I. INTRODUCTION

The Ozarks Environmental and Water Resources Institute (OEWRI) was established in January 2004 by the MSU Board of Governors and the first director was hired in March 2005 (Pavlowsky). OEWRI’s mission is to improve the scientific understanding of environmental problems involving water resource quantity, quality, and distribution in Ozark watersheds. It serves its mission by providing a hub for collaborative research projects in the areas of water and sediment quality, hydrology, environmental geology, and land use change. The scope of inquiry is at the interface of the water cycle, environment, and society at or near the watershed surface involving the physical and biological aspects of river, lake, soil, and karst systems. Additional information about OEWRI can be found at the following website: [http://www.oewri.missouristate.edu/](http://www.oewri.missouristate.edu/).

OEWRI staffing includes the following:

1) Robert Pavlowsky, PhD., Director, half-time load
2) Marc Owen, M.S., Project Supervisor, Soil Quality and Field Monitoring
3) Heather Hoggard, M.S., Project Supervisor, Water Quality and Laboratory Director
4) Derek Martin, M.S., Research Specialist, Geospatial Technology and Gap Project
5) Deana Gibson, secretary and project accounts (shared with Geography, Geology, and Planning);

OEWRI is housed in Temple Hall as follows:

1) Director’s office- T321;
2) Staff offices- T326 and T343;
3) Nutrient laboratory- T470 (shared with Dr. Richard Biagioni in Chemistry);
4) Metals/ICP-AES laboratory-T437 (shared with Chemistry);
5) Caves and Karst laboratory T329 (shared with Dr. Douglas Gouzie in Geography, Geology, and Planning);
6) Microbiology laboratory- T239 (shared with Dr. John Steiert in Biology); 
7) Geomorphology Laboratory- T125 (shared with Dr. Robert Pavlowsky in Geography, 
Geology, and Planning); and 
8) Sample Preparation Laboratory- T129 (shared with Geography, Geology, and Planning).

Presently, OEWRI is involved in three parallel running activities that are directly related to its 
research mission: (i) center start-up; (ii) present project activities; and (iii) future project 
development. Start-up involves the hiring and training of staff and student workers, renovation 
of offices and laboratory space, acquisition of outdoors areas for field equipment, meetings with 
administrators and sales representatives, purchase and fitting of instrumentation for laboratories, 
researching and acquisition of supplies to support the development of standard methods for use 
in environmental monitoring and research, developing a collaborative faculty research base at 
MSU, and organizing advisory committees.

Present project activities involve the planning, implementation, and completion of externally 
funded projects that were on-going at the time of OEWRI establishment or awarded since then. 
Active project activities involve the planning of the project, organization of human and supply 
resources, meetings with sponsors and collaborators, coordination of field logistics, training of 
staff and students, quality assurance/quality control procedures, analytical instrumentation 
operation and maintenance, data collection and management, data analysis, and report writing. 
Future project development involves looking for new opportunities for new funded projects in 
the Ozarks and beyond. Time and effort is spent on meetings with potential sponsors and 
collaborators, grant proposal writing and submission, environmental networking, and innovative 
application of OEWRI resources to meet the needs of project plans.

Beyond supporting the direct activities of the institute, significant amount of time and effort is 
used to support the university’s mission in public affairs. For OEWRI, public affairs activities in 
the science and environment theme usually include: (i) speaking engagements to talk about the 
general aspects of environmental problems and solutions to watershed stakeholders; (ii) technical 
assistance to various agencies, not-for-profit groups, and citizen groups; (iii) outreach of 
environmental knowledge and technical training to MSU students and faculty; and (iv) public 
assistance involving inquiries relating to environmental issues in the Ozarks.

This report presents the activities of OEWRI for calendar year 2006. In addition, since this is the 
first annual report submitted by the institute, information on its activities during the calendar 
years of 2004 and 2005 will also be included where appropriate.

II. ACADEMIC PROGRAMS

Undergraduate and Graduate Technical Assistance

OEWRI staff are a resource for undergraduate and graduate students in the department of 
Geography, Geology, and Planning. Since staff offices are located on the third floor among the 
classrooms and faculty offices of the Department of Geography, Geology, and Planning, it is 
only reasonable to expect that OEWRI supports the curriculum and teaching activities through 
technical assistance, research methodologies, and environmental database access.
Undergraduate Workers
OEWRI presently employs six undergraduate students at $7/hour to help with laboratory analyses and field work. Their names and majors are:

Water Analysis
Robert Powers, Chemistry Education
Kristin Clegg, Biology

Soil Analysis
Keven Mckee, Chemistry Education
Sarah Bunton, Agriculture

Field Surveys
Amanda Williams, Geography
Gill Gones, Planning

Graduate Assistantships
OEWRI projects provided graduate assistantships for 12 students in two programs (Biology and Geospatial Science) in 2006 (Table 1). Twelve graduate assistantships were provided in 2004 and 16 in 2005 for students within four graduate programs (Biology, Chemistry, Geospatial Science, and Natural and Applied Sciences). A list of the students and their program follows:

Graduate Theses
Thesis production for OEWRI projects trends as 1 for 2004, 6 for 2005, and 5 for 2006 and include graduated students in four programs (Biology, Chemistry, Geospatial Science, and Natural and Applied Sciences) (Table 2).

III. RESEARCH AND SCHOLARSHIP

Publications
OEWRI projects produced two published peer-reviewed journal articles in 2006, with 3 in 2004 and 2 in 2005 (Table 3).

Presentations
OEWRI projects produced 7 presentations in 2004, 20 in 2005, and 34 in 2006 (Table 4).

Funded Research
OEWRI principal investigators received 25 externally-funded grants totaling over $1,255,000 for the three year period from 2004 to 2006 (Table 5). This breaks down to 4 projects for $110,000 for 2004, 16 projects at $400,000 for 2005, and 9 projects at $745,000 for 2006. The 2006 total includes a $496,000 grant from the USEPA to use for start-up funding. Four OEWRI grant proposals were denied during the same period.

Collaborations and Partnerships
One of the goals for OEWRI is to develop and sustain partnerships across a wide range of environmental interests in the Ozarks and beyond through communication, resource sharing, and projects. OEWRI has partnered or collaborated with 10 government agencies, 5 watershed
groups, 4 universities, and 2 private firms (Table 6). In terms of on-campus collaboration, OEWRI has worked with 14 faculty from four departments and with three other MSU centers including the Center for Resource Planning and Management, Center for Archeological Research, and Bull Shoals Field Station (Table 6).

**Research Promotion**
One of the main goals of OEWRI is to promote and initiate cooperative research projects in water and sediment quality. Three examples of promotion efforts by OEWRI in 2006 are described below:

1) Incentive grant with biology- OEWRI submitted a successful research incentive grant with John Steiert (Microbiology) and Paul Durham (Cell biology and Life Sciences) to the MSU administration to that will fund a bacterial typing instrument (iPCR) and supplies needed to run the laboratory. This instrument has wide application in biological sciences, but it planned that OEWRI will oversee a pilot study to use the new instrumentation to detect the sources of bacteria in Ozark springs and streams.

2) Precision agriculture initiative- OEWRI worked along side the Department of Agriculture and other departments at MSU to take the lead and craft a precision agriculture white paper to fund a remote sensing and GIS initiative to study and manage small-scale crop production in the central Ozarks through the MSU Fruit Experiment Station. While the proposal has yet to be successful, it was an attempt by OEWRI and the CNAS as a whole to work together to promote research at MSU.

3) Lincoln University environmental science forum- OEWRI took parting in two events sponsored by Lincoln University and the Army Research Office. The first event involved an environmental research workshop held at Ft. Leonard Wood on November 29-30, 2005. The second event was the Student Environmental Science Exploration Summit held at Lincoln University on May 15-19, 2006. Both of these events focused on bringing MSU and other Missouri university researchers together to develop research interests in the areas of military needs and to involve Lincoln University students in these projects as well as graduate school recruitment within Missouri in general.

**Faculty and Student Awards**
In 2005, the director of OEWRI (Pavlowsky) was recognized at a home basketball game in the “Signature Bank Academic Spotlight” in honor of outstanding accomplishments by MSU faculty. Graduate assistants in the department of Biology won two “best paper” awards in 2005 and one in 2006 on topics dealing with OEWRI projects (Table 4). Graduate students working on OEWRI project won seven awards, 4 in 2005 and 3 in 2006 (Table 7).

**IV. PUBLIC AFFAIRS AND COMMUNITY OUTREACH**
OEWRI has given seven public affairs presentations including 3 in 2006 (Table 8).

**V. RESOURCE DEVELOPMENT**
Staff
Two new staff members were hired in 2006. A new Project Supervisor, Heather Hoggard, was hired in late Fall 2006, replacing James Richburg who left the position. Richburg was hired in late Fall 2005 along with the other current Project Supervisor, Marc Owen. A Research Specialist, Derek Martin, was also hired in late Fall but started in early 2006. Presently, OEWRI has three full-time staff and a half-time director.

Fiscal/Budgets
OEWRI is funded by an annual university budget of $70,000 and external funds from grants and subcontracts.

Infrastructure
OEWRI purchased new office furniture and benches for Temple 328 in early 2006 and Temple 343 in early 2007. New laboratory benches and cabinets were also put into Temple 125. Analytical instrumentation was also purchased by OEWRI. A Lachate nutrient analyzer (70k) was purchased for Temple 470. A CNS analyzer (40k) and laser particle sizer (60k) was purchased for Temple 125. It is planned for additional purchases of a portable XRF analyzer for soil samples and a Total inorganic carbon/Total organic carbon analyzer for water samples this Spring.

Start-up Funds
A 500k appropriation by Senators Talent and Bond supported a grant from the U.S. EPA to fund general start-up activities for OEWRI. The grant has the following objectives:

1. Provide infrastructure and develop office and laboratory space;

2. Develop facilities, instrumentation, and capacity for scientific water and soil/sediment monitoring and analysis through phase 1 plan for acquisition of equipment and supplies for water and sediment quality activities;

3. Develop EPA-approved Quality Assurance Program Plans (QAPPs) and Standard Operating Procedures (SOPs) for all laboratory/analytical, field monitoring, and geospatial techniques to support phase 1 aims to support water and sediment analysis;

4. Inventory and network university-wide resources to provide water and soil/sediment quality monitoring and analytical services for contract work and to support collaborative efforts or matching funds for grants;

5. Develop and support environmental and water resource website services including data delivery and communication systems;

6. Develop active partnerships with environmental groups, government agencies, or other universities to develop and implement monitoring activities, research projects, or management plans aimed at improving watersheds in the Ozarks; and

7. Host and sponsor one water research and resources conference for the Ozarks region.
Table 1: Graduate Assistantship Production by OEWRI Projects (2004-2006)

2004 = 12
Maya Williamson, Geospatial science
Derek Martin, Geospatial science
Ron Miller, Geospatial science
Mark Bowen, Geospatial science
Alyson Milhalenko, Geospatial science
Aaron Nickolotsky, Geospatial science
Briana Kaiser, Biology
Ben Dodd, Biology
Kim Medley, Biology
Jeff Kimmons, Biology
Alison Bellar, Biology
Mary Krause, Chemistry

2005 = 16
Aaron Nickolotsky, Geospatial science
Mark Gossard, Geospatial science
Gopala Borchelt, Geospatial science
Ron Miller, Geospatial science
Maya Williamson, Geospatial science
Derek Martin, Geospatial science
Stacey Armstrong, Geospatial science
Michael Addis, Natural and applied science
Matt Peters, Geospatial science
Jolen Bowers, Biology
Briana Kaiser, Biology
Ben Dodd, Biology
Kim Medley, Biology
Jeff Kimmons, Biology
Alison Bellar, Biology
Tim Davis, Applied and Natural Sciences

2006 = 12
Gopala Borchelt, Geospatial science
Stacey Armstrong, Geospatial science
Arindam Mukhergee, Geospatial science
Mark Gossard, Geospatial science
Matt Peters, Geospatial science
Brandi Gerik, Biology
Jennifer Duzan, Biology
Zachary Beussink, Biology
Todd Fobian, Biology
Jason Wolf, Biology
Kelli Dickerson, Biology
Jolen Bowers, Biology

Table 2: Master’s Thesis Production by OEWRI Projects (2004-2006)

2004=1
Bowen, M., 2004, Consequences of Valley Mill Reservoir drainage and downstream water quality (resource planning)

2005=6
Rodgers, W., 2005, Mercury contamination of channel and floodplain sediments in Wilson Creek Watershed, Southwest Missouri (geospatial science)

Martin, D., 2005, Geospatial analysis of gravel bar deposition and channel migration within the Ozark National Scenic Riverways (geospatial science)

Nickolotsky, A., 2005, Step-pool morphology of a wilderness headwater stream of the Buffalo River, Arkansas (geospatial science)

Krause, M., 2005 Jordan creek baseline water quality project: development of analytical methods (chemistry)

Kaiser, B., 2005. The effects of glochidiosis on fish respiration. Master of Science, Missouri State University (biology)

Dodd, B., 2005. Immune responses of host fish to the parasitic glochidia larvae of Unionid mussels. Master of Science, Missouri State University (biology)

2006=5
Miller, R., 2006, Nutrient loads and sources in the urbanized Jordan-Wilson Creek watershed (geospatial science)

Davis, T., 2006, Soil phosphorus levels in residential lawns and comparisons among four and land uses in Springfield, Missouri (natural and applied science)

Hunsinger-Nelson, T., 2006, Spatiotemporal patterns of transitional landscapes in the southwest Missouri Ozarks (geospatial science)

Woosley, R., 2006, Classification and Prediction of impervious surfaces in the Brush Creek Watershed, Missouri (geospatial science)

Bowers, J., 2006. Innate cross-immunity of host fish to the parasitic larvae of Unionid mussels. Master of Science, Missouri State University (biology)
Table 3: OEWRI Project Production of Peer-Reviewed Journal Articles (2004-2006)

2004 = 3


2005 = 2


2006 = 2

Table 4: OEWRI Project Production of Conference Presentations 2004-2006.

2004 = 7


2005 = 20


2006 = 34


Barnhart, M. C. 2006. Progress in the captive culture and toxicology of freshwater mussels. Freshwater Fisheries Research Center, Wuxi, China

Barnhart, M. C. 2006. Progress in the captive culture and toxicology of freshwater mussels. Shanghai Fisheries Institute, Shanghai, China

Barnhart, M. C. 2006. Research on native mussels at Missouri State University. Kansas Mussel Workshop, Missouri State University, July 12.


Barnhart, M. C. 2006. What the heck is a Neosho mucket, and why should I care? USDA NRCS Area IV Meeting, Springfield, MO April 27 **INVITED**


Bowers, J. and M. C. Barnhart. 2006. Competition and interference among the parasitic larvae of freshwater mussels. Poster presentation, Missouri Natural Resources Conference, Lake Ozark, MO.

Kaiser, Brianna, K. and M. C. Barnhart. 2006. Effects of hypoxia on juvenile freshwater mussels. Mollusk Conservation and Management Workshop, Missouri Natural Resources Conference, Lake Ozark, MO. **INVITED**


Barnhart, M. C. 2006. Host use and host abuse in the Unionidae. University of Oklahoma, Department of Zoology.  INVITED
<table>
<thead>
<tr>
<th>Principle Investigator(s)</th>
<th>Funding Agency</th>
<th>Title</th>
<th>Source</th>
<th>Date</th>
<th>Award ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pavlowsky, R</td>
<td>National Park Service</td>
<td>National Park Service-Heartland Network physical habitat assessment protocol</td>
<td>Federal</td>
<td>09/01/03</td>
<td>68,977</td>
</tr>
<tr>
<td>Pavlowsky, R</td>
<td>EPA/DNR via Watershed Committee of the Ozarks</td>
<td>Valley Water Mill restoration project (319)</td>
<td>Federal</td>
<td>10/01/03</td>
<td>11,726</td>
</tr>
<tr>
<td>Barnhart, M.C.</td>
<td>U.S. Fish &amp; Wildlife Service</td>
<td>A search for Epioblasma forentina curtisi</td>
<td>Federal</td>
<td>08/13/04</td>
<td>25,000</td>
</tr>
<tr>
<td>Barnhart, C</td>
<td>U.S. Fish &amp; Wildlife Service</td>
<td>Host Fish Requirements of the Winged Mapleleaf Mussel in the Ouachita and Bourbeuse river Systems</td>
<td>Federal</td>
<td>09/17/04</td>
<td>4,500</td>
</tr>
<tr>
<td>Pavlowsky, R; Biagioni, R &amp; Cammack, R</td>
<td>EPA via Upper White River Basin Foundation</td>
<td>Geospatial database and baseline water quality for the Upper White River Basin, MO and AR</td>
<td>Federal</td>
<td>01/12/05</td>
<td>53,893</td>
</tr>
<tr>
<td>Pavlowsky, B</td>
<td>EPA/DNR via Greene County</td>
<td>Ward Branch channel and water quality monitoring 319 (I)</td>
<td>Federal</td>
<td>01/31/05</td>
<td>16,970</td>
</tr>
<tr>
<td>Havel, J</td>
<td>EPA/USGS via INHS</td>
<td>Analyses of zooplankton samples from the Missouri River and its mainstream reservoirs</td>
<td>Federal</td>
<td>02/22/05</td>
<td>170,000</td>
</tr>
<tr>
<td>Barnhart, MC</td>
<td>US ACE</td>
<td>Propagation of the Endangered Freshwater Mussel, Potamilus Capax</td>
<td>Federal</td>
<td>05/19/05</td>
<td>9,468</td>
</tr>
<tr>
<td>Moskal, LM</td>
<td>MDC</td>
<td>Geovisualization of urban growth in the Brush Creek Watershed</td>
<td>State</td>
<td>07/18/05</td>
<td>9,269</td>
</tr>
<tr>
<td>Pavlowsky, R</td>
<td>Watershed Committee of the Ozarks</td>
<td>South Dry Sac River channel assessment in the Valley Water Mill area</td>
<td>Non-Profit</td>
<td>07/21/05</td>
<td>9,576</td>
</tr>
<tr>
<td>Barnhart, MC</td>
<td>US FWS</td>
<td>Host Fish Requirements and genetic Relationships of the Rabbitsfoot Mussel in the Black and Upper Arkansas River Systems</td>
<td>Federal</td>
<td>08/01/05</td>
<td>20,000</td>
</tr>
<tr>
<td>Cammack, R</td>
<td>Greene County</td>
<td>Geospatial science development of Greene County Planning and Zoning</td>
<td>County</td>
<td>08/03/05</td>
<td>25,356</td>
</tr>
<tr>
<td>Barnhart, M.C.</td>
<td>U.S. Environmental Protection Agency</td>
<td>Effects of hypoxia on freshwater mussels</td>
<td>Federal</td>
<td>09/12/05</td>
<td>64,985</td>
</tr>
<tr>
<td>Pavlowsky, R</td>
<td>EPA/DNR via Greene County</td>
<td>Ward Branch channel and water quality monitoring 319 (II)</td>
<td>State</td>
<td>09/14/05</td>
<td>15,275</td>
</tr>
<tr>
<td>Gouzie, D</td>
<td>Watershed Committee of the Ozarks</td>
<td>Missouri speleological file indexing</td>
<td>Non-profit</td>
<td>12/07/05</td>
<td>5,546</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Organization</td>
<td>Project Description</td>
<td>Type</td>
<td>Start Date</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------</td>
<td>--------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>--------</td>
<td>------------</td>
</tr>
<tr>
<td>16</td>
<td>Pavlowsky, R</td>
<td>Partnership MSU-USGS</td>
<td>Memo of Understanding between MSU and USGS-MCGSC</td>
<td>Federal</td>
<td>12/13/05</td>
</tr>
<tr>
<td>17</td>
<td>Cammack, R</td>
<td>Greene County</td>
<td>Geospatial science development of Greene County Planning and Zoning</td>
<td>County</td>
<td>01/25/06</td>
</tr>
<tr>
<td>18</td>
<td>Pavlowsky, R</td>
<td>U.S. Environmental Protection Agency</td>
<td>Ozarks Environmental and Water Resources Institute at MSU-Phase 1 Start-up Funding</td>
<td>Federal</td>
<td>03/09/06</td>
</tr>
<tr>
<td>19</td>
<td>Rhodes, R</td>
<td>Virginia Department of Game and Inland Fisheries</td>
<td>Assessment of phytoplankton abundance in water supplied for mussel production</td>
<td>State</td>
<td>03/14/06</td>
</tr>
<tr>
<td>20</td>
<td>Pavlowsky, R; Steiert, J; Gouzie, D</td>
<td>James River Basin Partnership</td>
<td>Finley Creek water quality baseline study-Phase 1</td>
<td>Non-profit</td>
<td>03/27/06</td>
</tr>
<tr>
<td>21</td>
<td>Pavlowsky, R</td>
<td>EPA/UWRBF via Bull Shoals Fieldstation</td>
<td>Nutrient analysis for Beaver Creek water quality monitoring</td>
<td>Federal</td>
<td>05/15/06</td>
</tr>
<tr>
<td>22</td>
<td>Pavlowsky, R</td>
<td>EPA/ERC via MEC Water Resources</td>
<td>SW Missouri Water Quality Improvement (GAP)</td>
<td>Federal</td>
<td>09/05/06</td>
</tr>
<tr>
<td>23</td>
<td>Pavlowsky, R</td>
<td>EPA/DNR via James River Basin Partnership</td>
<td>Stormwater runoff in the James River Watershed 319</td>
<td>Federal</td>
<td>09/11/06</td>
</tr>
<tr>
<td>24</td>
<td>Pavlowsky, R</td>
<td>EPA via CRPM/SMCOG</td>
<td>Bennett Spring State Park area: Planning for wastewater treatment and water quality education (404b)</td>
<td>Federal</td>
<td>10/15/06</td>
</tr>
<tr>
<td>25</td>
<td>Pavlowsky, R</td>
<td>EPA/DNR via Greene County</td>
<td>Ward Branch channel and water quality monitoring 319 (III)</td>
<td>Federal</td>
<td>12/19/06</td>
</tr>
</tbody>
</table>

**Denied Proposals**

1) Pavlowsky, R | University of Missouri-Columbia | Improving water quality in the Finley River Watershed - a high priority watershed in southwest Missouri | State | FY 2004 | 70,000 |

2) Pavlowsky, R | U.S. Department of Agriculture | Flat Creek USDA 406 monitoring project | Federal | FY 2004 | 87,461 |

3) Pavlowsky, R | U.S. Environmental Protection Agency | Finley River urban water quality 310 project | Federal | FY 2004 | 67,410 |

4) Evans, K; Mickus, K; Miller, J; Rovey, C | National Science Foundation | Weaubleau-Osceola impact studies (WISP): A multidisciplinary effort to explore a newly discovered impact structure | Federal | FY 2005 | 572,132 |
Table 6: OEWRI Research Collaborators
(C indicates some type of formal contract was established between OEWRI and the listed partner)

<table>
<thead>
<tr>
<th>Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watershed Committee of the Ozarks (C)</td>
</tr>
<tr>
<td>James River Basin Partnership (C)</td>
</tr>
<tr>
<td>Upper White River Basin Foundation (C)</td>
</tr>
<tr>
<td>Table Rock Lake, Inc.</td>
</tr>
<tr>
<td>Environmental Resource Coalition (flow through)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Government Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Protection Agency (C)</td>
</tr>
<tr>
<td>Missouri Department of Natural Resources (C)</td>
</tr>
<tr>
<td>Missouri Department of Conservation</td>
</tr>
<tr>
<td>Greene County, Missouri (C)</td>
</tr>
<tr>
<td>City of Springfield, Missouri (C)</td>
</tr>
<tr>
<td>National Park Service, Heartland Network (C)</td>
</tr>
<tr>
<td>National Resources Conservation Service</td>
</tr>
<tr>
<td>Southern Missouri Water Quality Project</td>
</tr>
<tr>
<td>USGS-Mid Continent Geographic Science Center (C)</td>
</tr>
<tr>
<td>U.S. Fish and Wildlife Service (C)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Missouri-Columbia</td>
</tr>
<tr>
<td>Lincoln University</td>
</tr>
<tr>
<td>University of Arkansas (C)</td>
</tr>
<tr>
<td>East Carolina University (C)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEC Water Resources (C)</td>
</tr>
<tr>
<td>Olsson Associates (C)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Missouri State University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center for Archaeological Research (C)</td>
</tr>
<tr>
<td>Center for Resources Planning and Management (C)</td>
</tr>
<tr>
<td>Bull Shoals Field Station (C)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty at MSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doug Gouzie, Geology (C)</td>
</tr>
<tr>
<td>Xin Miao, Geography</td>
</tr>
<tr>
<td>Jun Luo, Geography</td>
</tr>
<tr>
<td>Diane May, Planning (C)</td>
</tr>
<tr>
<td>Russ Rhodes, Biology (C)</td>
</tr>
<tr>
<td>John Havel, Biology (C)</td>
</tr>
<tr>
<td>Dan Beckman, Biology</td>
</tr>
<tr>
<td>Chris Barnhart, Biology (C)</td>
</tr>
</tbody>
</table>
Paul Durham, Biology (C)  
Jack Steiert, Biology (C)  
Janice Greene, Biology (C)  
Rich Biagioni, Chemistry (C)  
Gary Meints, Chemistry  
Tom Dewitt, Agriculture/NRCS

*Table 7: Awards to Students working on OEWRI Projects from the Department of Geography, Geology, and Planning.*


2) Derek Martin (GEO): won one of eight “Best oral paper” awards at MSU’s Graduate Interdisciplinary Forum held on April 23, 2005.

3) Willard Rodgers (GEO): won one of ten “Best poster” awards at MSU’s Graduate Interdisciplinary Forum held on April 23, 2005.

4) Derek Martin (GEO): “Outstanding Research Assistant” award at MSU’s Graduate Interdisciplinary Forum held on April 23, 2005.


6) Mark Gossard (GEO): “Best poster” award at MSU’s Graduate Interdisciplinary Forum held on April 8, 2006.

Table 8: Public Affairs Presentations by OEWRI

2003: Testimony on water quality issues 10/3, Public hearing of the State of Missouri Interim Committee on Water Quality Issues, SMSU Campus.


