On November 12, 2004, 70 faculty, students, and staff convened at an Environmental Summit to discuss potential multidisciplinary, university-wide environmental initiatives that Tulane could undertake over the next ten years. This is a summary of Summit discussions.

This report summarizes the presentations and plenary discussions; and outlines the initial proposals of key areas of environmental research that could become defining foci for Tulane nationally. A copy of the minutes from this November 12 meeting is available upon request (hkitzman@tulane.edu).

Background:

In June, President Scott Cowen asked Professor John McLachlan, Director of the Center for Bioenvironmental Research (CBR), to convene the Summit. In preparation, environmental faculty leaders from each school of the university were asked to serve on a Summit Steering Committee, along with student representatives (Steering Committee list attached). With the committee’s input, a university-wide list of environmental faculty, key staff, and student leaders was assembled. This served as the Summit invitation list.

Two briefing documents were prepared in advance of the summit – Tulane University: An Inventory of Environmental Programs, 2004-2005, and a Directory of Environmental Summit Registrants, including descriptions of their environmental projects, research, and publications. These documents are available on the Summit website at http://green.Tulane.edu.

Opening Plenary:

- CBR Director John McLachlan: outline of Summit purpose and focus - emphasize importance of interdisciplinary efforts and encourage active dialogue on university-wide environmental work
- Newcomb junior Brie Darragh: student’s perspective on the state of environmental affairs at Tulane
  - successes - excellence in environmental course offerings, plentiful bike racks on campus, availability of recycling bins, campus use of recyclable containers
  - areas for improvement – desire for increased service learning, field-work, study abroad, and internship opportunities; activism lacking a voice on campus; recycling efforts less than optimal in execution
- President Scott Cowen: provide framework for guided dialogue
  - 3 components of the Tulane mission: research, education, and community engagement; while all three are integral to the University, this summit will focus on research
  - In past 6 years, Tulane’s competitive R&D awards grown from $68m to $135m; challenge is to reach $200m in the next 4 years
  - To achieve this, need large-scale interdisciplinary programs - Tulane is seeking candidates that in the next few years can be developed into research foci or pillars of differentiation (see diagram); significant institutional investments can be made in these areas

FOCI
1. compete continually for competitive grants
2. defining foci for the institution
3. potential to become 1 of top 5 in nation

PILLARS OF DIFFERENTIATION
1. compete continually for competitive grants
2. distinguish Tulane from other institutions
3. dominant regional player

BASE
1. strong academic departments
2. University commitment to 160 new faculty in next 4 years
General Discussion:

Tulane environmental programs have potential to be pillar or focus

- Much of infrastructure, faculty, and research capability in place
- Environmental issues quintessentially interdisciplinary; with support of administration, interdisciplinary relationships should be strengthened and projects explored
- Sciences of river and coastal environments important as national resource; prototype for developing countries; Tulane should be major player in coastal restoration
- Environment & Health is area where Tulane can bring strength
- Need more interaction with social scientists and engineers; environmental law program available as a resource to add policy component; Business School can provide additional support
- Transdisciplinary emphasis brings other partners, business or other government entities outside institution
- Questions over whether to think thematically or geographically (e.g. focus on Latin America, New Orleans) as discussions move forward
- Once areas are identified, university needs to focus resources

In order to realize potential, interdisciplinary research & teaching need to be fostered with special attention to:

- Tenure-friendly promotion practices for interdisciplinary faculty (ex – reference letters)
- School/departmental encouragement of interdisciplinary teaching
- More effective institutional procedures encouraging departmental linkages (ex - grant routing)
- Shared funding mechanism related to interdisciplinary research (ex – indirect costs shared)

Breakout Groups:

Five facilitated groups of students, faculty, and staff discussed in detail research themes and barriers to interdisciplinary work. From these discussions and breakout group reports, seven major research themes emerged (each of the following themes was emphasized by at least two breakout groups). Institutional support mechanisms necessary for interdisciplinary success including tenure-friendly practices for interdisciplinary faculty and enhanced institutional/administrative communication to promote interdisciplinary activity were repeatedly addressed by participants.

- River & Wetlands
  
  **Themes:** coastal restoration, rivers, coasts and wetlands; multidisciplinary interaction of human/natural systems with RiverSphere as focus; energy efficiency & novel sources applied to aquaculture activities; underwater robotics linked to mediating coastal erosion & monitoring success of coastal restoration; use of remote technologies to monitor wildlife; enhancement & re-development of LA commercial crawfish industry, catfish farming, & Gulf/Lake fisheries; conservation value of aquaculture habitats; LA cultural connections to environment & biodiversity effects; link tourism to fisheries & aquaculture; link aquaculture to local climate, disease issues (mosquito-borne) & quality of life; history & culture of the River; prototype for developing countries

- Urban Environment
  
  **Themes:** sustainable urban design; identify env-related health issues to engage in solutions in our own backyard; uniqueness of New Orleans in terms of health, children, society/culture, physical environment, infrastructure/conservation; archaeology & hydrography (mapping); environmental education of community; env effects of urbanization; arts & sciences dimension

- Environment & Health
  
  **Themes:** impact of environment on health disparities; women and children’s health; a focus on local problems; translational research (“bench to bedside” and “bench to bayou”); heavy metals, gene therapy,
lung biology, obesity, nutrition, population studies; human health risk assessment; disease biomonitoring; infrastructure improvements; exposure assessment

- **Renewable Energy**
  Themes: initiated with campus-wide assessment of best opportunities & use results to write funding proposals; Tulane could purchase renewable energy credits; Tulane-River turbines demonstration at RiverSphere

- **Environmental Security & Disaster Preparedness**
  Themes: environmental disaster and global risk; natural disasters and mitigation; environmental justice & risk communication; government trust, natural disasters, terrorism, crime; human-made hazards & mitigations; risk communication; competition of natural resources; conflict resolution; corporate health issues

- **Economic & Environmental Sustainability in Industry**
  Themes: resource & waste management, ed/outreach clearinghouse to help businesses work with Tulane; economic cost/benefit for waste reduction; policy, command & control regulation; technological improvements for waste reduction/reuse; resource utilization/conservation

- **Climate Change**
  Themes: geographical connection with Latin America; climate change in tropics; loss of biodiversity; maintaining diverse ecosystems; integration of agriculture; wildlife monitoring; emerging diseases

**Closing Plenary:**

After review of key ideas, President Cowen responded and led discussion
- President Cowen concurred that the research themes identified were appropriate for further consideration
- President Cowen stated that in addition to Environment, other research areas at Tulane are potential candidates (e.g. gene therapy) for similar discussion and review: environmental group is first to have such a dialogue with President; each area will be given opportunity to have same iterative process
- By July 1, 2005, groups should be prepared to give status on potential to move forward

**Next Steps:**
- John McLachlan will continue as convener of people and ideas in environmental area
- Laura Levy, Associate Sr VP for Research, will monitor overlap with other university groups, which may occur with such large-scale projects, and will receive recommendations from the Environmental Steering Committee for possible inclusion in her overall plans
- Yvette Jones will designate planning person to participate in process
- Meetings of the Environmental Summit Steering Committee will be held to refine Summit findings
- Recommendations from faculty who could not attend the Summit will be solicited for the overall Environmental Research Recommendations
- Website for environmental programs will be created
- Environmental Faculty registry and list-serve will be generated
- Second summit should be planned
- Recommendations for environmental pillars of differentiation or foci will be made
Environmental Summit Steering Committee:

Barbara Beckman  Pharmacology
Joan Bennett  Environmental Studies and CMB
Arnold Brody  Pathology
Eric Dannenmaier  Environmental Law Institute
Brie Darragh  Green Club
Elizabeth Davey  Environmental Affairs/CBR
Aaron Fritts  Environment & Medicine Committee
Oliver Houck  Law School
John Klingman  Architecture
John McLachlan  CBR
Doug Meffert  CBR
Christine Murphey  Environmental Studies
Lindsay O'Connor  Green Club
Tom Sherry  Ecology & Evolutionary Biology
Laura Steinberg  Civil & Environmental Engineering
Martha Sullivan  Office of the Senior VP External Affairs
LuAnn White  Environmental Health Sciences