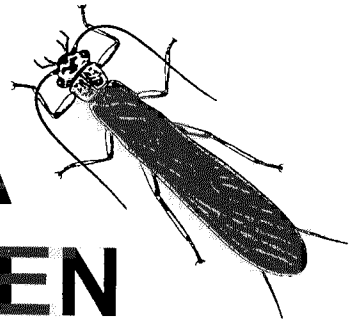
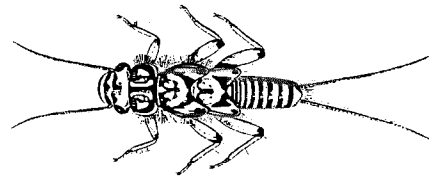




THE IOWA CITIZEN MONITOR



VOLUME 2, NO. 2 Spring 2001



The Next Phase, IOWATER Level 2 Monitoring

Rich Leopold – IOWATER Coordinator

This winter has been a very busy time for IOWATER. Our staff has been evaluating last year's workshops and preparing for the 14 Level 1 workshops scheduled for the 2001 season. Add to this the development of IOWATER Level 2 methods and workshops, and the phrase "burning the candle at both ends" comes to mind!

A number of technical workgroup meetings and a large number of interested professionals and volunteers have been creating the new IOWATER Level 2 monitoring program. This has proved to be as challenging and ambitious as creating the original IOWATER Level 1 program. Level 2 will consist of additional Level 2 workshops and shorter Level 2 "module" workshops. These workshop schedules and locations are listed in this newsletter



After completing Level 1 training, an individual can take the Level 2 training or any of the Level 2 modules. To become certified as an IOWATER Level 2 Monitor, the individual must complete;

- *IOWATER Level 1 workshop
- *IOWATER Level 2 workshop, and
- *At least one IOWATER Level 2 Module.

Level 2 workshops are 8-hour training sessions that focus on a number of topics for those with the level of commitment and concern to further document their monitoring program. This includes the inevitable "paper trail"; paying more attention to monitoring design, quality assurance procedures, and data interpretation.

In addition to all Level 1 parameters, Level 2 will also include ammonia, chloride, and E. Coli bacteria. The actual methods are still being field tested by IOWATER staff, the Dept. of Natural Resources, and the University Hygienic Laboratory. Pending results of comparing IOWATER's methods and that of the professionals, we will be developing our training manuals.

(Continued on the following page)

Three Level 2 modules are in varying stages of development. The Benthic Macroinvertebrate Indexing module is nearing completion with great help coming from the limnological staff of the University Hygienic Laboratory in Coralville and Des Moines. The Soil Monitoring module is a work in progress, with help coming from the National Soil Tilth Laboratory, the Natural Resources Conservation Service, and Iowa State University Extension.

The Standing Waters module is being crafted from the inception with help from Dr. John Downing and his associates of Iowa State University. This team is responsible for the 5-year professional monitoring project with the Iowa Dept. of Natural Resources, giving IOWATER the wonderful opportunity for side-by-side comparisons of parameters from the very start of the program. This will be accomplished using IOWATER trained participants alongside professionals in comparing citizen-generated data.

With continued success of the Level 1 program and the expanding influence of IOWATER statewide, our Level 2 program holds the promise of continued support of the agencies involved and the citizens they serve. It is encouraging to see these two sectors both benefiting from the IOWATER program. Our Level 2 expansion also holds well with IOWATER's mission, "To protect and improve Iowa's water quality by establishing and supporting a statewide volunteer water monitoring program".

Thanks for the continued diligence to YOUR program! Spring's here, time to refresh on your methods, check your equipment, wipe the winter sleep from your eyes, and **START MONITORING!**

Introducing...

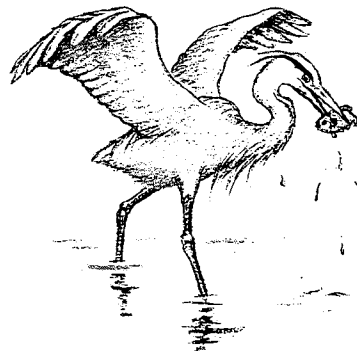
IOWATER's new Field Coordinator

Jacklyn Gautsch - Field Coordinator

Hello! The IOWATER program, in doubling its staff (two full-time people instead of one), has hired me as the new IOWATER Field Coordinator. The positions duties will include leading most of the Level 1 workshops, building relationships with and assist locally led water monitoring groups and individuals, and assisting IOWATER in many other areas.

I am originally from the La Crosse, Wisconsin area and hold a Bachelor of Science in Biology and Earth Science from the University of Wisconsin La Crosse. I've been involved in a variety of biological research projects including herpetological studies with the U. of W. Stevens Point, a caddisfly study with the U. of W. La Crosse, and most recently a fish-monitoring program with the Upper Mississippi Long Term Resource Monitoring Program, the University of Wisconsin, and the Iowa Dept. of Natural Resources.

I have also worked directly with volunteers in the Girl Scouts in a variety of staff and volunteer positions. I hope my experience in working with volunteers and in field research will blend together to make me effective at this new position. I look forward to working with everyone and having a great training summer.



IOWATER *Action!*

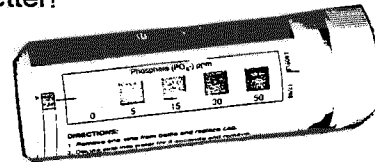
Monitors in the Water

Recent recruitment events and/or press releases organized by IOWATER monitors have taken place in:

- Muscatine County – thanks to Matt McAndrew of West Liberty High School and Cargill.
- Dallas County – thanks to Chris Adkins of the Dallas County Conservation Board and other presenters at a volunteer citizen water monitoring workshop at Voas Conservation Area.
- Dallas County (again!) – thanks to Dave Bolluyt and his Environmental Science class monitoring the Middle Raccoon River and Bear Creek.
- Thanks to Iowa District 14 Rep. Norman Mundie for his "From the Desk of Mundie" endorsement of the IOWATER initiative.
- Wright County – thanks to Sean McCoy and the Wright County Water Quality Project.
- Delaware County – thanks to Sue Behrns and the Maquoketa River Water Quality Team
- Emmet County – thanks to Gary Phillips and the Iowa Lakes Community College Conservation Club for their recognition by the Iowa Dept. of Natural Resources for their contribution toward the construction of IOWATER transparency tubes.
- Floyd County – thanks to Dale Adams for representing IOWATER at a booth at their "Heritage Fest".
- Butler County - thanks to Shirley Van Eschewn and congrats to the city of Greene in receiving recognition as an Earth Year 2000 participant from the state of Iowa.

- Bremer County – thanks to Tammy Turner and the Bremer County Conservation Board and congrats on the 2000 Outstanding County Conservation Board Environmental Education Award from the Iowa Conservation Education Council and the Iowa Association of Naturalists.
- Tama County – thanks to IOWATER supporter Mary McBee, staff writer for the Dysart Reporter, Tama News-Herald, and the Traer Star-Clipper for a wonderful full-length feature article concerning IOWATER and upcoming Level 1 workshops.

If we are missing "happenings" you would like to see in this newsletter, let us know using the contact information on the return address portion of this newsletter!



IOWATER Phosphate Testing Out with the Old!

IOWATER was aware from the start that the test strips used weren't the best for our purposes, and the first year's data indicates they were even worse than first suspected. Therefore, for the sake of credibility, we will no longer be using phosphate test strips within the IOWATER program! As of April 1, all current phosphate data on our website will be archived and IOWATER monitors will not be able to enter new phosphate data using test strips.

This does not point to a failure for IOWATER! On the contrary, this points to the high standards upheld within the program, and our desire and flexibility to accept better methods as they become apparent. We are currently field-testing new methods and will release these sometime in late spring / early summer.

The Iowa Rivers Project, **Ideas and Energy Flowing Into IOWATER**

Kathy Belden – IOWATER AmeriCorps

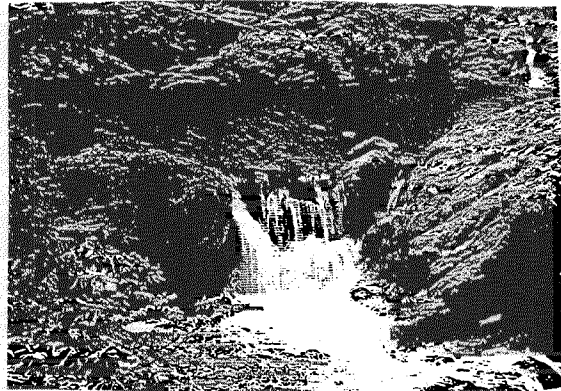
The Iowa Rivers Project (IRP) was developed as an interdisciplinary study for secondary students. The main goal of the project was to involve the students with a local stream or river in such a way that they are also drawn in to local environmental issues and problem solving.

The project involved teachers of all disciplines forming teaching teams that developed a study focusing their local stream. Working with the students, the teams planned and facilitated their own project. These would include not only a study of the water quality, but also the study of the history of the area, the impact the river has had on the development of the local culture, and the art and music based on the waters. A main theme of the project was the sharing of information through several sources, including the Iowa Communications Network (ICN) and the Iowa Rivers Project website.

The IRP began in the spring of 1994 when an initial group of teachers participated in a training workshop conducted by the Grant Wood AEA. It is loosely based on the Illinois River Curriculum Project, so training at this earliest workshop was provided by the Illinois Project staff and by local resource people. During that first year, 10 teacher teams from eight Grant Wood AEA schools developed and implemented programs unique to their schools. Over the next few years, the project grew immensely!

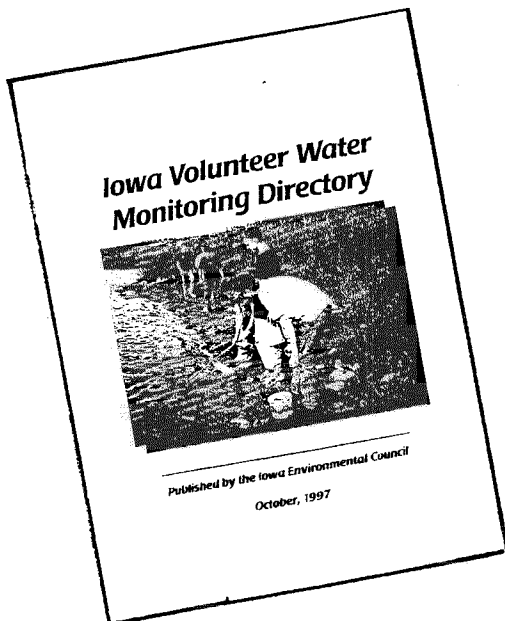
In the fall of 1994, the IRP received a Resource Enhancement and Protection (REAP) grant that allowed for a fall training workshop for teachers and expanding the project to include 20 additional schools. The grant also allowed time for the teams of teachers to devote time to the development and implementation of their projects. Additional REAP grants allowed the project to continue holding training workshops every fall in 1995, 1996, and 1997. The goals of the grants expanded to include not only time and resources for teachers, but also to provide support through resource people, to increase the sharing of information, and to develop a resource guide. In the fall of 1997, five workshops were held in the western half of the state and the project had grown to include over 20 schools from across Iowa.

The schools gathered during the spring conferences held every year from 1994 through 1998. The spring conference served as an opportunity for teachers to meet and learn about the experiences of other teams and to be involved in group problem solving, planning, and development of projects. It also helped to provide a network for teachers that would offer support for them in the continuation of their project. Later spring conferences also provided an opportunity for students from the project schools to share their knowledge with other students.



Currently, there are a few schools actively continuing their projects and submitting data on the IRP website, however; the numbers of schools and teams involved have dropped considerably. The project hasn't had the staff to continue with the fall and spring conferences and other support needed for such a substantial statewide program.

Since the beginning of IOWATER, teachers and staff from the IRP have been involved and interested. After staff from both programs met, the decision was made to merge the IRP with IOWATER in order to join forces. An IOWATER education module is under development in which teachers will not only gain college credit, but also expand their horizons in environmental education using the IOWATER monitoring and the cross-curriculum approach of the Iowa Rivers Project. We believe this is an exciting opportunity to promote the learning about our natural resources and need to take personal interest and responsibility in their care.



Coming Soon! IOWATER STATEWIDE VOLUNTEER MONITORING DIRECTORY

IOWATER is currently developing an updated version of the Iowa Volunteer Water Monitoring Directory originally published by the Iowa Environmental Council in 1997. IOWATER would like to invite your Volunteer Water Monitoring Program to join and sign-up!

The Iowa Environmental Council is an alliance of diverse organizations and individuals both in the private and public sectors working to protect our natural environment. IOWATER and the Iowa Environmental Council are working together on this and other monitoring endeavors to serve Iowa's volunteer water monitors. The previous directory was an important resource for volunteers, educators, government agencies, the media, and environmental groups. The new directory will continue to serve the needs of water quality monitors enabling them to reach other monitoring groups and resources in their areas and throughout the state.

To include your monitoring program to the directory please fill out and return the survey inserted in this newsletter. An electronic version of the directory will be available on the IOWATER website by fall and printed copies will also be available.

NatureMapping: Involving Citizens in Mapping Iowa's Biodiversity

Jason O'Brien – NatureMapping Coordinator

The Iowa NatureMapping Program is offering another season of training workshops. Teachers, naturalists, resource managers, and any individual interested in mapping Iowa's biodiversity are welcome to attend. The program is designed to give participants the "basics" of how to collect information on common terrestrial vertebrate wildlife species in a statewide effort to map Iowa's biodiversity.

IOWATER citizen monitors with an interest in riparian habitats or the whole watershed are encouraged to become a NatureMapper. Collecting wildlife data will enhance our understanding of the entire watershed community.

Five workshops have been scheduled to date, with more dates to be filled:

March 24th Cerro Gordo Co., NIACC Campus

April 28th – Mahaska CCB, Russell Wildlife Area Conservation Center

May 12th –Dallas CCB, Kuehn Nature Center (birding at 7:30am)

June 23rd – Jackson County, Bellvue State Park

September 29th – Dickinson County, Iowa Lakeside Laboratory

Workshops are one day and free of charge. If interested in attending, please contact Jason O'Brien at 515/294-6440 or jpobrien@iastate.edu, or go to the NatureMapping website at www.naturemapping.state.ia.us. NatureMapping is a great way to connect with Iowa's environment and help keep common species common.



Attention Educators!

IOWATER would like to introduce an exciting opportunity for educators interested in water quality monitoring within the IOWATER program. Thanks to a grant from the Roy J. Carver Charitable Trust and the Iowa Conservation Education Council (ICEC), secondary educators (teachers, naturalists, etc.) trained in IOWATER Level 1 are eligible to receive an additional five sets of testing equipment with your training! If you are an educator that is already Level 1 certified, you are already eligible for this free equipment. If you are interested in becoming certified, you can find this year's training in this newsletter or on the IOWATER website at www.iowater.net. This grant is available this year only, pending funding. For more information, contact Jacklyn Gautsch at (515)281-4476 or email at jacklyn.gautsch@dnr.state.ia.us



iowater.net
Net Notes

Lynette Seigley – Research Geologist

Map of IOWATER sites – helpful hints.

The map showing the location of IOWATER sites (in the On-Line Database section) can be used to see the distribution of IOWATER sites, identify sites and within a watershed, zoom in to different areas of the state, and print a map of an area of interest.

Since the last newsletter, the map has been linked to water-quality data in the IOWATER database. Available at the map site is a "Help" page to show how to use the map. On the left side of the map is a toolbar. These tools help to find your way around the map, identify points on the map, and sort the different types of information available.

The upper left hand button in the toolbar – the **Legend/Layer List** – allows you to move between the Legend for the map and the Layer List (both appear on the right side of the map when you click on this button). You can select different "layers" to show on the map by clicking on the desired layer(s) and clicking "Refresh Map".

The + and – options in the toolbar allow you to **zoom in (+) or zoom out (-)** to an area of the map. Click and hold the left button of your mouse and pull a red square around the area you would like to "zoom" on. As you zoom into smaller scales, more details such as rivers, cities, and HUC's will appear.

The **lightning bolt** in the toolbar is a "hyperlink" to the IOWATER database. After clicking the Lightning Bolt, select a point on the map and click. A hyperlink will take you to the IOWATER Monitoring Site Log for the site you selected.

The **Identify** (letter "i" in a circle) allows you to identify items on the layers you have as active. This can be used to identify towns, counties, major rivers and creeks, and different sized HUCs. Simply click a layer in the legend to make it active, click a feature, and the results will appear below the map.

Update on Sites Registered and Data Submitted. As of March 1, 386 sites in 56 counties have been registered in the IOWATER database! A total of 293 biological, 715 chemical/physical, and 239 habitat records have been submitted.

Forgotten your IOWATER ID or password? As another monitoring season rolls around, some of you may have forgotten your IOWATER ID or password. If you need your ID or password, contact Jackie Gautsch at (515) 281-4476; (Jacklyn.Gautsch@dnr.state.ia.us) or Lynette Seigley at (319) 335-1598; (lseigley@igsb.uiowa.edu)

Biological Assessments – No more than 3 times each year! In reviewing data in the IOWATER database, we've noticed that some people completed more than 3 biological assessments last year. Remember that IOWATER recommends that you complete no more than 3 biological assessments a year. If you do more than this, you may be impacting (hurting) the population of the local benthic critters, not something we want to do!

Iowa's Professional Monitoring Data - Now Available Online! The data being collected as part of Iowa's ambient monitoring program is now available online at wqm.igsb.uiowa.edu. At this site, click on "Water Quality Data" and then click on "Water Quality Data from Iowa's STORET Database". The database currently has chemical data from October 1999 through present for the streams and rivers monitored in Iowa. You can search this data by station (site location), county, or by hydrologic unit code (8-digit HUCs). Historical water quality data Iowa will be added in the near future to the STORET database as time permits. Eventually, you will be able to do "data dumps" from this database to your computer and generate graphs of data you select.

A special thanks to Becky Soglin, an IOWATER monitor, who has been volunteering her time reviewing the IOWATER database and clean up duplicate records.

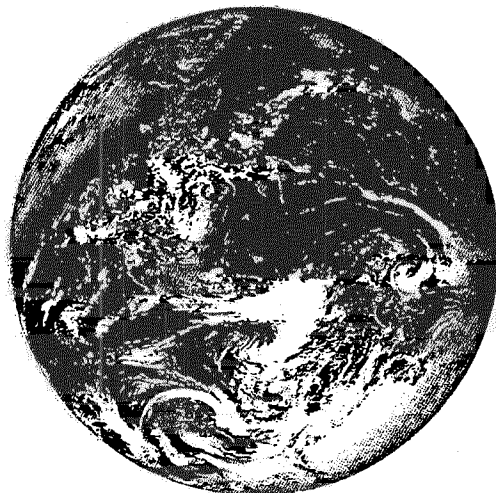
From Henry David Thoreau's "Walden"

***I learned this, at least, by my experiment;
that if one advances confidently
in the direction of his dreams,
and endeavors to live the life which he has imagined,
he will meet with a success unexpected in common hours.***

***He will put some things behind,
will pass an invisible boundary;
new, universal, and more liberal laws will
begin to establish themselves around and within him;
or the old walls will be expanded,
and interpreted in his favor in a more liberal sense,
and he will live with the license
of a higher order of beings.***

***In proportion as he simplifies his life,
the laws of the universe will appear less complex,
and solitude will not be solitude,
nor poverty poverty,
nor weakness weakness.***

***If you have build castles in the air,
your work need not be lost; that is where they should be.
Now put the foundations under them.***



IOWATER Level 1 Workshops – 2001 Schedule

Our Level 1 workshop schedule has expanded with new dates and locations in Marshalltown, Webster City, and Dewitt. All workshops are open to any individual or group that is interested. Upon completion of the workshop, you will be a certified Level 1 IOWATER Citizen Monitor. The workshop is based on ten hours training, set-up comfortably over two days, exact times varying depending on location. Workshop registration fee is \$25, which covers all program fees, meals, and testing equipment. To register for any of the IOWATER Level 1 workshops listed below, or for more specific registration information, please contact the individuals listed for the workshop you are interested in.

Date / Time	City	Contact	Phone	E-mail
May 4, 5-9pm May 5, 9am-4pm	Montezuma	Renny Crawford	(515) 623-2547	powcocon@netins.net
June 1, 5-9pm June 2, 9am-4pm	Montrose	Holly Sanders	(319) 463-7673	heronben@interl.net
June 5, 9am-3pm June 6, 9am-3pm	Rock Rapids	Rochelle Ebel	(712) 472-2217	lyonccb@rconnect.com
June 8, 5-9 pm June 9, 9am-3pm	Missouri Valley	Pam Cates	(712) 647-2785	mcates77@aol.com
June 15, 5-9 pm June 16, 9am-3pm	Center Junction	Michelle Olson	(319) 487-3541	jccb@netins.net
June 22, 5-9pm June 23, 9am-3pm	Perry	Chris Adkins	(515) 465-3577	adkins@iowalink.com
June 29, 5-9pm June 30, 9am-3pm	Clarinda	Kevin McCall	(712) 542-5484	kevin.mccall@ia.usda.gov
July 12, 9am-3pm July 13, 9am-3pm	Manchester	Rick Lawrence	(319) 652-5104	rick.lawrence@ia.usda.gov
July 17, 4-9pm July 18, 4-9pm	Marshalltown	Diane Pixler	(641) 754-6303	mccb@co.marshall.ia.us
July 20, 5-9pm July 21, 9am-3pm	Storm Lake	Julie Sievers	(712) 262-4177	julie.sievers@dnr.state.ia.us
July 25, 9am-3pm July 26, 9am-3pm	Waukon	Lynn Ellefson	(319) 568-2246	lynn.ellefson@ia.usda.gov
August 7, 5-10pm August 8, 5-10pm	Mason City	Todd Von Ehwegen	(515) 423-5309	tvonehw@co.cerro-gordo.ia.us
August 17, 5-9pm August 18, 9am-3pm	DeWitt	Angie Kudelka	(319) 659- 3456	angie.kudelka@ia.usda.gov
August 22, 9am-3pm August 23, 9am-3pm	Webster City	Marvin Hoffman	(515) 832-2916	kolson@iawebsterc.fsc.usda.gov

IOWATER – Making Waves of Difference Across Iowa – JOIN US!

IOWATER Level 2 Workshops

***Commitment and caring for our natural resource
... taken to the next Level!***

**You must have attended a Level 1 workshop to participate in Level 2 workshops or modules.*

Level 2 Workshops. This 8-hour training session will include monitoring design, intro to Quality Assurance Project Plans (QAPP), restoration techniques, and data interpretation. Additional parameters include ammonia, chloride, and fecal coliform / E. Coli bacteria.

Level 2 Modules. These are advanced 4-hour training modules. Offered in 2001 are:

- Benthic Macroinvertebrate Indexing
- Standing Waters Monitoring (Lakes, Ponds, and Wetlands)
- Soil Monitoring

Level 2 Certification. An IOWATER Citizen Monitor will be certified as Level 2 trained upon completion of Level 2 workshop training and at least one Level 2 module.

Workshop registration fee is \$25 for Level 2 workshops and \$10. for each of the modules. This covers all program fees, meals, and testing equipment. To register for any of these IOWATER workshops, please fill out and send in registration form found on the last page of this newsletter. You will be sent confirmation, maps, and more info when paid registrations are received.



IOWATER Level 2 Workshops and Modules Registration Form

Level II Workshops (place check by workshop)

Date	Time	Location
____ May 19	8 am – 4:30 pm	Springbrook State Park, Guthrie Center
____ June 7	8 am – 4:30 pm	Hotel Winnesheik, Decorah
____ August 11	8 am – 4:30 pm	University Hygienic Laboratory, Coralville

Benthic Macroinvertebrate Module (place check by workshop)

Date	Time	Location
____ May 23	5 pm – 9 pm	Des Moines Izaak Walton League, Des Moines
____ June 8	8 am – 12 pm	Nahant Marsh Nature Center, Dewitt
____ July 7	8 am – 12 pm	North Iowa Area Community College, Mason City
____ August 2	8 am – 12 pm	Iowa Lakes Community College, Estherville

Soil Module (place check by workshop)

Date	Time	Location
____ June 13	5 pm – 9 pm	Hartman Reserve Nature Center, Cedar Falls
____ July 14	10 am – 3 pm	Neal Moeller Environmental Ed. Center, Denison
____ August 2	1 pm – 5 pm	Iowa Lakes Community College, Estherville

Standing Waters Module (place check by workshop)

Date	Time	Location
____ June 8	1 pm - 5 pm	Nahant Marsh Nature Center, Dewitt
____ July 7	1 pm - 5 pm	North Iowa Area Community College, Mason City
____ July 13	1 pm - 5 pm	Backbone State Park, Manchester
____ August 3	10 am – 3 pm	Lost Island Prairie Wetland Nature Center, Ruthven

Name: _____ Organization: _____

Address: _____
Street or PO Box City State Zip Code

Phone: (day) _____ (evening) _____

E-Mail: _____

Make check out to Iowa DNR (\$25. for Level 2 workshop and \$10. for each Level 2 module)

Send To: Rich Leopold – IOWATER
Iowa DNR – Wallace Office Bldg.
502 East 9th Street
Des Moines, IA 50319

*Rich Leopold – IOWATER Coordinator
Wallace Office Building
502 East 9th Street
Des Moines, IA 50319
515.281.3252, fax: 515.281.8895
richard.leopold@dnr.state.ia.us*

