

Strategic Plan for the Proposed

*Pine Lake Institute for Environmental and  
Sustainability Studies*

At Hartwick College

Prepared by:  
Dr. Patrick Drohan  
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*Executive summary*

The Pine Lake Institute for Environmental and Sustainability Studies will strive to educate the Hartwick Community and citizens of Upper Susquehanna/Delaware River region in how to practice and live sustainably. The Institute will consist of The Pine Lake Environmental Campus (summer programs academy, student living learning community, and recreation component), a center for sustainable living, and a center for applied and basic research in watershed science focusing on the Upper Susquehanna and Delaware watersheds. The Institute will be self funded via programming fees and external grants. Staff will be comprised of those who work at Hartwick College and beyond. The Institute will help to guide research, programming and workshops, and educational efforts focused on environmental and sustainability studies.

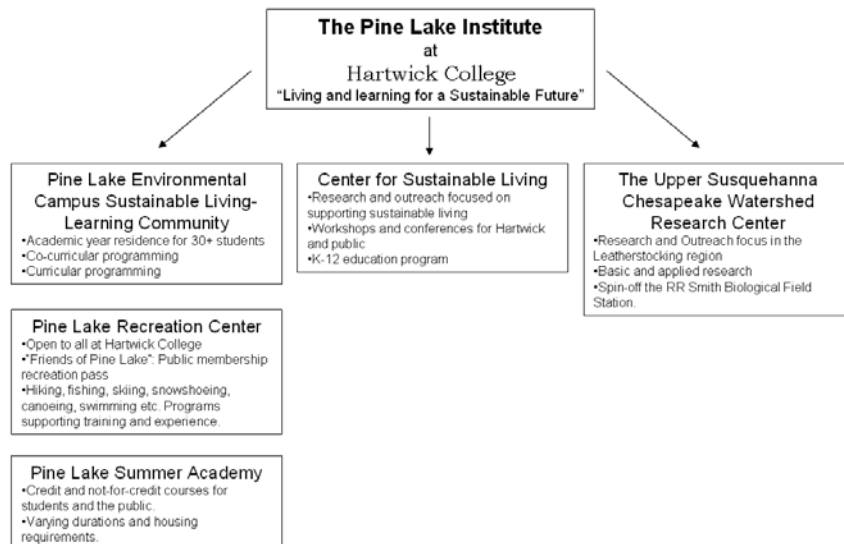
*Mission Statement*

The mission of Hartwick College’s Pine Lake Institute (PLI) for Environmental and Sustainability Studies is to:

- focus the collective energy, knowledge, and efforts of the college in achieving a sustainable Upper Susquehanna/Delaware River region;
- promote outreach and research opportunities focused on the environment and sustainability in the Upper Susquehanna/Delaware River region of NY that help further the liberal arts education goals of the college;
- enhance the College’s role in promoting a sustainable/environmental education curriculum across disciplines, in the community, and through the involvement of local, state, federal, and international stakeholders.

Promoting sustainable education, research and outreach in a setting reflecting environmental stewardship will integrate lessons and experiences among all at the college and in the community. Through education and practice, we will achieve a more responsible and sustainable land and community ethic and will help enable our students to become the leaders of tomorrow.

*Institute Structure*



- I. Pine Lake Environmental Campus (see 2006 Pine Lake Review for details)
  1. Pine Lake Recreation Center
    - Public Membership – Friends of Pine Lake
      - i. Public membership in the Friends of Pine Lake is key to developing a volunteer base that can support programming and help raise funds.
    - Hartwick Community access
  2. Pine Lake Environmental Campus Sustainable Living Learning Community
    - Student residence program during the academic year.
    - Greater Campus involvement (courses, programs, activities)
  3. Pine Lake Summer Academy
    - Credit and not-for credit course/programs
  
- II. Center for Sustainable Living (Virtual entity with no facilities)
  1. Public sustainability initiatives
  2. White papers
  3. Public lecture series
  4. Curriculum for campus and K-12 in Delaware and Otsego County
  5. Outreach Projects
    - e.g. Delaware county oral history project
    - Tours of Pine Lake property and sustainable living community
    - Professional development programs and teacher training programs
    - Weekend workshops for K-12 and adults on sustainability in cooperation with the education department.
  1. Campus sustainability initiatives
    - Composting
    - Landscaping
    - Dining
    - Recycling
    - Energy
    - Buildings and Planning
  
- III. The Upper Susquehanna-Chesapeake Watershed Research Center
  1. Extension of the Pine Lake R.R. Smith Field Station and faculty research.
  2. Supported via Biology and Geology

*Vision and Need for the Institute*

PLI will work to integrate the efforts of students, educators, researchers, community members and public policy officials to achieve a sustainable Upper Sussquehanna/Delaware River region. Sustainability is herein defined according to the 1987 United Nations Brundtland Commission report as meeting the needs of the present without compromising the ability of future generations to meet their own needs.

The Upper Sussquehanna/Delaware River region has a long history of cyclic resource use and allocation that has had parallel effects on community development; as resources disappear, economies suffer. As is common in communities that derive much of their

wealth from natural resource development and industry related to it, economic success is frequently not focused locally, but rather directed outside of the local economy. Therefore, as dollars disappear with the natural resources, a complicated decision-making process emerges over time to support economic growth that leads to short-term economic success at the cost of unsustainable long-term community disruption (e.g., suburban sprawl; lost core downtown community businesses; over-reliance on automobiles; dependence on nonrenewable energy and non-local food; and dependence on personally destructive habits that lead to family and community disruption). Momentum across the United States is now directed at correcting this self-destructive path by educating society on how to achieve sustainability; among the leaders in this new movement are institutions of higher education.

The Upper Sussquehanna/Delaware River region is presently involved in community planning to direct future economic growth by possibly supporting: a second cycle of natural resource extraction; new light industrial expansion; expanded tourism attractions; expansion of box retailers; and/or new high technology information transfer industry. In order to best address the complexity of decisions communities face, and to implement sound policy leading to a sustainable region, a primary focus must be the future community leaders. However, the economy of the region could derail efforts early on to train these leaders; many children in the region attend rural, low-income school districts and have parents who have only a high school education. Compounding this is a future local job market for area children, which does not encourage the brightest and best students to remain in the community.

Hartwick College is well situated, through the development of PLI, to become a leader in sustainability for the region by: (i) training the leaders of tomorrow (Hartwick students and regional citizens) to guide their communities toward sustainability; (ii) serving as a clearinghouse for information on how to achieve sustainability; (iii) conducting research that supports the development of sustainability in the region; (iv) training people in the community in skills to help achieve sustainability; and (v) investing in education/training that supports the children of the region. By focusing on a small regional area, PLI can specialize and succeed in serving a distinct clientele.

PLI will encourage the interdisciplinary study currently underway at Hartwick College and further the liberal arts mission of the college by helping to broaden efforts outward into the community. The research and learning activities provided for all ages in the region will help to foster an atmosphere of collaboration and success for research, learning, and practice in sustainability.

Currently a diverse array of activities supporting sustainability are occurring at the College in a somewhat dispersed manner. PLI can help to integrate activity and focus campus wide research and learning to help better the students, staff, faculty, and community.

### *The Pine Lake Environmental Campus Sustainability Model*

PLI will strive to set the example for the College and community as to how to live sustainably. Currently, the office for the Institute offsets all CO<sub>2</sub> emissions by investment in renewable energy certificates. This offset has been extended to the entire Pine Lake Environmental Campus, the resident's office and the campus bell tower over Yager. Hartwick College's Pine Lake Environmental Campus residents are committed to reducing their footprint on the Earth. During its 36 year history, much work has been completed to help limit or eliminate the environmental and climate impact from this campus residential community; it is one of the rarest college residences in the world. Thirty students live at the Environmental Campus (7 miles from main campus) in cabins nestled in a northern hardwood forest or in the main Robertson Lodge. Students minimize car use when living at the property by parking in a centralized location and by carpooling together in the Pine Lake Shuttle. The College provides the shuttle and a student resident coordinates the shuttle schedule.

Student cabins, and the main Robertson Lodge in part, are heated by Quadra-fire wood pellet stoves, which have the majority of their wood fuel coming from a local furniture maker 20 miles away in Stamford, NY (Catskill Craftsman). Besides the entire Environmental Campus being carbon neutral via the purchase of Green-e renewable energy certificates, Robertson Lodge has 48, 208W solar panels on the roof that run off of a net metering system (installed by ETM Solar Works). Net metering systems feed our electrical load in synchrony with utility power; no batteries are used. When there is more solar electricity (for example at midday) than the building needs, the utility meter turns backwards and we receive credit at the retail rate. When the sun is not out we use the credit. All buildings also use compact fluorescent bulbs. Water for the property comes from two wells on property in the Pine Lake Watershed and low flow showerheads are installed in all bathrooms; wastewater on the property is treated via septic tanks. Furniture in some of the buildings is from Nikea furniture (local wood and manufacture) in nearby Richfield Springs, NY and the remaining is recycled from the main campus. Students work together on a community organic garden behind Robertson Lodge, and plant vegetables and herbs for their own use (or next year's residents). Other food is bought in part from local farms/businesses (see our links).

The Environmental Campus has been featured in regional magazines, radio shows and newspapers, nationally with the Association for the Advancement of Sustainability in Higher Education, and via visits from other schools and international scholars such as Vandana Shiva and Winona LaDuke. The project has now influenced life on main campus via the signing of the Talloires agreement in 2004 and the purchase of renewable energy certificates for part of the main campus's power. In addition the College is in the process of constructing a LEED certified academic building.

To foster cooperation and high quality activities, PLI will strive to form partnerships with regional, national, and international like-minded organizations that embody the ideals of the Pine Lake Environmental Campus. To date partnerships exist with the Catskill Institute for the Environment and The Association for the Advancement of Sustainability in Higher Education.

## **Institute Goals**

### **1. *Research***

Facilitate efforts across campus to coordinate focused research on issues of sustainability. PLI not only facilitates and coordinates research efforts centered on sustainability across campus, but staff also conduct research supporting it's mission. PLI will work to communicate results of this research through peer-reviewed literature and presentations/workshops with the public.

1. Support research efforts within campus and beyond that support the Institute's goals.

#### **I. 5-year goals**

- Develop procedures, networks, and strategies for coordinated research on sustainability within campus and with the community.
- Offer services to help foster collaboration between current faculty, staff, and students and visiting/external researchers.
- Organize and arrange permitting procedures for research on Hartwick's main campus and Pine Lake Environmental Campus to track long-term research and protect against projects that might inadvertently reuse a previously disturbed research area.
- Encourage research partnerships with other organizations (public/private).

#### **II. Funding**

- Research funded in part through the Office of Academic Affairs internal awards program (already existing) and in large through external grants received via the Institute. A 10% overhead for the Institute will be charged on top of College overhead.

#### **III. Results**

- By year five, publish three peer-reviewed articles related to sustainability and obtain three externally funded grants.
- By year five complete two single-season research projects
- By year five complete one multi-year research project.

### **2. *Learning***

PLI will provide participation opportunities to students, staff, and faculty based on institute research and outreach projects in the region. These opportunities will encompass nontraditional co-curricular activities, living-learning community experiences, campus service, and traditional workshop models.

1. Host for-credit courses for the campus via a campus wide sustainability metadiscipline (see appendix 1).

#### **I. 5-year goals**

- Develop structure for the Institute to offer it's own courses independent of departments. These will consist of traditional academic courses and courses structured like continuing education classes.

- Host above and other departmental for-credit and not-for-credit courses for campus members and the public. These would in part be run via the Institute and/or in collaboration with outside entities. Public not-for-credit courses would at times be offered through a certificate program (instead of the traditional College requirement of 40 hours of student experience equaling 1 credit, a certificate program would have 1 credit be fulfilled by 20 hours of student experience).
- Begin pilot student fellow and metadiscipline program.
  - Students participating in the program would be acknowledged as *student fellows*
  - To receive a certificate upon graduation, students must:
    - a. complete all 4 metadiscipline courses (see model structure in appendix).
    - b. Attend 3 lecture/program events a semester that have been prior approved as counting towards the certificate. These do not need to be at Hartwick.
    - c. Conduct 15 hours of service a year that supports the mission of the Institute. Service must be prior improved by a course instructor, the Institute Director, or appointed Institute staff person.
- Advertise courses available to non-Hartwick community members regionally (and nationally, where appropriate).
- Develop external Web site for information dissemination.
- Develop advisory board of community members.
- Host summer field camp for 4<sup>th</sup> to 8th graders centered on environmental/sustainability studies in conjunction with the Education Department.

## II. Funding

- Charge a pro-rated fee structure for non-Hartwick member courses based on income (using a W2 form).
- If metadiscipline courses are offered for credit through Hartwick, the Institute would receive a percentage of these funds.

## III. Results

- At least 6 annual courses by year 5.
- 50 students enrolled (across all 4 academic years) in campus pilot metadiscipline by year 5.

## 2. Host conferences

### I. Five year goals

- Host at least one scientific meeting on sustainability where results are published in a proceedings review.
- Host at least 3 community focused workshops on aspects of sustainability
- Host 5 field workshops on various aspects of sustainability

### II. Funding

- Grants and fees charged
- III. Results
- Two conferences are held in a 5 year period.
3. Develop cross-college cooperative relationships
- I. Five year goals
- Develop and implement memorandums of understanding and formal relationships
  - Evaluate Hartwick Departments to see how these relationships could serve them
  - Work towards cross campus exchanges supporting sustainability
- II. Funding
- Institute general fund
- III. Results
- MOU's or other relationships developed with 50% of peer institutions in 5 years.
  - Cross college winter or summer J-Term course on sustainability by year 5.
4. Foster minority participation and community interaction
- I. Five year goals
- Pursue requests for proposals that support underrepresented groups
  - Work in conjunction with the pluralism program and beyond Boundaries
  - Seek outside expertise to help jump-start the program
  - Develop campus mentors
- II. Funding
- External grants
- III. Results
- 10% of participants in workshops and courses will be from underrepresented groups.
5. Foster K-12 teacher training
- I. Five year goals
- Develop annual series of summer one to two-week programs that assists teachers in maintaining certification or adding to their accreditation
  - Develop collaborations with teachers and school districts
  - Attain external funding to do this
- II. Funding
- External grants and/or school district grants
- III. Results
- At a minimum, one course per summer will be offered

## Administration and Facilities

### 1. Administration

The daily activities of the Institute will fall under the direction of the Institute Director. In order to promote the greater benefit of the Institute to the Upper Susquehanna/Delaware River region, the Institute will be guided by an Independent advisory board comprised of invited appointees from the region the Institute serves. This board will consist of 5 members and terms on the board will be limited to one year.

1. Create Institute's Administrative structure
  - I. Five year goals
    - Set-up board oversight, financial activities, and staff decisions.
  - II. Funding
    - None required
  - III. Results
    - Strategic planning goals are met

### 2. Staffing

Institute staff will be comprised of affiliated and salaried members

1. Two categories of staff will be work for/with the Institute: salaried and affiliated.
  - I. *Salaried* staff includes those directly under the budget of the Institute (Pine lake Environmental Campus Staff and the Institute Director).
  - II. *Affiliated* staff includes those who are faculty or staff at Hartwick, or elsewhere, who: teach for the Institute; manage outreach projects and/or conduct research; and develop/run workshops with the Institute.
    - Non-Hartwick affiliated staff must be approved by the Director and advisory board, hold an MA or MS in their field of interest or equivalent experience as approved by the advisory board.
    - Hartwick affiliated staff can be from any department (academic or non-academic). For faculty or staff to affiliate, they must agree to support institute activities, be involved in a least one research project/community outreach project a year, publish a minimum of one paper every two years, present once a year on said research/project at a regional or national meeting, be available for bi-monthly Institute meetings, be available for an annual Advisory Board meeting, and conduct one community workshop a year on sustainability. If a faculty or staff member from Hartwick or beyond has project funding through the Institute and is also conducting research with the Institute, they will be noted as an *Institute Fellow*.
2. Future expansion will be limited to funding that can support new staff and needs that fulfill the Institute's mission.

- I. Five year goals
  - Attain 10 cooperative faculty
  - No new hires as of this 5 year budget cycle. If funding were found, new hires would follow that of the 2006 Pine Lake Review.
- II. Funding
  - Institute general fund would support any if hiring took place
- III. Results
  - I. No new hires anticipated unless external funding allowed. New hires would follow that of the 2006 Pine Lake Review.

### **3. Marketing**

Develop public relations structure in conjunction with the campus office of communications to publicize achievements of the Institute.

- 1. Outreach efforts will be supported by an Institute WWW site, newsletter, and public membership.
  - I. Five year goals
    - Maintain up to date WWW site
    - Develop email newsletter
    - Develop “Friends of Pine Lake” membership brochure
  - II. Funding
    - Institute general fund
  - III. Results
    - Development of effective advertising and marketing that strengthens awareness of the institute and it’s goals.
    - Increase annually of 5% in membership in the Friends of Pine Lake.

### **4. Funding**

Funding for the Institute is independent of the College. At present two major sources of funding exist to support a. The Pine Lake Environmental Campus, which will be fiscally independent of the College beginning 2006/2007; and b. the Campus Sustainability Initiatives/Academic Theme, which is receiving funding from the Academic Theme. The business plan for the institute is essentially that of the Pine Lake Environmental Campus at this time (including the new funds received through the Academic theme). Funds via the Academic these will be used to continue to provide the same high quality annual programming offered on topics related to sustainability. These will be expanding beginning 2006/2007 with the new Climate Change theme. Institute expansion will not occur without independent funding.

If sufficient funds exist in the future, a funding mechanism will be created to support Institute related projects and research. Proposals for such work will be reviewed by a committee external to the College (proposals will initially be reviewed by the advisory board).

Those developing grants through the Institute for will receive 5% of the 10% overhead the Institute requires as part of external grants. All College policies concerning external grants, buyouts for teaching and funds for salaries apply.

If sufficient funds exist at some point in time, a faculty/staff support fund will be created to pay travel expenses for affiliated members who are invited to present work they have conducted with the Institute. This dollar amount will be limited in the first 5 years to \$500.

1. Attaining funding independent of the College will ensure success in achieving the stated mission of the Institute. Funding will be secured by Hartwick and public course fees, external grants, private membership in the *Friends of Pine Lake*, and private donations.

- I. Five year goals

- Funding strategies for Institute goals beyond that of the Environmental Campus and Academic Theme will center on external and cooperative funding via regional/national awarding entities.
- Develop materials necessary for fundraising and endowment generation.
- Develop programs or opportunities geared at individuals who might be willing to take advantage of a giving or naming opportunity. Example opportunities include emails, volunteer days, research vacations, workshops, awards dinner for annual sustainability award.
- Investigate interaction between campus capital campaigns and PLI campaign.
- Involve the PLI board in fundraising

- II. Funding

- Institute general fund and external grants

- III. Results

- Submission of 5 external grants in 5 years

## **Appendix 1**

A metadiscipline is an effective, unique alternative to a new major or minor in sustainability. In essence, sustainability would become the cornerstone of Hartwick's curriculum for those who chose to partake of the metadiscipline. The metadiscipline would be integrative of the community (local, regional, state, national, and international) via the Pine Lake Institute and its research and outreach.

A metadiscipline fosters community, creates tradition, facilitates purpose in a student's time at Hartwick, and offers an alternative experience; all which aid retention.

The following is a proposed model for a *pilot* metadiscipline:

### **Structure**

1. To fulfill the metadiscipline, Hartwick students in the metadiscipline take 4 courses over 4 years: one each year. The First-Year course for the metadiscipline could be an alternative to the "First Year Seminar".
2. Each year, a student would take seminar in one semester and conduct service in a second; OR in one semester, both seminar and service could be conducted (lighter course load, but perhaps less effective). Seminar consists of readings, workshops and guest speakers.
3. The service component can be replaced by J-Term or other equivalent service experience.
4. One faculty/staff member coordinates each year's courses for each class year (freshman, sophomore, junior, senior).
5. New courses would be administered by the Pine Lake Institute (relieves burden off of faculty).
6. Faculty/staff train upper classman to teach lower classmen. Lower classman are selected based on interest or talent in the year of participation to become leaders for the next year.
7. Classes meet once a week for one hour during the seminar semester and for three hours in the service semester; if only taught once a year than class meets for three hours.
8. Projects build on skills centered on sustainability and become more outward looking from year to year, moving through themes of sustainability. Projects can, over time, support all departments on campus.
9. Any year's theme could support a faculty member's research project. For example, a professor is conducting research on public opinion concerning a specific topic...seniors could help in the research by conducting surveys, facilitating forums with the public etc.

### **Four Theme Years**

**First year students: "Our Food and Health":** explores the sustainability of our lives

- a. *service activity*: students run campus composting operation and/or;
- b. help organize local food buying,

- c. help grow local food and garden items like campus hanging baskets
- d. help acquire guest speakers

**Sophomore students: “Our Campus Environment”:** explores environmental and sustainability issues at Hartwick specifically

- a. *service activity*: maintain green/native landscaping of perennial beds and/or;
- b. conduct environmental audits of campus components
- c. examine quality of life issues
- a. help line-up guest speakers

**Junior students: “Our Energy”:** explores energy usage and alternative energy

- a. *service activity*: students maintain energy monitoring/savings program, track energy usage, investigate the implementation of green energy and/or;
- b. students may help build a campus green structure
- c. help acquire guest speakers on annual academic theme

**Senior students: “Our College and Community”:** explores building sustainable communities

- a. *service activity*: students conduct campus and community initiatives focused on building and enhancing community and local government and/or;
- b. help with the campus master plan experience
- c. conduct pertinent surveys of the College and Community population
- d. help acquire guest speakers
- e. choose annual winner of Campus Sustainability Award (eligible candidates: student, staff, faculty, alumni, or other)