# CLEARSCAPES









A Newsletter of the Center for Land Use Education and Research at the University of Connecticut.

## **Special Edition**

#### **CLEAR Co-founder and Longtime Director Chet Arnold Retires**

#### From the Director

David Dickson

Still feels like Chet should be writing this, but he has certainly earned his retirement. I am extremely honored, humbled and, not afraid to admit, a smidge overwhelmed to take up the mantle of the house that Chet built. Luckily, Chet has assembled an amazing team over the years that will ensure CLEAR not only keeps on keepin' on, but also continues to push the envelope in the name of balancing growth and natural resource protection. On behalf of the entire CLEAR team, we thank Chet for building this home for us. While there is no replacing the original, we will do our best to maintain your vision, clarity, humor, grace, innovation, and overall Ubermensch-ness in all that we do.

#### From the Old Director (take that any way you want)

Chet Arnold



Greetings. All this fuss is because I have retired from UConn, and stepped down from my role at CLEAR, as of October 1. I've had a great time building things, convincing brilliant people to help me, and then taking credit for

all their work (see the slightly embarrassing Chet's Legacy Timeline on the next page). It's been interesting, gratifying, frustrating, fun, and [your favorite here]. I think the most important thing to say is that although this will be a big change for me, it will not be a big change for CLEAR—or for you, as the Center's friends, partners, benefactors, and beneficiaries. The scientific, technical, outreach and instructional firepower of CLEAR is here in force, in the form of our accomplished and dedicated faculty, staff and partners. In more good news: I have every reason to believe that we will be expanding and enhancing our work in the years to come, as well as extending our reach by way of new partnerships (look for our next issue for news!). I will miss the work, but mostly I will miss my "work family." I am not going to name names, but they are a pretty awesome bunch. Good place to end...

CLEAR provides information, education and assistance to land use decision makers, in support of balancing growth and natural resource protection.









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# **Chet's Legacy Timeline**

Not an exhaustive list by any means, some highlights and key moments from Chet's 34-year career at UConn.



#### LONG ISLAND SOUND STUDY (1987-1994)

The year he was hired by CT Sea Grant, Chet got an EPA grant to redevelop the LISS Public Participation Program, as a CT & NY Sea Grant collaboration. At the time, having a NOAA entity (Sea Grant) working with an EPA entity (LISS) was vaguely scandalous. But successful nonetheless. He led the program until 1994, when others took over, but it still exists today. His highlight was having a beer with Katharine Hepburn at her house in Old Saybrook during the taping of a public service announcement for the LISS.

#### 1027

◆ Chet's Hired by CT Sea Grant - 1987



Chet took to research-based outreach quickly.

◀ Has a beer with Katherine Hepburn (1989)

#### 1991

#### NEMO is Born (1991 - present)

Chet led a team from Extension and Natural Resources to create the Nonpoint Education for Municipal Officials (NEMO) program, with funding from USDA. NEMO was groundbreaking in both its use of geospatial technology and its targeting of land use, and land use officials, as a strategy to protect water resources. NEMO also spun off the Chester Creek and Eightmile River watershed projects, a partnership with TNC (The Nature Conservancy) CT Chapter and EPA. NEMO has won several national awards and has undergone many changes but is still going strong today, with a focus on "MS4" stormwater permit support. For those keeping score: NEMO had a website before the university did!

- NEMO's Official Website Launched (9-1996)
- ◀ UConn's Official Website Launched (12-1996)
- ◀ First NEMO program conducted outside of CT (in NC) (1996)

#### IMPERVIOUS COVER INNOVATIONS (1992 - present)

With NEMO colleague Jim Gibbons, Chet developed the impervious cover build-out analysis, a way for communities to visualize the impacts of their current land use regulations. In 1996, they published a landmark paper on the use of IC for environmental planning in the Journal of the American Planning Association; to date the paper has been cited over 2,700 times (that's a whole lot,

for those not versed in the minutiae of academia). In 2007, when CT DEEP (Department of Energy & Environmental Protection) issued the first Impervious Cover TMDL regulation in the nation for Eagleville Brook on the UConn campus, Chet developed a project to respond to the TMDL, funded jointly by UConn Administration and CT DEEP. Since then, campus has become a well-known showcase for Low Impact Development.





2004

2008

1995

#### NATIONAL NEMO NETWORK (1999 -2013)

◆ The first National NEMO University in Haddam, CT (2000)

In 1996 Chet got a grant from EPA to help start the first out-of-state NEMO program, in North Carolina. That led to a series of USDA projects that funded the NEMO Nation, which was founded in 2000. At its height, there were 32 programs in 30 states, all patterned after, and coordinated by, CT NEMO. After the 8th national "NEMO U" conference, they were banned for being too much fun for an academic endeavor. While official facilitation of the Network has ended, the bonds with programs and professionals across the country endure. Tattoos will do that.





■ Leads response to first impervious cover TMDL in the nation (2007)

■ National NEMO Network peaks at 32 programs in 30 states (2008)



Chet helped Natural Resources Conservation Academy (NRCA) creator John Volin develop the program, specifically the critical connection to CT communities. Chet also created and led the

Teacher Professional Learning (TPL) branch of NRCA, focused

on high school teacher training. NRCA has had a lasting impact

in Connecticut, involving hundreds of students and resulting in conservation projects in communities all over the state.

NEMO 20th Anniversary Bash in New London, CT (2011)

# CLEAR

#### CLEAR Becomes an Official UConn Center (2002 - present)

CT's Changing Landscape project debuts - 2004 ▶

In 1999 Chet was PI on a grant from NASA that enabled Dan Civco's LERIS lab in Natural Resources to expand its great land cover work. At the same time, Sandy Prisloe was creating the Geospatial Technology Program with funding from NOAA and the NEMO Network was taking off. In 2001, on a plane ride back from one of his many National NEMO related trips to DC, Chet roughed out the general idea for CLEAR on an barf bag. Back home, he worked with Dan, Sandy, Jim Gibbons and Steve Broderick to develop a plan for CLEAR, which was approved by the Board of Trustees in 2002. (That proposal was written

on more conventional paper). In 2004, The Connecticut's Changing Landscape project was unveiled, with front page coverage on the Hartford Courant. CLEAR was really and truly launched, and the rest is history, as they say.





(Barf bag circa 2001) Chet almost (but not quite) nailed the acronym coming home from a NEMO related trip. He blames turbulence...

#### ENVIRONMENT CORPS (2016 - present)

Chet was a member of the small faculty team that developed the Climate Corps, and he wrote the grant to the Provost's Office that allowed the CC to become a reality. In 2019, a much larger team received an NSF (National Science



Foundation) grant that has enabled the development of the "E-Corps," which Chet leads. The project involves 4 colleges/ schools, 6 departments, 4 university centers, and the Provost's Office.





Creates TPL branch of NRCA (2016)

NRCA (2012 - present)



Academy

◆ Chet retires (kind of)! (2021)

2016





#### By the Numbers Chet Arnold

34 +

Years at UConn

6

Major programs founded or co-founded 160+

Funded grant proposals

\$25M+

Grant funds as PI or Co-PI 4

Programs winning UConn Provost Engagement Award (NEMO, CLEAR, NRCA, E-Corps) 1

Beer with Katharine Hepburn

#### An Appreciation the Lighter Side

























#### **But Enough About Chet...**

## **CLEAR Program Updates**



- The **Environment Corps** program (E-Corps), a multi-college collaboration at UConn led by CLEAR, has won the 2021 Provost's *Award for Excellence in Community Engaged Scholarship* for a Faculty Team. The awards "...recognize scholarly activities led by members of the UConn community that are in collaboration with local, regional/state, national, or global communities to create conditions for the public good, culminating in sustainable change and dissemination of these activities." E-Corps combines classroom instruction, service learning, and Extension outreach to give undergrads a "real-world" understanding of complex environmental problems, while assisting Connecticut towns to deal with these problems. The team included 22 (!) faculty members from across the University, including Chet Arnold, Juliana Barrett, Dave Dickson, Mike Dietz, and Bruce Hyde from CLEAR.
- CLEAR's Emily Wilson has been named as the UConn representative to the newly formed Geographic Information Systems Advisory Council. The Council was established by the Connecticut Legislature last session in a bill that created a state Geographic Information Systems Office within the Office of Policy and Management, a Geographic Information Officer (GIO) to oversee the new Office, and the Council to Advise the GIO. Prior to this bill, Connecticut was one of only a handful of states without a state GIS office. Emily has been at the forefront of explaining the many reasons that Connecticut needs to reduce redundancy, increase efficiency, and in general get its act together with respect to the collection and coordination of mapping data.





- Connecticut Sea Grant and CLEAR are partnering on a new project to provide **information**, **education** and assistance to Connecticut towns on the development and operation of Stormwater Authorities (also known as Stormwater Utilities). Stormwater Authorities (SWAs) are commonly used by communities in much of the country to pay for increasingly critical stormwater management improvements. Until recently, only a handful of communities in CT were authorized to establish a SWA, and only 1 has done so. As part of Public Act 21-115, *An Act Concerning Climate Change Adaptation*, all Connecticut municipalities are now able to establish stormwater authority if they so choose. With increased flooding events and expanding stormwater regulatory requirements great interest in pursuing SWAs is expected. The new project will be integrated with NEMO's MS4 outreach program and the CT Sea Grant-CLEAR Climate Adaptation Academy.
- ▶ Good news for MS4 communities and entities. CT DEEP has agreed to **extend NEMO's MS4 out-reach program** for at least another year beyond the current permit term. With the pandemic slowing progress on MS4 requirements for many towns and an expected extension of the permit beyond 2022, we will continue to provide tools, training, and advice on complying with the permit.





▶ UConn CLEAR is the new home for **CT DEEP's online certificate courses**. Three existing courses, Aquifer Protection Program Technical Training, Inland Wetlands, and Hazardous Waste are being updated and moved to CLEAR's new training website at clear.uconn.edu/training. Aquifer Protection is open for registration now and the Inland Wetlands and Hazardous Waste courses will be available by the end of the year. A new course, Pollution Prevention, is in development and will be added to the site soon. The plan is to use these trainings as a springboard to a large suite of online trainings for land use officials and decision makers.



COLLEGE OF AGRICULTURE,

HEALTH AND NATURAL

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The UConn Center for Land Use Education and Research (CLEAR) provides information, education and assistance to land use decision makers, in support of balancing growth and natural resource protection. CLEAR is a partnership of the Dept. of Extension and the Dept. of Natural Resources and the Environment at the College of Agriculture, Health and Natural Resources, and the Connecticut Sea Grant College Program. Support for CLEAR comes from UConn and from state and federal grants.

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