The Center for Land Use Education (CLUE) is a joint venture of the College of Natural Resources at the University of Wisconsin - Stevens Point and University of Wisconsin-Cooperative Extension (UW-Extension) in collaboration with UW System institutions. It is a focal point for land use planning and management education, and represents the Wisconsin Idea at its best: The borders of the state are truly the border of the center’s work.

CLUE was established in 2000 to provide learning opportunities related to land use and related topics. Land use is impacted by a complex, and changing, set of issues that impact how we ultimately use the land. CLUE specialists, with input from our partners, continue to provide up-to-date, comprehensive education to help individuals and communities make well-informed land use decisions that result in a sustainable Wisconsin.

**Mission:** CLUE creates learning opportunities for communities to help them make sound land use decisions resulting in a sustainable Wisconsin.

**Vision:** Individuals and communities make well-informed land use decisions with confidence. Their decisions are legally, ethically, ecologically and economically sound.
Anna Haines is the director of the center, a professor and a land use and community development specialist. Haines received her Ph.D. from UW-Madison in the Department of Urban and Regional Planning. Her extension, research and teaching focuses on planning and community development from a natural resources or environmental perspective, which includes comprehensive planning and planning implementation tools, such as zoning, and sustainable communities.

Karen Blaha is a project associate. She holds a M.S. in Education from Northern Illinois University. She has a strong interest and is involved in local, sustainable food initiatives. Blaha supports CLUE staff and assists with publications and projects related to land use, sustainability and community food systems.

Shiba Kar is an assistant professor and a sustainable energy specialist. Kar earned his Ph.D. in Forest Resources from Pennsylvania State University. He has a strong background and interest in teaching, collaborative research and outreach in energy policy and natural resources sustainability. Kar joined CLUE in July 2014.

Lynn Markham is a land use specialist. Markham has a M.S. in Biochemistry from the University of Oregon. Her extension work has focused on land use tools and techniques to protect drinking water, lakes and streams; zoning and boards of adjustment/appeals; and sustainable communities. To assist communities, Markham provides research-based information, policy options and community case studies.

Dan McFarlane is a research specialist and utilizes Geographic Information Systems (GIS) for land preservation and environmental planning. McFarlane has a M.S. in Natural Resource Management from UW-Stevens Point. He has a particular interest in the use of GIS for visualizing and measuring spatial landscape patterns.

Rebecca Roberts is a land use specialist. She has a M.S. in Urban Planning from the University of Illinois. Roberts provides training workshops for plan commissions, zoning boards and other local land use officials. She also assists communities with comprehensive planning, public participation, plan implementation and the fiscal impacts of land use decisions.

Aaron Thompson is an assistant professor and a specialist. He received a Ph.D. from Purdue University and an M.S. in Natural Resource Planning. His extension, teaching and research focuses on using social data to understand key attitudinal characteristics that motivate agricultural landowners to engage in conservation efforts, to expand the use of spatial analysis techniques to visualize and respond to land use trends, and to identify pathways for improving public participation in the planning process.
CLUE partners with local and state government, educational institutions and community groups to meet the needs of communities throughout Wisconsin. This includes, but is not limited to, the following:

UW-Stevens Point
UW-Extension
  State Specialists and County Educators
  Center for Community and Economic Development
  Center for Watershed Science and Education
  Local Government Center
  Lakes Program
  Community Food Systems Team
  Sustainability Team
Cooperative Extension Land Use Planning Community of Practice
Wisconsin County Code Administrators
Wisconsin County Planning Directors
Wisconsin Chapter of the American Planning Association
League of Wisconsin Municipalities
Wisconsin Counties Association
Wisconsin Towns Association
Wisconsin Wetlands Association
Wisconsin Department of Natural Resources
UW-Madison Department of Urban and Regional Planning
North Central Conservancy Trust
Ozaukee-Washington Land Trust
Gathering Waters

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U.S. Forest Service
Wisconsin Department of Natural Resources
Wisconsin RREA Program
UW-Stevens Point Student Research Fund
The future of planning is cultivated on the UW-Stevens Point campus.

The UW-Stevens Point natural resource planning major in the College of Natural Resources (CNR) prepares students to guide citizens in making community decisions, with a firm understanding of natural resource knowledge and social science skills. This will ensure that our future planning professionals will have a firm understanding of land use planning and its emerging challenges.

**Teaching**

As a joint venture of UW-Stevens Point and UW-Extension, CLUE faculty and staff regularly participate in teaching activities on campus relating to land use and sustainability in Wisconsin.

Three CLUE faculty – Anna Haines, Aaron Thompson, and Shiba Kar – have partial appointments in the CNR and teach a variety of courses every year, including seven courses for the Natural Resource Planning major, three courses for the Sustainable Energy minor and two courses for graduate students. In addition, graduate students work with faculty on many projects.

**Internships**

All Natural Resource Planning students are required to complete an internship. Haines oversees the program and monitors student internships. In the summer she visits each student in Wisconsin. The students work at federal, state, county and city agencies. They also work at land trusts and a variety of other organizations.

In 2015, Aaron Thompson earned the Excellence in Teaching Award, College of Natural Resources, UW - Stevens Point.
**Service Learning**

Many of the planning courses include service-learning components. For example, students studying natural resources planning have had the opportunity to work collaboratively with Ozaukee-Washington Land Trust, Wisconsin Department of Natural Resources, local government and other conservation partners in southeastern Wisconsin to develop a strategic conservation plan for Washington County. Led by Aaron Thompson, year one of this multi-year effort has engaged classes across two semesters and has allowed students to work with community partners on developing conservation, and water quality.

Thompson also assisted students in developing the Land Conservation Society. The group engages directly in service projects and provides ongoing support to the local land trust, North Central Conservancy Trust.

**International Studies**

Anna Haines led the College of Natural Resources (CNR) Iceland Study and Service Learning Assessment in April 2015. Accompanying Haines were Aaron Thompson, Nancy Turyk (Center for Watershed Science and Education), Aaron Kadock (Interior Architecture), and Dianne McDonnell (Northern Arizona University). Sustainable tourism and climate change adaptation are two major themes that energized the group as they explored opportunities for new International Programming to support Natural Resource students.
CLUE faculty and staff participate in a variety of scholarship activities beyond their UW-Extension work.

Anna Haines worked on four manuscripts and reviewed eight articles for a variety of peer-reviewed journals. The following book, chapter and articles were published in 2014 - 2015:


Shiba Kar worked on two manuscripts and reviewed four articles for Forest Policy and Economics and Forest Products Journal. The following peer reviewed article was published:

Aaron Thompson worked on six manuscripts. The following article was published in 2015:
He has also reviewed articles for Journal of Agricultural & Human Values and the Journal of Environmental Planning & Management.

Presentations
Thompson, Aaron. February 2015. Collaborative Planning for the Wisconsin Greater Prairie Chicken: Seeking Alternatives to Talking Past Each Other. 75th Midwest Fish & Wildlife Conference: Indianapolis, IN.
CLUE operates within the Community, Natural Resource and Economic Development (CNRED) program within the Cooperative Extension division of UW-Extension.

As a part of UW-Extension, CLUE daily represents the Wisconsin Idea through our work in counties across the state. CLUE’s extension work is organized into three areas: training, publications and applied research.

In 2015 CLUE topic areas included planning and zoning, land and water issues, sustainability, and related issues throughout the state.

Training

CLUE provides training around the state on a variety of topics.

Planning and Zoning

CLUE provides up-to-date, comprehensive training on planning and zoning that is modified to address specific local needs and interests. CLUE staff also regularly respond to land use questions from planning and zoning staff, past workshop participants, and others throughout the state.

Becky Roberts takes the lead role in providing statewide Plan Commission workshops and related education. From September 2014 to August 2015, Roberts provided nine plan commission workshops throughout the state reaching over 400 participants and 74 communities. Workshops focused on plan commission roles and responsibilities, comprehensive planning, town and county relationships in zoning and legally defensible decisions.
Lynn Markham led the development of *Zoning Board* workshops emphasizing new legislation and case law. Workshops were held at six locations throughout the state, reaching 357 participants. Many zoning board workshops include relevant, recent information about shoreland zoning, impervious surfaces and shoreland buffers. Last year, CLUE also offered one joint plan commission and zoning board workshop.

CLUE also provides planning and zoning leadership in other ways. In 2014, Haines, Markham, and Roberts partnered with Wisconsin County Code Administrators (WCCA) to develop and coordinate a four-hour Zoning Leadership Program. Initially delivered to 17 recently hired county zoning staff from 12 counties, the program covers zoning history, variances, conditional uses, and other fundamentals. Narrated PowerPoint® slides were developed and used to train additional planning and zoning staff and local officials.

**Land and Water**

Land use has an impact on Wisconsin waters, and a growing segment of CLUE’s work helps decision makers understand these connections and make informed decisions.

Lynn Markham continued to educate local officials, staff, and community members about impervious surfaces. Waterfront property owners learn about how impervious surfaces like driveways and patios impact fish, wildlife and waterfront property values.

In the past year, Markham presented information about shoreland zoning at the 2015 Wisconsin Lakes Convention, Northwest Wisconsin Lake Conference, Wisconsin County Code Administrators Conference, and the Wisconsin Towns Association Conference. She also presented shoreland zoning material to a variety of community groups, including the UW-Stevens Point Learning is ForEver program, Stevens Point Area League of Women Voters, Marquette County Lakes Association, and Big Eau Pleine Reservoir Planning Group. Additionally, Markham delivered a webinar reaching over 55 participants from 22 Wisconsin counties.

**Sustainability**

Over the years, CLUE has been regularly involved in sustainability issues and eco-municipalities. Lynn Markham delivered presentations about pesticides in drinking water and food. She spoke at the Wisconsin Association of Environmental Educators and Green and Healthy Schools Conference and to various classes and community groups.

Haines continued to co-lead the CNRED Sustainability Team.
Publications

CLUE creates a variety of publications annually to reach our audiences.

Land Use Megatrends Series

Each year CLUE releases a new publication in the Land Use Megatrends series. Using maps, data, and images, the series highlights emerging policies and trends impacting land use in Wisconsin. In Summer 2015, Haines and Roberts partnered to produce the Land Use Megatrends: Housing publication. Topics include homeownership, housing affordability, seasonal housing, impacts of an aging population, and generational preferences. Over 1,000 copies were distributed statewide.

Previous publications in the Land Use Megatrends series have addressed water, energy, agriculture, climate change, recreation, and forests.

Land Use Tracker

CLUE prepares the Land Use Tracker, a quarterly publication that includes research-based articles on emerging land use trends and topics written by CLUE and our partners, and communicates the need and value of planning in Wisconsin. Over the past year, editor Becky Roberts has assembled articles focused on local plan commissions, groundwater conflicts, the statewide parcel database, electric vehicles, wetlands, the benefit of trees in water, landowner views of forestland development, and comprehensive plans for rural communities. Contributing authors include staff from CLUE, Public Policy Forum, State Cartographer’s Office, Wisconsin Wetlands Association, East Central Wisconsin Regional Planning Commission, Martenson and Eisele, Inc., Iron County UW Extension and Civic Webware.

CLUE’s foundation publications include the Plan Commission Handbook (2012) and the Zoning Board Handbook (2006). CLUE provides electronic access to the handbooks free of charge on our website, and distributed more than 1,500 copies last year.
Shoreland

Lynn Markham coordinated a new publication, *A Second Life for Trees in Lakes: As Useful in Water as They Were on Land*. Lynn updated the original article by Michael Bozek with current fisheries research, obtained reviews, and coordinated the graphic design of this full color publication. In the first month, over 3,700 copies of this eight page publication were distributed upon request to Department of Natural Resources (DNR) staff and zoning administrators in Wisconsin.

Markham also published the 7th annual article, *Keeping Lakes in the Family: Children’s Books Help Us Share the Magic of Lakes*, which recommends forest and wetland-related books and videos for children. The article reached over 30,000 people through UW-Extension Lakes Fall 2014 newsletter and the Wisconsin County Code Administrators newsletter. She also presented these recommendations at the Wisconsin Wetland Association Conference.

Sustainability

Anna Haines co-authored, *Central Wisconsin, Preliminary Food System Assessment*, an analysis of community food systems in a four county Central Wisconsin region.

Lynn Markham regularly posts articles about community sustainability to the Central Wisconsin Sustainability Blog which has over 200 readers per month.
Applied Research

The role of research is a critical one as embedded in the Wisconsin Idea. CLUE conducts research focused on planning and zoning issues, and offers mapping and spatial analytic services.

GIS Research and Leadership

Mapping is a powerful way of illustrating land use issues. On a regular basis, GIS specialist Dan McFarlane consults with UW-Stevens Point and UW-Extension on projects and creates maps that tell the story of land use as it relates to a variety of topics. Dan works to stay up to date on evolving GIS science and technology, particularly web and mobile applications. In the past year, his projects included GIS database administration and development in support of the “Using social psychology and tailored messaging to better promote shoreland restoration on Wisconsin’s inland lakes” research project. McFarlane also contributed a variety of maps and graphics for the Housing Megatrends publication and the Regional Food System Assessment.

Land and Water

Lake planning and management relies on applied research, and CLUE conducts policy review, mapping and analysis, and social science research to assist decision-making in these activities.

CLUE is working with the Wisconsin DNR and County Land and Water Conservation Departments to develop a statewide protocol for shoreline inventory mapping and analysis. McFarlane has provided technical expertise for the shoreline guidance document and plans to assist with training professionals through conferences and on-site workshops. McFarlane also generated a statewide generalized agriculture layer using a sequence of US Geological Service Cropland data layers. The project is hosted on a web mapping application and provides resource professionals with an improved data layer for watershed and water quality modeling. The results are also being used to help explore future multi-county/area agricultural programming opportunities.
McFarlane also collaborated with UW-Stevens Point forestry faculty analyzing the scale and cost implications of seasonal timber harvest restrictions in Wisconsin.

Under an EPA grant with the Wisconsin Wetlands Association, Anna Haines and graduate student, Matt Zangl, completed the inventory of wetland policies in all of Wisconsin counties. The results and case study research were published in, *An Examination of Local Ordinances for Wetland Protection*.

Rebecca Roberts developed, and in December 2014, facilitated *A Summit on Wetlands and Watershed Planning*, bringing together over 40 professionals representing state, county, tribal, education and non-profit sectors.

Aaron Thompson continues to support efforts to enhance watershed and lake planning efforts across Wisconsin by providing training, public participation facilitation, and survey research analysis of social conditions affecting management in multiple communities across Wisconsin. In particular, Aaron led a workshop in August that attracted more than 50 water resource professionals from county governments, WDNR, and water-based non-profits on the importance of social science research to inform community capacity building that supports implementation of watershed management recommendations. Aaron also contributed directly to the planning process, supporting the development of lake management plans for the Big Eau Pleine, Lake Wausau, and other water bodies throughout central and western Wisconsin.

**Conservation Planning**

Thompson is working on several conservation projects, including assessing central Wisconsin farmers’ attitudes towards grassland conservation efforts, assessing the future directions for strategic conservation planning and training of land trust professionals including the preparation of an accompanying report, and preparing the final report of a northern Wisconsin landowner survey. Service-learning efforts and outreach to the Wisconsin Land Trust community, in particular, explore the use of GIS applications for strategic conservation planning.
Service is an expectation of UW-Stevens Point and UW-Extension, and allows staff to share expertise and participate in governance activities. The role of service for CLUE staff is a significant duty in terms of effort and time.

**UW-Extension**
- Climate Change Team (Kar)
- CNRED Annual Retreat Planning Committee, 2015 (Haines)
- Sustainability Team (Haines, chair; Markham)
- Systemwide Extension Council (Haines)

**College of Natural Resources**
- Academic Advising, approximately 20 students per faculty member (Haines, Thompson, Kar)
- CNR Student Research Symposium (Roberts, judge)
- Graduate Committee (Thompson, HDNRM representative)
- Internship Committee (Haines)
- Land Conservation Society (Thompson, faculty advisor)
- Students for Sustainable Communities (Thompson, faculty advisor)
- UW Extension Lakes Convention Planning Committee (McFarlane)
- Wisconsin Center for Environmental Education Director Search (Haines, chair)

**UW-Stevens Point**
- Commencement Student Speaker Selection Committee (Kar)
- Diversity in Natural Resources, Brown Bag Series (Kar, organizer)
- Selection Committee for Annual Distinguished Alumnus (Markham)
- Sustainability Committee (Haines)

**State and National**
- American Planning Association (APA) - Wisconsin Chapter (Roberts, Executive Committee)
- APA-Minnesota Chapter Awards, (Roberts, judge)
- Northwoods Research Summit Planning Committee (Haines)
- Wisconsin Chapter, eXtension Land Use Community of Practice (Haines, leader; Roberts)
- Wisconsin Wetlands Association, Land Use and Wetlands Advisory Group (Roberts)
- Wisconsin Coastal Management Program (Roberts, grant reviewer)

**Community**
- Central Rivers Farmshed Local Food School Fundraiser (Markham)
- City of Stevens Point Plan Commission (Haines)
- Green Team at Frame Presbyterian Church (Markham)
- Incredible Edibles Investment Club (Haines, Markham)
- Jensen Center/Amherst Youth Soccer (Roberts)
- McKinley Center Elementary School, Junior Achievement Program (Kar)
- North Central Conservancy Trust (Thompson, President)
- Shama, Inc. (Kar)
- Stevens Point Area League of Women Voters (Markham)
- Tomorrow River Initiative (Roberts)
Notes

The Center for Land Use Education annual report includes activities from September 2014 through August 2015. This report is available on the CLUE website on the About Us page: www.uwsp.edu/cnr-ap/clue/pages/about.aspx. Front cover photos are courtesy of (left to right) to CLUE, Wisconsin Farm Bureau Federation, and CLUE. Back cover photos are courtesy of (left to right) CLUE, KT Element, and CLUE.

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