SUSAN SEACREST ’75 TURNED HER CONCERN OVER THE QUALITY OF LOCAL GROUNDWATER INTO A NATIONAL CAMPAIGN TO EDUCATE PEOPLE ABOUT WATER POLLUTION. HER EFFORTS HAVE FLOWED WELL BEYOND HER GREAT PLAINS HOME TO ALL QUARTERS OF THE NATION.

By Kim Ode

PHOTOGRAPHED BY GWYNETH ROBERTS / POLARIS
Susan Seacrest comes up with these sayings—so many of them that she can’t help but smile a little sheepishly each time she steers through yet another turn in the conversation with, “I have this saying about…”

There is her saying about what the Groundwater Foundation, her brainchild, has accomplished on a global scale in the 32 years since she first sat at her kitchen table licking envelopes: “It shows what happens when you take care of business every day.”

There is her saying about how our lives are so inextricably linked to groundwater that our every action, whether positive or negative, affects it on some level: “Groundwater is the footprint of human endeavor.”

And then there is her saying about her home state sitting atop a huge underground aquifer. “Nebraska is number one in groundwater—and you don’t even have to win a football game to prove it!”

Seacrest, a 1975 graduate of St. Olaf College, is founder and president of the Groundwater Foundation in Lincoln, Nebraska. Over the course of three decades, she has seen the quietly earnest issue of safe groundwater become a unifying force within a community, a personal obsession, even a hot topic among youngsters. Through it all, her strategy for success has remained constant: Once we know, we’ll care.

Her mission of helping us know as much as possible about groundwater recently gained high recognition. Seacrest is one of six Americans to share in the $1.25 million Heinz Award for the Environment, among the largest individual achievement prizes in the world. A statement from the Heinz Family Foundation said this of Seacrest: “Engaging, creative, collaborative, and, perhaps most of all, persistent, she has been a tireless and remarkably effective advocate for protecting the health of our fragile aquifers.”

Seacrest, 53, is slim as a colt and just as rambunctious. She’s the sort of person who reads the Clean Air Act in bed and freely acknowledges that housekeeping is something she’ll have more time for … someday. Her husband, Gary, is a lawyer who once gave her a button to wear to a cocktail party: “Do not ask this woman about groundwater.” Their three children, Logan, Tyler and Kelly, are grown and there’s every reason to believe that they do not let the faucet run while brushing their teeth.

Born and raised in Nebraska, she is passionate about her state. Her grandparents settled in the western half, where many of the novelist Willa Cather’s stories are set. Little wonder that Seacrest did her senior paper at St. Olaf on Cather.

The intersection of Seacrest’s life and Cather’s art on those plains seems fitting, for Seacrest is not unlike how Cather described one of her heroines, Thea, in The Song of the Lark: “She had the power to make a great effort, to lift a weight heavier than herself.”

Yet Seacrest didn’t see this coming. “I had no intention of starting a big national organization,” she says. “I just wanted to share with others so they wouldn’t have to go through their own long, lonely journey.”

Seacrest’s journey began in 1981 and is testament to what happens when a passion is ignited, when serendipity occurs, when hard work bears fruit. But it’s also what can happen when someone, like a dripping faucet, won’t stop asking questions.

Her newborn son, Logan, was ill, dreadfully ill, because of something with his digestive tract. The doctor, mystified, called it “failure to thrive” and took a wait-and-see approach. Seacrest was beside herself at her son’s inability to retain any food. “I knew he was dying because a mother knows these things,” she says.

With her pushing the issue, they eventually discovered that Logan’s lower intestines had lost...
“Half of America drinks groundwater every day. Every time we eat, we’ve used groundwater — because some portion of whatever is on the plate likely came from a field or garden watered with groundwater.”

— SUSAN SEACREST ’75
their cilia and thus their ability to absorb nutrients. He was placed on a special diet with the hope that he would live until his intestines could repair themselves. The doctors never did determine what first caused his illness, but Logan is a healthy young man today.

Seacrest’s story might have ended with her son’s recovery. But the four-year battle had changed her, left her feeling vulnerable, even naive. “I’d been congratulating myself on raising my family in a healthy environment, and it never occurred to me in a million years there could be trouble.” So when she chanced on an article written by a doctor in Kearney, Nebraska, about a high incidence of leukemia rates possibly linked to pesticides and nitrates in the Central Platte River Basin, she was drawn to it. “Intuitively I knew children would be more vulnerable.”

Her grandparents had grown up in one of the affected counties, so the doctor’s concerns felt especially personal. But she was prodded to action by one other motivation: “I needed somewhere to put all the anguish I’d been through,” Seacrest says. “So I started studying groundwater.”

Her grandparentshad grown up in one of the affected counties, so the doctor’s concerns felt especially personal. But she was prodded to action by one other motivation: “I needed somewhere to put all the anguish I’d been through,” Seacrest says. “So I started studying groundwater.”

The festival has inspired similar gatherings in other countries, and one of Seacrest’s crowning achievements was making the 10th festival an international affair, with a student delegate from each continent — except Antarctica. Give her time.

The team then leads its community to take action and to demonstrate results. Such activities generally fall in five categories: public awareness and education; conservation; pollution prevention; public policy; and management practices such as guiding well surveys, creating rain gardens, or organizing pharmaceutical collection programs.

Seacrestlikes to tell how some concerned citizens in Desert Hot Springs, California, hid and took photographs of illegal dumping, providing the necessary documentation to halt the waste disposal that was contaminating the groundwater.

Then there’s Davis, California, where historically contentious urban and agricultural interests began talking with each other at brown bag sessions after — and Seacrest says this with only half a laugh — they agreed to keep their lawyers outside. By the next year, both sides worked together

What is groundwater?

Groundwater is freshwater that’s held within soil and permeable rock in underground aquifers. Here’s how it gets there: Rainwater seeps into the ground, providing plant roots with needed water. Excess moisture moves deeper, through cracks and gaps until it reaches bedrock impermeable enough to stop it. The water that accumulates in that network of porous rock is groundwater.

Only 3 percent of the Earth’s water is fresh water, and two-thirds of that is frozen in polar icecaps and glaciers. Half of America drinks groundwater every day. Every time we eat, we’ve used groundwater because some portion of whatever is on the plate likely came from a field or garden watered with groundwater. Irrigation is its greatest use.

“I discovered a reverence for groundwater I’d never had.” Seacrest talks about groundwater the way many of us talk about a favorite aunt — a nurturing presence that’s always been there, taken a bit for granted, a little plain, but dearly loved.

Seacrestalways loved Nebraska for its broad expanses, but it was the intimacy of a sparsely populated state that proved an ally to her budding curiosity. “Nebraska is big enough to have people who do really fine work but small enough that even I could get interviews with them,” she said.

Seacrest was the director of the National Arbor Day Foundation — the organization was founded in Nebraska — and she used what she learned from that group as a template for building another. “We engage people locally because groundwater, like a tree, is a uniquely local resource,” she says. The foundation offers various programs that help a community learn its geology, such as whether the community is built on clay, peat or loam. The better citizens know their local conditions, the better they can make wise decisions.

Building from the ground up

A cornerstone of a community’s education is the Groundwater Guardian program that came to Seacrest, as many good ideas do, in the middle of the night. A Groundwater Guardian designation must be earned, with the first step being the establishment of a team with representatives from citizens, business or agriculture interests, education, and local government.

The team then leads its community to take action and to demonstrate results. Such activities generally fall in five categories: public awareness and education; conservation; pollution prevention; public policy; and management practices such as guiding well surveys, creating rain gardens, or organizing pharmaceutical collection programs.

Seacrest likes to tell how some concerned citizens in Desert Hot Springs, California, hid and took photographs of illegal dumping, providing the necessary documentation to halt the waste disposal that was contaminating the groundwater.

Then there’s Davis, California, where historically contentious urban and agricultural interests began talking with each other at brown bag sessions after — and Seacrest says this with only half a laugh — they agreed to keep their lawyers outside. By the next year, both sides worked together

Making water education fun

For one day each year, the Children’s Groundwater Festival in Grand Island, Nebraska, is the hottest ticket in town, aiming to serve about 3,500 students from the thousands more who try to register.

The day is driven by experiences more than by words. “We believe teachers can be found anywhere,” Seacrest says, describing how a truck stop manager talked about how leaky underground storage tanks can pollute the groundwater.

“He brought in this big box of sand in which he’d buried little Lego blocks to show the kids how hard it can be to search for a tank.”

The state quilting society has guided sessions on sewing squares for a groundwater-themed quilt. The Omaha Symphony created a special musical piece about groundwater and brought students up on stage to help conduct. There are game shows called “Who Wants to be a Parts-Per-Millionaire?” and “H2Owood Squares.”

“I have this saying, that we’re the Disney of the water education effort,” Seacrest says. Like the Nebraska landscape, the strategy is all about the long view: “If kids have fun learning about water, then the next time they get an opportunity to learn something more, they’ll pay closer attention.”

The festival has inspired similar gatherings in other countries, and one of Seacrest’s crowning achievements was making the 10th festival an international affair, with a student delegate from each continent — except Antarctica. Give her time.

The different perspectives were fascinating, she says, still marveling at the impact made by the students from Mexico. In their villages, they still carried their own water from wells to homes, so they were conscious of not wasting a drop, even at the water fountain.

Groundwater Foundation Kids Corner: groundwater.org/kc/kc.html
on a calendar of water facts. Now they’re collaborating on a county-wide water use plan. “They took the time to build trust with each other,” Seacrest says.

She likes talking about the City of Davis experience because it holds the seeds of her greatest concern about the foundation and her work. Anyone can start a group or hold a brown bag session, but “sustainability is the real challenge.”

Given the potential for getting bogged down in a political quagmire, from day one the foundation has been deliberately nonpartisan, nonpolitical, and nonadversarial. It does not take stands on specific legislation, does not lobby, and does not issue policy statements. “We’ve been successful for the things we don’t do as much as for what we’ve done,” she says.

So how do they decide what to do? Seacrest uses the “fit” test. Community proposals must fit this criteria: They must have a viable and useful answer to the question “How does this activity help the public understand groundwater?” It’s a narrow focus, but following this standard has proved a guiding principle for decades.

Perhaps nothing demonstrates Seacrest’s long view of her work more than the connection the foundation makes with students, once solely in Nebraska and now around the world. Their enthusiasm recharges her as surely as a cloudburst boosts an aquifer.

“You cannot make or destroy a water molecule,” she says, sounding at once both the instructive teacher and the wondering child. Every drop is part of the hydrologic cycle of evaporation and precipitation and always has been. In other words, we have the same water we began with, or, as she explains to youngsters, “The water you showered with in the morning might have been in a stegosaurus’s bathtub.”

Then humanity put its finger into the water cycle. While human-made pollutants cannot destroy water, they can make it dangerous to ingest — something that water experts call making it “unavailable.” Can polluted water be reclaimed over time in a way that makes economic sense? That’s the challenge and the dream.

“I have this saying,” Seacrest explains. “Groundwater is interesting because groundwater is the environmental bottom line — literally,” she said. By that, she’s talking about gravity. Run-off from lawn chemicals, soil erosion from farms, toxins around us, air pollution — gravity pulls all of it into the waiting ground and its treasure chest of water.

Technology that improves so many other aspects of our lives can at times have a negative effect on our water. Some new chemicals, for example, last longer than ever, which is good for their individual purpose but not so good if their ultimate destination is below ground. Forget about worrying over one part per million, she said; parts per trillion are growing more common. “You can tell the history of a community by what’s in its groundwater.”

“I don’t ever want to come across as an alarmist,” she adds. Rather, she urges the quiet power of a consistently repetitive message.

“That’s how behavior changes,” she says. “It is not enough for us to go out and do something once or even ten times. It’s like recycling. I don’t know when I was no longer able to throw an aluminum can into a wastebasket, but it wasn’t after the first time I did it.”

**Actively engaged**

Seacrest’s own history as an activist took hold at her kitchen table. After diving into learning about groundwater, she wanted to share what she’d found and create connections between the experts and the consumers. “The managers of the state’s watershed districts were nice enough to send me the names of people they thought would be interested in a conference,” she said. She knows they were just trying to help out a 32-year-old pregnant mother who was typing everything on a typewriter and taking letters to the print shop.

“Every drop of water is part of the hydrologic cycle of evaporation and precipitation, and it always has been.”
**What can we do?**

Get your well tested. You can’t always tell if your water is unsafe. Taste, smell and appearance aren’t always clues.

Ask for your Consumer Confidence Report. Public water system suppliers are required to provide annual water quality information. It should come in the mail, but if you’ve missed it, contact your local water department. For more on reports, go to epa.gov/safewater/ccr/index.html

**Know where your water comes from — and goes.** New developments may not have enough septic field capacity, especially as more retirement communities are being built in picturesque lakes and mountains where it’s more of a challenge. Lots get divided and wells sunk near a forgotten septic field. Or the old family lake cabin gains additions and remodeling projects until it’s a six-bedroom residence that far outpaces the septic system.

**Go look at the source of your water.** Go to the lake or the river. Visit your water treatment plant. You as a citizen have a right to do that. Look at how the adjoining land is used. Is there a gas station nearby? Take a few hours out of your life and explore.

**Be conscious of what you put in the ground.** Learn how a watershed works. One of the worst actions is to dump your motor oil behind the garage. Even a few drops of benzene can contaminate volumes of water.

Dispose of leftover drugs wisely. If you need to get rid of pharmaceuticals, don’t flush them down the toilets. Call your county health department and ask what disposal procedures they recommend.

Recycle and buy items made from recycled goods. An overstuffed landfill is more likely to leak.

---

Kim Ode is a Star Tribune journalist and author of Baking with the St. Paul Bread Club: Recipes, Tips and Stories.