Solutions Journalism Fellowship. The four-month fellowship supported five journalists associated with local and regional newsrooms with professional development, a stipend, and specialized resources to support their projects: high-impact news stories run through their outlets that connect local priorities with climate impacts and solutions. By engaging Americans who are unsure, disengaged, or doubtful about the need to act on climate change, we advanced our larger goal of building stronger public support for urgent, equitable and science-based climate action.

*Please see the end of this report for all image credits.*

"This approach made readers who are skeptical of climate change and renewable energy let their guard down and consider these topics with a more open mind."

- Tristan Baurick,  
2021 ESI Journalism Fellow



# BACKGROUND

## **It is critical to engage Americans across the political spectrum on climate change**

Surveys find that around 43% of American adults think that global warming is *not* caused by human activities, and only 52%

say global warming should be a high priority for the President and Congress. When you separate audiences by political affiliation, it paints a telling picture: 85% of Democrats say they are worried about global warming, whereas only 40% of Republicans say the same. Given the scientific consensus on the causes and impacts of climate change – and the need for bipartisan support of ambitious climate policies – these are alarming figures.

## **We need to make climate change local**

Studies show that localizing climate change impacts and solutions are effective ways to convince individuals that climate change is happening and engage diverse audiences in climate solutions.

## **Yet climate journalism is often limited to national news outlets**

In recent years, national news outlets like *The Washington Post* and *The New York Times* have increased climate change reporting, employing dedicated journalists and sometimes running front-page climate stories. Yet this treatment is still mostly reserved for national and specialty publications. In local papers, climate issues receive far less coverage, and are usually reported by journalists covering other beats such as politics or economics.

## **And local journalism in general is on the decline**

Local news outlets generally do not have the resources or expertise to take on climate change reporting. In fact, over the past 15 years, about 2,100 newspapers – more than 25% of the country's total newspapers – have permanently closed, leaving over 65 million Americans without a local paper.

## **But there are local reporters and outlets who want to cover climate stories**

MIT Environmental Solutions Initiative (ESI) saw an opportunity to locate these journalists and bolster their ability to tell meaningful and impactful local stories on climate change. In doing so, they would be engaging Americans through the outlets that they rely on and trust the most: local news.

*Please see the end of this report for sources.*





# PROGRAM DESIGN AT A GLANCE

- MARCH**
- APRIL**
- MAY**
- JUNE**
- JULY**
- AUGUST**
- SEPTEMBER**
- OCTOBER**
- NOVEMBER**
- Call for applications included outreach to dozens of journalists, editors, news associations, journalism networks, focusing on parts of the country where climate change is not a salient political issue.
  - Fellow applications required a project proposal and publication commitment from a newsroom
  - Fellowship activities ran from June through September
  - Fellowship included eight workshop sessions and biweekly cohort calls
  - Stipend of \$15,000 was designed to cover 75% of their time during this period
  - Also offered an expense budget for travel, materials, and media development
  - Stories were published by Fellows' news outlets October 2020 - January 2021 (ESI holds republishing rights for all stories and media)
  - ESI hosted a [public virtual event](#) featuring journalists in November 2021
  - [MIT News story](#) about the fellowship published January 2022

# PROJECT ADVISORY

- **Deborah Blum**, Director of the MIT Knight Science Journalism Program (listed project advisor)
- **Prof. Jim Paradis**, Robert M. Metcalfe Professor of MIT Writing and Comparative Media Studies (listed project advisor)
- **Steve Sapienza**, Senior Strategist, Pulitzer Center
- **Christina Couch**, Assistant Director of Professional Development, MIT Graduate Program in Science Writing

# RESOURCES FOR FELLOWS

- **MIT Libraries:** Christine Sherratt, MIT Earth, Energy & Environmental Science Librarian & Madeline R Wrable, GIS Specialist
- **Science Writing:** Joshua Hatch, editor, KSJ Science Editing Handbook & Brooke Borel, project lead of the KSJ Fact-Checking Project and author of the Chicago Guide to Fact-Checking
- **Climate Modeling:** Dr. Adam Schlosser, Senior Research Scientist and Deputy Director for Science Research at the MIT Joint Program on the Science and Policy of Global Change
- **Energy & Environmental Policy:** Joshua Hodge, Executive Director of the MIT Center for Energy and Environmental Policy Research
- **Climate communications:** Fen Montaigne, Senior Editor @Yale 360 and editor of the Knight Science Journalism's handbook chapter on covering climate and the environment
- **Listening tools:** Jess Weaver, Local Voices Network (LVN) & Cortico (affiliated with MIT Media Lab)
- **Listening approaches:** Prof. Arlie Hochschild, professor emerita of sociology at the University of California, Berkeley and bestselling author

# FELLOWSHIP RESULTS

## PRODUCTS

- 21 published stories
- 6 podcast episodes
- 194 photographs
- 18 graphics & charts
- 22 maps
- 5 videos
- 1 interactive website
- 3 radio interviews
- 4 public events
- 3,300+ attendees at these events
- 2 journalism awards won by Fellows

## READ ALL STORIES

[HTTPS://ESI.MIT.EDU/ESI-JOURNALISM-FELLOWSHIPS/](https://esi.mit.edu/esi-journalism-fellowships/)



*Fellow locations*

# NORA HERTEL



St. Cloud Times - St. Cloud, Minnesota  
Government and investigations reporter

Fellowship project:

- Six reported pieces ([link to the first story](#)), digital and print
- Six-episode [podcast series](#), “Future-Facing Farms”
- A short explanatory [video](#) on climate and photosynthesis
- Minnesota Public Radio radio interview
- [Public event](#)

In late 2021, selected as an Minnesota Initiator Fellow  
Won a [2022 Best of Gannett award](#) for her project

## EXCERPTS FROM NORA'S PROJECT

**Farmers are getting paid to fight climate change by cultivating a new cash crop: carbon**  
Nora G. Hertel, St. Cloud Times  
Published 8:15 AM EDT Oct. 24, 2021 | Updated 8:15 AM EDT Oct. 24, 2021

**L**ITTLE FALLS — Minnesota [agronomist](#) Amy Robak describes budding [carbon markets](#) as the wild west.

And she's not the only one who sees it that way.

"There's no regulatory bubble around it," Robak said.

There's still debate about just how much carbon farmers can intentionally draw from the air and deposit into the soil, a process called [carbon sequestration](#).

Robak is working that frontier. She helps farmers change some practices and measure the impact on their soils as they join a new carbon marketplace backed by corporate partners including Land O'Lakes and General Mills.

**■ How do carbon markets work?**

Agricultural carbon markets pay farmers to draw greenhouse gases, namely carbon dioxide, from the air and keep it locked in the soil to fight [climate change](#). Plants do this naturally through photosynthesis; farmers

**SC Times**  
SUBSCRIBE NOW \$29 for one year. Save 75%.

News Sports Life Opinion Business Obituaries E-Edition Legals

**FIELD AND FOREST**  
Minnesota climate solutions

- Minnesota farmers are getting paid to fight climate change by cultivating a new cash crop: carbon
- Conservation practices are on the rise on Minnesota farms and across the U.S. Here's why
- How Minnesotans are helping trees in the north woods adapt to climate change
- This startup uses AI and satellite imagery to preserve trees, moose habitat in Minnesota

Nora G. Hertel, St. Cloud Times  
Published 8:15 AM EDT Oct. 24, 2021 | Updated 8:15 AM EDT Oct. 24, 2021

**Glossary of carbon farming terminology**

- **Agronomist**  
An expert in soil management and crop production.
- **Carbon markets**  
An exchange in which businesses or other entities buy credits to counterbalance their carbon pollution. The money goes to land managers, such as farmers or foresters working to keep carbon locked up in soil and plants, or to other projects that reduce emissions or sequester carbon. Various nonprofit and for-profit organizations are setting up voluntary carbon markets as more companies seek to buy credits.
- **Carbon sequestration**  
The capture and storage of carbon dioxide from the atmosphere. It's converted from a gas into a liquid or solid form.
- **Climate change**  
Long-term shifts in weather and temperatures. Climate change taking place since the 1800s is attributed to human activities, including the widespread burning of fossil fuels like coal, oil and natural gas.

**■ How do carbon markets work?**

Agricultural carbon markets pay farmers to draw carbon dioxide, from the air and keep it locked in the soil to fight [climate change](#). Plants do this naturally through photosynthesis; farmers

Continued on the next page.

# NORA HERTEL EXCERPTS FROM FELLOW'S PROJECT



**Using pigeons to teach hunting dogs pointing**  
SPORTS, 1C

**CALLAN FURNITURE**  
CallanFurniture.com

## St. Cloud Times

SUNDAY, OCTOBER 24, 2021 | SCTIMES.COM PART OF THE USA TODAY NETWORK

CLIMATE SOLUTIONS PART 1 OF 5

### Adapting to a changing world



Minnesota farmers raise new cash crops spurred by climate change, reduce carbon dioxide in the air

**How do carbon markets work?**  
Agricultural carbon markets pay farmers to plant cover crops, restore riparian forests, and use other practices that sequester carbon in the soil. A person could reduce emissions by planting cover crops in crop fields and planting cover crops in the forest on between-row crops.

**What it means to sequester carbon for big companies**  
Carbon cycles constantly through living organisms, and the Earth's crust, oceans and atmosphere. Some organisms store carbon in part of their bodies, such as trees in the form of cellulose. Other store it in the form of carbon dioxide gas that escapes through the atmosphere and helps regulate the planet's temperature. Other organisms store carbon in the form of dead bodies that decompose into soil. This process releases carbon dioxide back into the atmosphere, which is then taken up by plants. This cycle is known as the carbon cycle. However, human activities such as deforestation and other land-use changes have disrupted the cycle, leading to an increase in atmospheric carbon dioxide levels. This has caused a rise in global temperatures, which in turn has led to more frequent and severe weather events and rising sea levels.

**USA TODAY**  
Get eye-catching photos and videos from our award-winning photographers via email. Sign up for our newsletter today.

**Incipities seen in school**  
Valuable students affected as named by educators, AA

**Weather**  
High 67° Low 33°  
Clouds, Breeze, 20%

Volume 91 | No. 123  
www.stcloudtimes.com  
Phone 837-432-4242 Fax 837-432-4243



**St. Cloud Times**  
October 24, 2021

### St. Cloud area teams receive top seeds in sections

**SOMETHING HAS TO BE DONE**  
How Minnesota farmers raise new cash crops spurred by climate change, reduce carbon dioxide in the air

**\$50.8 million planned for St. Cloud's 2022 Enterprise Funds Budget**



**St. Cloud Times**  
October 24, 2021

### Enrollment declines persist in higher ed

St. Cloud State's enrollment declines persist in higher education

**FARM CONSERVATION PRACTICES ON THE RISE**  
High-tech startup gives Minnesota landowners to help preserve forests, and uses AI and satellite imagery to do it



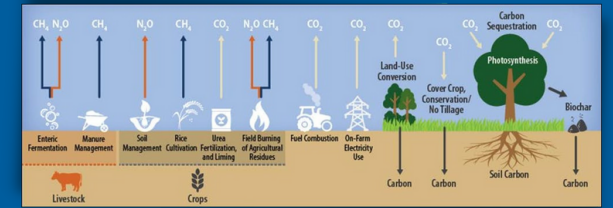
**St. Cloud Times**  
October 24, 2021

### SPEAKING FOR THE TREES

High-tech startup gives Minnesota landowners to help preserve forests, and uses AI and satellite imagery to do it

**Number of students rebounding**  
St. Cloud State's enrollment declines persist in higher education

**School board resigns triple in Minnesota**



### How plants can help combat climate change through photosynthesis (1:40)



Plants can help reduce the effects of climate change through photosynthesis. This video, part of the MIT Environmental Solutions Journalism Fellowship project, features an animated segment by Mariena Myles and a field segment with Nora Hertel.



ANIMATED BY MARIENA MYLES, WRITTEN BY NORA HERTEL

### Future-Facing Farms

▶ Play Newest + Follow

A St. Cloud Times podcast series on six Minnesota farms at the forefront of conservation and environmental stewardship, made possible with support from the MIT Environmental Solutions Journalism Fellowship.

#### Episodes

- Future Facing Farms-Ep. 6- How curiosity and joy led two cousins on a journey into regenerative agriculture  
October 20, 2021 • 19 min
- Episode 6 - Janski Farms with Nora Hertel and Sarah Koehler  
Cousins Daniel and Tyler Janski have been experimenting with cover crops and no-till farming practices for the last four years on their family's St. Augusta, Minn., farm.
- Future Facing Farms-Ep. 5- Two Harbors farmers were drawn to tree seedlings project. Here's why  
October 20, 2021 • 13 min
- Future Facing Farms-Ep. 4- Little Falls farmer uses cover crops to leave soil better than he found it  
October 20, 2021 • 11 min

# TRISTAN BAURICK



The Times Picayune | New Orleans Advocate - New Orleans, Louisiana  
Environment reporter

Fellowship project:

- Five-part investigative series, digital and print
- Public event

Read the series on [NOLA.com](http://NOLA.com)

## EXCERPTS FROM TRISTAN'S PROJECT

COMING THURSDAY: The T-P Doll and Toy Fund envelope  
SINCE 1837  
**The Times-Picayune**  
THE NEW ORLEANS ADVOCATE  
NOLA.COM WEDNESDAY, NOVEMBER 24, 2021 \$1.00

### SECOND WIND

Louisiana firms long tied to the offshore oil and gas industry are making the shift to offshore wind

**All of us that have been in oil and gas, we all need to look at switching to wind, because the question of 'if or when' wind will happen has long since passed and gone.**

BY TRISTAN BAURICK Staff writer

ROCK ISLAND, Ill. — Bryan Wilson's boat leaves a barely visible wake and heads toward a shoreline obscured by heavy rain clouds. The destination is 30 miles off the Atlantic Coast, in barely visible and barely defined waters to massive offshore wind farms.

Wilson says before taking a breath and starting out a series of tasks about the firm's offshore wind project.

It is not the position of a lobbyist, but an engineer. The Exxon generator sits on the deck of the boat. Wilson and the other people on board are from Rock Island, the home of the firm's headquarters.

The project is an effort to reconvert an energy rig that was once used to pump oil from Louisiana.

"The foundations were designed and built in Louisiana," says Wilson, the firm's manager. "They're each 400 tons, and we had them brought '99 here all the way from Houston."

The firm's contractors don't need the six Louisiana companies, all of which grew out of the offshore oil and gas industry, supplied a small array of specialists — from designers and engineers to shipyard workers and marine welders — that designed and executed a large share of the \$200 million project.

"We needed guys with experience, and you've got some guys that were here back in the day, one of those old hands that you don't see anymore. That's the kind of guys you need in a whole 'nother field. It's a really daunting engineering and logistical task."

— See WIND, page 4A

PHOTO BY CHRIS GRANOFF  
Wind turbines generate electricity in the Atlantic Ocean near Rock Island, Ill.

### Batiste nominated for 11 Grammy Awards

N.O. artist in running for album and record of the year

BY KEITH SPEAR Staff writer

If the Recording Academy invites you to help announce the Grammy Award nominees, chances are you're going to see at least one of them nominated.

Jon Batiste, the Kenner native and St. Augustine High School and New Orleans Center for Creative Arts alumnus, was among the presenters during Thursday's broadcast of the 2022 Grammy nominations.

And he ended up with a lot more than one.

He scored a total of 11 nominations, including two of the most prestigious categories: the "Best Album" and "Best Record." In addition to a nomination for best album, he was nominated for best record, best artist, and for two of the most coveted Grammy awards: the "Album of the Year" and "Record of the Year."

In a statement, Batiste thanked his fans and the community for their support. He also expressed his excitement to see his hometown of New Orleans represented on the Grammy stage.

"I'm honored to be nominated for 11 Grammys, and I'm excited to see my hometown represented on the Grammy stage," Batiste said. "I want to thank my fans and the community for their support. I also want to express my excitement to see my hometown of New Orleans represented on the Grammy stage."

— See GRAMMY, page 8A

### St. Martin's board member resigns amid voyeurism probe of husband

BY RAMON ANTONIO VARGAS, MARIELLA PELLETI, ANDREA GALLO and MIKE PERAZICH Staff writers and staff

Aurora-area investigators are investigating the husband of a St. Martin's Episcopal School board member after he was accused of voyeurism in a bedroom in his home.

The school's board of trustees last week voted to suspend the board member, and the school's board of trustees last week voted to suspend the board member.

Jefferson Parish Sheriff's Office Capt. James Brubaker, a spokesperson for the agency, confirmed the investigation Thursday but said he could not provide any details.

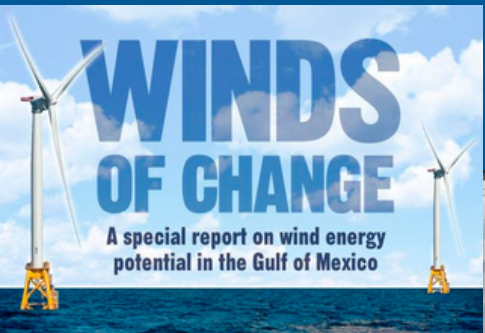
"We have an ongoing investigation, and for the safety of that investigation we would decline to comment at this time," Brubaker said. "We have not made an arrest and we are actively investigating."

The investigation was initiated after law enforcement received information about at least one camera hidden in a bedroom where marital intimacy would take place.

The information led Jefferson Parish detectives to the board member's home in River Ridge near the month with a search warrant. The Sheriff's Office declined to say whether the board member has been found or an attorney for the board member has been retained.

— See RESIGN, page 8A

- Front page, above the fold features of the Thanksgiving print edition
- The Times-Picayune is Louisiana's largest paper



### ABOUT THE SERIES

This story is part of a Times-Picayune | The Advocate series on offshore wind energy supported by an MIT Environmental Solutions Initiative journalism fellowship.

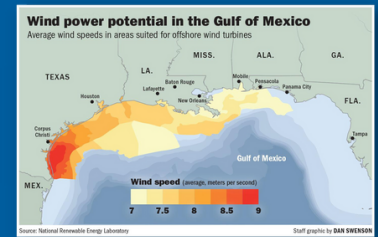
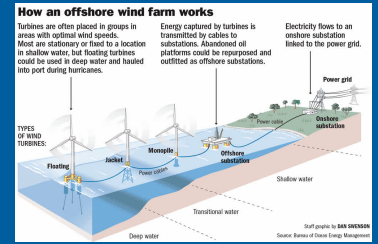
5% of the state's House and Lafayette conferences. "At the first one,

PHOTO BY CHRIS GRANOFF  
Jon Batiste's 11 Grammy nominations are the most for any artist this year and the most ever for a New Orleans artist.

Continued on the next page.



# TRISTAN BAURICK EXCERPTS FROM FELLOW'S PROJECT



"All of us that have been in oil and gas, we all need to look at switching to wind, because the question of 'if' or 'when' wind will happen has long since passed and gone."  
- State Rep. Joe Orgeron, Louisiana businessman

**U.S. Senator Bill Cassidy, M.D.** @SenBillCassidy

With our experience in offshore oil, Louisiana is well positioned to build another successful offshore energy industry. Great investment.

nola.com  
Louisiana oil workers built first U.S. offshore wind farm on East Coast. Can the...  
Turbines could start sprouting in waters off Louisiana and Texas within the decade

**Helena Moreno** @HelenaMorenoLA

"What we'd love to see is Louisiana do the same as New Orleans." Absolutely! I was proud to lead and enact New Orleans clean energy regs and goals. We have one of the top policies in country, but for major industries to move in, LA needs to do same!

nola.com  
Louisiana sent a 'strong signal' to offshore wind developers, but is it enough?  
New Orleans' commitment to renewable energy caught eye of growing industry

# MELBA NEWSOME



North Carolina Health News - Charlotte, North Carolina  
Independent journalist

Fellowship project:

- Two-part series ([Oct 20 story](#), [Oct 29 story](#)), digital
- Two public radio interviews
- An interactive map project forthcoming in 2022

In 2022, selected as a Logan Science Journalism fellowship.

## EXCERPTS FROM MELBA'S PROJECT

**ENVIRONMENTAL HEALTH**

### Unchecked growth of industrial animal farms spurs long fight for environmental justice in Eastern NC

*As large-scale hog and poultry industries continue to grow in eastern North Carolina, local residents push back against decades of air and water pollution.*

by Melba Newsome  
October 20, 2021

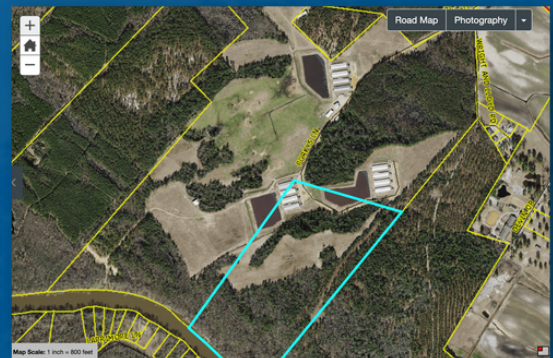
An aerial view of an industrial hog farm and lagoons filled with water in eastern North Carolina. Photo credit: Cape Fear River Watch

By Melba Newsome

On a Sunday evening in July, about 30 residents from around Sampson County gathered at Byrd's Chapel Missionary Baptist Church in Rose Hill, about 20 miles from the county seat of Clinton, to hear about a soon-to-be-constructed methane pipeline.



Reporting included fly-over and drone footage of hog waste piling up in floodplain zones.



*Continued on the next page.*

# MELBA NEWSOME EXCERPTS FROM FELLOW'S PROJECT

**Health Care Half Hour NC**  
NC Health News

with of Eastern NC, hope advocate  
 to do for it, with network support on the  
 to.

2021 Health Journalism to discuss the best  
 possible. Support and coverage for the  
 public and the best and responsible use  
 of funds.

6, October 21, 2021  
to not exceed your budget!

**ENVIRONMENTAL HEALTH**

## Health Care Half Hour – Environmental justice in eastern NC

by **Editor** October 21, 2021

Join us for a conversation with NC Health News journalist Melba Newsome to discuss her two-part MIT Environmental Solutions Initiative series about the residents’ decades-long struggle for environmental and health justice and the laws and regulations that work against them. Read Melba’s reporting here: Unchecked growth of industrial animal farms spurs long fight for environmental [...]



**"When Hurricane Floyd brought life-threatening and catastrophic flooding ashore in September 1999, floodwaters breached the lagoons and transformed coastal rural communities like the McKivers’ into seas of dead hogs, chickens, turkeys and their toxic waste."**  
*- Excerpt from Mebla's Oct 29 story*

**NC HEALTH NEWS**

Home About Topics Series Health Care Half Hour Contact Health Job Listings Newsletter En Expo

### More than just a nuisance

The coronavirus pandemic highlighted the long-standing health and health care disparities that communities of color face across the state. In eastern North Carolina, the adverse effects of living close to industrial farms are well-documented. A [study](#) conducted by the Environmental Health Scholars at Duke University School of Medicine and published in the NC Medical Journal found that communities located near hog CAFOs had higher all-cause and infant mortality, resulting in more deaths due to anemia, kidney disease, tuberculosis and septicemia. These residents also experience higher rates of hospital admission, emergency room visits and low birth weight infants.

This story was developed with support from the MIT Environmental Solutions Journalism Fellowship

Nitrogen from the unlined pits of hog waste seeps into waterways and contributes to groundwater and well pollution. Ever since an industrial hog farm was established a



# DUSTIN BLEIZEFFER



WyoFile - Casper, Wyoming  
Education Reporter

Fellowship Project:

- Three-part series ([story one](#), [story two](#), [story three](#)), digital
- Four videos
- Public event, "Beginning the Climate Conversation in Wyoming"

## EXCERPTS FROM DUSTIN'S PROJECT

**WyoFile**  
People, places & policy

LATEST NEWS VOICES SUPPORTERS COVID-19 PODCASTS

FEATURED TOP STORY

### Wyo residents observe a changing climate and quality of life

Extreme conditions feel like the continuation of a shift in climate patterns residents have observed over their lifetimes, they say.

by Dustin Bleizeffer November 2, 2021

Crook County rancher Thayne Gray on the family's Warbonnet Ranch outside Moorcroft on Sept. 23, 2021. (Dustin Bleizeffer/WyoFile)

W e talk a lot about the weather in Wyoming because, like it does in any place occupied by humans, it unites us. Talking about a changing climate in

driver of annual spring runoff. And spring runoff helps drive large portions of Wyoming's biological health and economy.

Intense springtime warming and increasing variability in both temperature and precipitation are also critical trends.

“

**“Let’s have a conversation about what we can do and how we can start preparing ourselves.”**

— JODEE PRING, PRESIDENT, WYOMING WATER ASSOCIATION

The annual mean springtime temperature in the Upper North Platte Valley, for example, has increased by 3.6 degrees Fahrenheit since 1920, according to National Oceanic and Atmospheric Administration data. That’s double the global average increase of about 1.8 degrees Fahrenheit. That rate of warming has major implications for a watershed

Continued on the next page.

# DUSTIN BLEIZEFFER EXCERPTS FROM FELLOW'S PROJECT



[Link to video](#)



[Link to video](#)



er in Wyoming because, like it does in any place  
es us. Talking about a changing climate in  
more difficult.

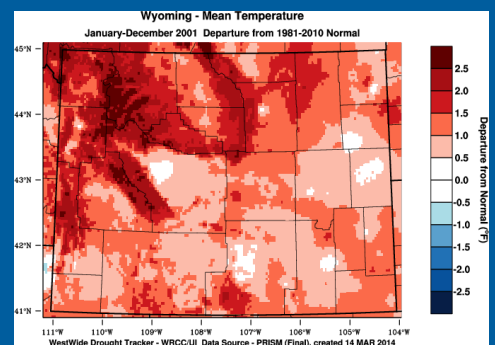
st politics and policy, residents from all walks of  
.

ross the state  
g water  
unities  
ust. This fall,  
o reduce herd  
al hay as they

climate  
conditions felt  
s in climate  
fetimes.

ll County rancher Eric Barlow, who also serves in  
ay that, certainly, [there are] trends that I just don't  
to follow the tradition, you know, from generation

This story is part of a WyoFile series examining climate change and what it means for the quality of life in Wyoming. It is supported by the MIT Environmental Solutions Initiative's journalism fellowship program. Read about Wyoming climate trends here and read about a Wyoming coal community in transition here.



# ALEX SCHWARTZ



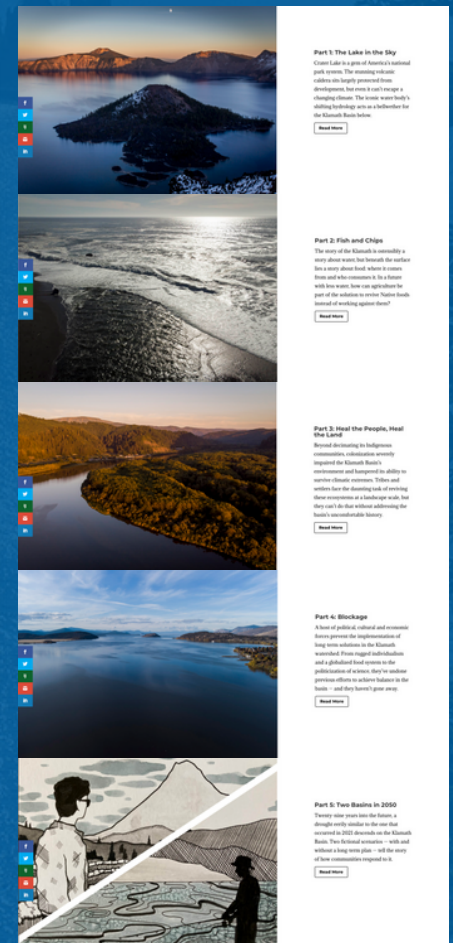
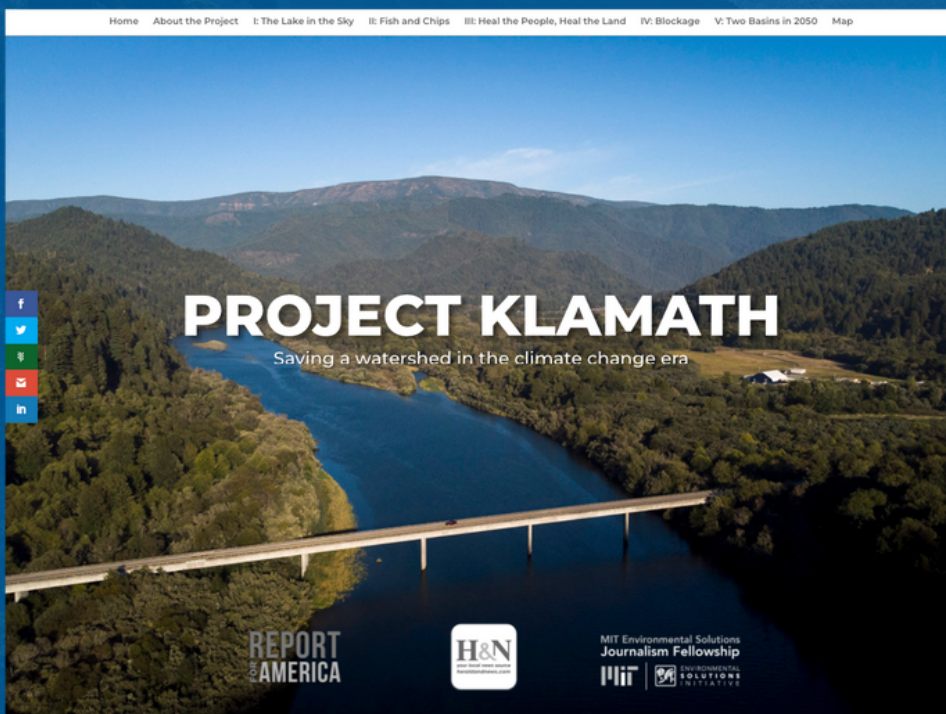
*Herald & News* - Klamath Falls, Oregon  
Environment reporter

Fellowship Project:

- Five-part series, including climate fiction narrative, released on an [interactive website](#) and weekly print publications
- [NPR \*On Point\*](#) radio interview

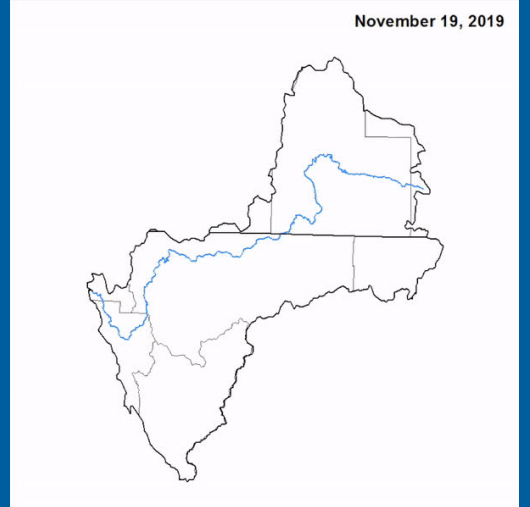
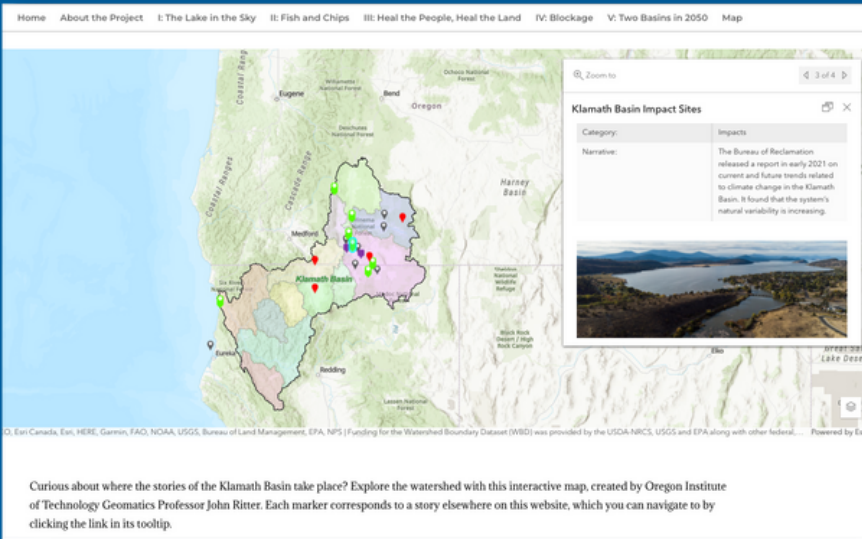
Work won an [Eric and Wendy Schmidt Award](#) for Excellence in Science Communication, given by the National Academies.

## EXCERPTS FROM ALEX'S PROJECT



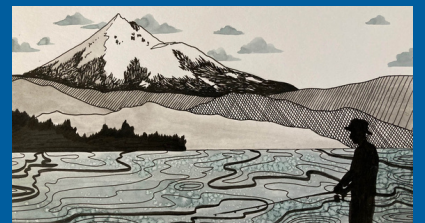
*Continued on the next page.*

# ALEX SCHWARTZ EXCERPTS FROM FELLOW'S PROJECT



"It did more than tell stories. It also suggested ways out of the area's bitter water and environmental conflicts while painting a specific picture of what a climate-changed future actually may look like. **The report showed that how people respond to the coming changes could make a vast difference.**"

- *Oregon Capital Chronicle*, on Alex's project



# FELLOWSHIP RESULTS

## REACH OF HOST OUTLET

Each story was published by the journalist's host outlet. Some of these outlets have only a digital presence; some have both a digital and a print presence. The collective print circulation of the host outlets is over 113,000. For stories published online, the Fellows sent us click metrics for each story. Collectively, the stories had 77,838 direct visits as of December 2021. (Note that one fellow's stories were still being published as late as January 2022, so we expect this number to increase.)

## ADDITIONAL LOCAL + NATIONAL REACH

The Fellows' stories were republished by dozens of local, state, and national media outlets, including USA TODAY, U.S. News & World Report, Associated Press (AP), Yahoo News, Apple News, and public radio programs. These are listed in full on the next page.

The numbers listed above do not include the circulation figures or page views for the news outlets that republished the original stories.

However, we expect the additional local and national reach to be in the hundreds of thousands; for example, USA TODAY alone reportedly has a weekly print circulation of over 720,000, a digital-only subscriber base of over 500,000, and a daily readership of over 2.5 million.

"What local journalism should be."

- [Gillian Flaccus](#), reporter for AP,  
on Alex's project

"This project is a model for really deep,  
engaged environmental reporting."

- [Emma Marris](#), reporter for The Atlantic, NatGeo  
Mag, WIRED, etc., on Alex's project



# FELLOWSHIP RESULTS

## OUTLETS THAT REPUBLISHED FELLOWS' STORIES

Nora Hertel

**St. Cloud Times\***

USA TODAY\*

USA TODAY's Climate Point Newsletter

U.S. News & World Report

Associated Press (AP)

Yahoo News

Apple News

El Paso Times (TX)

The Star Tribune (MN)

Winona Daily News (MN)

La Crosse Tribune (WI)

Titusville Herald (PA)

Herald Standard (PA)

Minnesota Public Radio \*\*

Alex Schwartz

**Herald & News\***

Oregon Capital Chronicle

NPR *On Point* \*\*

Datawrapper

**Journalist's host outlet**

\* *front page feature*

\*\* *interview with fellow*

Tristan Baurick

**The Times-Picayune | New Orleans**

**Advocate\***

The Catch Basin

The Advocate of Baton Rouge

Acadiana Advocate of Lafayette, LA

Melba Newsome

**North Carolina Health News\***

Indy Weekly

North Carolina Public Radio (WUNC) \*\*

Charlotte, NC Public Radio (WFAE) \*\*

Environmental Health News

The Daily Yonder

Dustin Bleizeffer

**WyoFile\***

Energy News Network

Wyoming Tribune-Eagle\*

Laramie Daily Boomerang\*

Casper Star-Tribune

Sheridan Press

Uinta County Herald

Pinedale Roundup

Rawlins Times

County17

Oil City News

# FELLOWSHIP RESULTS

## GOVERNMENT OFFICIALS

Known attendance at an event hosted by the Fellow:

- Dave Kleis, Mayor of St. Cloud, MN (R)
- Minnesota State Sen. Aric Putnam (D)
- Minnesota Rep. Lisa Demuth (R)

Personally contacted the Fellow:

- Minnesota State Rep. Lisa Demuth (R)
- Minnesota House Assistant Majority Leader Dan Wolgamott (D)

Publicly referenced a Fellow's project:

- U.S. Senator Bill Cassidy (R-LA)
- Helena Morena, New Orleans City Council member
- Thom Petersen, Minnesota Commissioner of Agriculture

Subject in a project:

- Louisiana State Rep. Joe Orgeron (R)
- Wyoming State Rep. and Speaker of the House of Representatives Eric Barlow (R)

"I have [used] this reporting to advocate against the media lockdowns that have plagued local agencies due to the political tension associated with drought in the Klamath Basin.

The ... two [government] agencies that have some of the biggest impacts on water management in the basin finally began to ... provide me more information after we published Project Klamath."

- Alex Schwartz



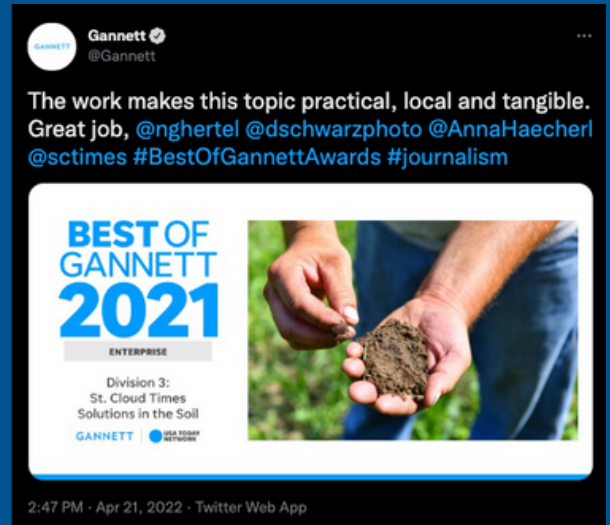
# FELLOWSHIP RESULTS

## AWARDS WON

### Nora Hertel - Best of Gannett 2021

The competition -- which is run by the company that owns USA TODAY -- received over 1,950 entries for 20 categories this year.

"Judges praised [Hertel's] strong focus on solutions and the innovative digital presentation."



### Alex Schwartz - Eric and Wendy Schmidt Award for Excellence in Science Communication 2022

The award was given by the National Academies of Science, Engineering, and Medicine in partnership with Schmidt Futures.

"Schwartz provides insightful and comprehensive reporting in this outstanding body of work. Environmentalism, indigenous rights, bureaucracy, and climate change all come to a head in this extremely thorough collection of pieces about the Klamath Project."



# FELLOWSHIP RESULTS

## FELLOWS' EARLY OBSERVATIONS

"I received more emails on the series than probably any other story or project I've worked on."

"Resource development director for the Modoc Nation said a comprehensive look at the Klamath has been something many people have tried to do in the past, but that this was the one attempt that succeeded. He called me a "hero" for writing it!"

"Some of the companies and experts I featured have been getting many questions from other offshore oil and gas industry-focused companies about how to diversify into the offshore wind industry."

"The project has prompted us to cover the topic of offshore wind energy more closely. I've already written one follow up..."

"I heard feedback from [Wyoming Water Development Association, the Wyoming Outdoor Council, and the Powder River Basin Resource Council] that my reporting project was a boost and has helped to encourage them to continue the efforts."

"[The number of climate stories put out by my colleagues] is definitely more than I've seen since I've worked here (within the last four years)."

"The fellowship and my project was integral to convincing my employer ... to agree to my request to shift from education reporter to energy & climate reporter."

"A tribal advocate from downriver said Project Klamath is something people will cite in the future during discussions about water in the Klamath."

"The former news director of the Klamath Tribes told me she cried after reading the final section of Part 5, the 'hopeful' vision of the future Klamath Basin."

# FELLOWSHIP RESULTS

## Q: HOW DID THE SUPPORT OR INVOLVEMENT OF ESI MAKE A DIFFERENCE FOR YOUR PROJECT?

"It allowed me to stop hedging around the term 'climate change.'"

"The ESI convinced my newsroom to give me a ton of time to investigate and report on a very complicated and nuanced topic. That would not have happened otherwise."

"The ESI fellowship connected me with a handful of excellent and friendly journalists across the country for support – the minimum requirement of a fellowship."

"It made it possible. ... I had been hoping to write about [this topic] for about two years before I pitched my project to ESI – I hadn't been able to take the time and resources with all my other responsibilities. ... If I only had a day or two to report this I wouldn't have been able to grasp and communicate the complexity."

"It allowed travel that might not be approved by my publication. It also connected me to experts that were helpful in my reporting."

"ESI support allowed an important reporting trip that likely wouldn't have happened otherwise. The trip really helped with the storytelling and audience engagement. It allowed us to 'show' readers a concept ... that doesn't yet exist in our area."

# FELLOWSHIP RESULTS

## Q: IN YOUR PERSONAL ASSESSMENT, HOW SUCCESSFUL WAS YOUR PROJECT IN ENGAGING READERS WHO ARE UNSURE, DISENGAGED OR DOUBTFUL ABOUT THE NEED TO ACT ON CLIMATE CHANGE?

"A local conservationist called it a 'masterpiece' and said: 'You're not dividing people. You're not pushing buttons.'"

"The project relied on experts from the oil and gas industry to introduce the idea of offshore wind energy and the opportunities it could offer the region. This approach made readers who are skeptical of climate change and renewable energy let their guard down and consider these topics with a more open mind."

"...my project definitely made strides. The first and most obvious were the people I interviewed and featured in my reporting. All but one are climate skeptics, but they spoke in detail about climate changes they've observed, and very eloquently described their concerns. ... I'm still receiving comments about enthusiasm to keep the conversation going."

"...I reached [several dozen to a few hundred] people in agriculture and a few state lawmakers doubtful or unsure about climate change. I interviewed a number of people who don't worry about climate change but are involved with natural climate solutions for other reasons like soil benefits and carbon payments. A Republican lawmaker attended the event and told me she appreciated the 'helpful information' and meeting the other people there – she has not been involved in climate policy up to this point. I also know the stories really resonated with people who feel there's not enough local coverage on climate issues. Readers told me so, and the engaged time on [the digital webpages of] these fellowship stories was longer than most."

# IMAGE CREDITS

All included images were provided by the Fellows or were produced through the fellowship, and are used with permission.

Pg 1.

- Dustin Bleizeffer, WyoFile. *Campbell County rancher Eric Barlow surveys the family ranch Sept. 23, 2021.*
- Arden Barnes, Herald and News. *John Vradenburg, supervisory biologist for the Klamath Basin National Wildlife Refuge Complex, checks a bird for signs of avian botulism on Sept. 15, 2021.*
- Dave Schwarz, St. Cloud Times. *Farmer Jason Lorenz holds a handful of soil from a field he farms Aug. 31 near Little Falls.*
- Chris Granger, NOLA.com / Times Picayune. *Joseph Orgeron, left, stands in front of the lift boats that were used to install wind turbines in Rhode Island and talks to some of the south Louisiana crews who worked on that project: right to left, Jed Lorraine, Keith Randazzo and Kenneth Miers, all based in the Houma area.*
- Cape Fear River Watch. *An aerial view of an industrial poultry farm with piles of litter next to it in eastern North Carolina.*

Pg 2.

- Arden Barnes, Herald and News. *A sign reads “Endangered farmer can’t survive without water” near Tulelake, Calif. on June 14, 2021.*

Pg. 3

- Chris Granger, NOLA.com / Times Picayune. *The platforms for these wind turbines in the Atlantic Ocean near Block Island, Rhode Island, were made in south Louisiana.*

Pg. 7

- Dave Schwarz, St. Cloud Times. *Assistant Extension Professor Anna Cates speaks during a Soil Stewardship and Nutrient Management Field Day on Sept. 1 near Albany.*
- Dave Schwarz, St. Cloud Times. *Jon and Dewayne Lesemoe hoe weeds from rows of trees growing on a plot Wednesday October 6, 2021 at the Badura State Forest Nursery near Akeley*
- CRS. *Many agricultural activities release carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) to the atmosphere. Some store carbon in plants and soil.*
- Photo by Caroline Yang, St. Cloud Times. *Tyler Carlson rests on a tube protecting an oak seedling at Early Boots Farm in Sauk Centre on Monday, July 19, 2021. Carlson is working to restore the oak woodland landscape on the farm where he raises grass-fed beef, pastured lamb, sour cherries and honey berries.*

Pg. 9

- Dan Swenson, Bureau of Ocean Energy Management.
- Dan Swenson, National Renewable Energy Laboratory.
- Chris Granger, NOLA.com / Times Picayune. *Louisiana state Rep. Joseph Orgeron stands in front of the lift boats that were used to install wind turbines in Rhode Island. The boats are based in Houma.*

# IMAGE CREDITS (CONTINUED)

All included images were provided by the Fellows or were produced through the fellowship, and are used with permission.

Pg. 10

- Cape Fear River Watch. *An aerial view of an industrial poultry farm with piles of litter next to it in eastern North Carolina.*
- Bladen County Tax Assessor website. *Screenshot from the Bladen County Tax Assessor website shows two parcels of land: One 261 acre parcel was purchased by Kinlaw Farms LLC in 1998, the other 34 acre plot (outlined in blue) was purchased by Billy Kinlaw in 1994.*

Pg. 11

- Melba Newsome, NC Health News. *Mt. Zion AME Church in Duplin County.*
- Photo credit: Cape Fear River Watch, *An aerial view of an industrial hog farm and lagoons filled with waste in eastern North Carolina.*

Pg. 13

- PRISM Climate Group, Oregon State University. *Wyoming's highest elevations persistently experience warmer temperatures compared to a 30-year average*

Pg. 14

- Arden Barnes, Herald and News. *Wizard Island sits in the caldera of Crater Lake on Oct. 16, 2021.*
- Arden Barnes, Herald and News. *The mouth of the Klamath River near Klamath, Calif., on Sept. 23, 2021.*
- Arden Barnes, Herald and News. *The town of Klamath, California, is located near the mouth of the Klamath River.*
- Arden Barnes, Herald and News. *Upper Klamath Lake from Moore Park on Oct. 28, 2021.*
- Illustrations by Jenna Gibson.

Pg. 15

- Arden Barnes, Herald and News. *Amy Cordalis cleans a salmon caught by her and her father, Bill Bowers, via gill net on July 21, 2021.*
- Maps from the U.S. Drought Monitor.
- Arden Barnes, Herald and News. *John Vradenburg, supervisory biologist for the Klamath Basin National Wildlife Refuge Complex, checks a bird for signs of avian botulism on Sept. 15, 2021.*
- Arden Barnes, Herald and News. *Taylor Thompson (left), the Yurok Tribe's food sovereignty division manager, and Louisa McCovey (right), the Tribe's Environmental Director, pose for a portrait on Sept. 23, 2021, on the 48-acres of land soon to become a "food village".*
- Arden Barnes, Herald and News. *Rep. Greg Walden spoke with farmers, ranchers and community leaders on the continued drought crisis in the Klamath Basin during a visit at the Klamath County Chamber of Commerce offices on March 10, 2018. H&N file photo by Sean Bassinger.*
- Illustrations by Jenna Gibson



# SOURCES

Sources from Background section:

- Abernathy, P. M. (2020). News Deserts and Ghost Newspapers: Will Local News Survive? (p. 121). University of North Carolina - Hussman School of Journalism and Media.
- Bloodhart, B., Maibach, E., Myers, T., & Zhao, X. (2015). Local Climate Experts: The Influence of Local TV Weather Information on Climate Change Perceptions. PLOS ONE, 10(11), e0141526. <https://doi.org/10.1371/journal.pone.0141526>
- Brüggemann, M. (2017, April 26). Shifting Roles of Science Journalists Covering Climate Change. Oxford Research Encyclopedia of Climate Science. <https://doi.org/10.1093/acrefore/9780190228620.013.354>
- Hendrix, M. (2020, October 5). How the Decline of Local News Threatens Local Democracy. Governing.Org - The Future of What's Happening Now. <https://www.governing.com/now/How-the-Divide-of-Local-News-Threatens-Local-Democracy.html>
- Sands, J. (2019, October 29). Local news is more trusted than national news—But that could change. Knight Foundation. <https://knightfoundation.org/articles/local-news-is-more-trusted-than-national-news-but-that-could-change/>
- Mildenerger, M., Marlon, J. R., Howe, P. D., & Leiserowitz, A. (2017). The spatial distribution of Republican and Democratic climate opinions at state and local scales. Climatic Change, 145(3), 539–548. <https://doi.org/10.1007/s10584-017-2103-0>

# CONTACT

Laur Hesse Fisher, Program Director, MIT Environmental Solutions Initiative, [lfi@mit.edu](mailto:lfi@mit.edu)