Iowa Children's Water Festival A splash of Educational Fun

Non-Point Source Pollution Information & Education Programs Conference Chicago, IL May 14-17. 2001

> By: Kaylene F. Carney U. S. Geological Survey P.O. Box 1230 Iowa City, IA 52244 319-358-3612 kfcarney@usgs.gov

The Iowa Children's Water Festival (ICWF) was first held in May 1997. Plans are currently underway for the 6th annual event to be held on Thursday, May 19, 2002 on the campus of the Des Moines Area Community College (DMACC) in Ankeny, IA. The festival began as an opportunity for the youth of Iowa to spend a fun-filled day learning about all aspects of water including water quality, conservation, resources, uses, safety, and fun. Approximately 2,000 fifth grade students from across the State of Iowa attend the Festival each year. The hands-on learning activities are presented by a variety of water professionals, representing government agencies, environmental organizations, higher education and private businesses. The activities are designed to teach children about water in a learning-intensive, yet very festive and fun environment. The Iowa Festival was patterned after the Nebraska Children's Groundwater Festival, which is organized by the Groundwater Foundation.

Pre-Festival Organization

Invitations to the Festival are sent to each 5th grade teacher in the state by mid-August. The list of teachers is obtained through the State Education Association. The letters are sent early enough so teachers can incorporate water studies into their curriculum, the day can be scheduled into the school's calendar and arrangements can be made for transportation. In the months proceeding the festival, students are invited to submit entries for the poster and essay contests. Teachers receive pre-festival resource packets to help them prepare their classes for the day.

Classroom Presentation and Exhibit Hall registrations are usually sent to participants about four months in advance. It is very important to acknowledge each registration and to keep all participants advised through out the year. Most organizations prefer to receive notices and reminders by email.

Arrangements for entertainers should be made as soon as possible, especially if the event is planned for spring. This is a very busy time for class field trips and special events. Professional entertainers can get booked as far as a year in advance so the earlier the better. It is also a good idea to contact museums or science centers, as they will be booked early too.

The Steering (Planning) Committee begins meeting about every 6 weeks in September and through the fall. After the first of the year, monthly meetings will be held until a month before the Festival when meetings will be scheduled about every other week. The final planning meeting is held the evening before the Festival.

This year an Advisory Committee will be formed which will be made up of major supporters of the Festival not involved in the actual planning. The Steering Committee will look to this group to provide leads for financial support, contacts with the media and state legislators, and new ideas.

A Day at the Festival

As the students arrive, local high school theater students provide entertainment with improvisation and mime routines. At this time, teachers and guides have an opportunity to register, pick up their Festival packets and become familiar with the campus and their schedule. There is also a photographer on hand to take group photos that are sent to the classes and their local newspaper after the Festival.

Each class will participate in three Classroom Presentations and one game event, visit the Exhibit Hall, and attend an entertainment event. The students spend approximately five hours at the Festival. The day is divided into 30-minute sessions with ten minutes passing time in between. Each group consists of 20-25 students.

Classroom Presentations

Over 40 organizations participate in the Festival as Classroom Presenters. A majority of Presenters set up in classrooms. However, each year there have been five or six who require a larger space and set up outdoors. The Festival is held "rain or shine" and teachers are asked to tell their students to dress accordingly. The Presenters are encouraged to make their presentations hands-on and interactive. Students will retain what they have learned if they have had an opportunity to participate rather than having to sit and listen to a lecture.

Every effort is taken to provide the Presenters with the classroom set-up that will best suit their presentation. DMACC has a wide variety of rooms and a large selection of audio-visual equipment available. Volunteers are also

available to help the Presenters for the day. Presenters are responsible for any other materials needed.

Exhibit Hall

The Exhibit Hall was originally set up in the school's cafeteria but it was quickly discovered that cycling 200 students per session through such a small area filled with exhibit booths was not practical. Two years ago the Exhibit Hall was moved to the much larger automotive labs. This move has made a considerable difference in the flow through the hall and gives the students a better chance to see all of the exhibits.

The Exhibitors are also encouraged to have interactive, hands-on activities for the students and are provided with water, electricity, tables and A/V equipment. Exhibitors are asked to have at least two people working at their booth to interact with the students and allow for break times since there are students scheduled in the Hall for every session of the day. It is important to have someone take charge of the Exhibit Hall on the day of the Festival. Our Hall Coordinator carries a bullhorn to instruct the students about the rules before they enter and to round them up when it is time for their session to be over.

Entertainment

As stated before, it is advisable to book your entertainers as early as possible. Each year we have a Water Magician who teaches lessons about the water cycle, the interaction of ground and surface water and water supply through his magic tricks. This has been one of the favorite events each year. Another popular event has been presentations given by organizations involved in raptor rehabilitation. They bring several live birds they are currently

working with and talk to the students about the importance of water in the life of the birds. Other sessions have also included local musicians singing water education songs, Native Americans have set up their tipi and told water-related stories, handed down from their ancestors and a professional puppeteer group that has given several different plays about water or recycling. Overall the entertainment events have been a very big hit.

Large Group Games

This is an opportunity for students to compete with and against students from other schools. The students are scheduled for one of four game events: Dripial Pursuit, Environmental Bingo, Recycling Relays and Dripmatics.

Small candy prizes are awarded to the winning individuals or teams.

Lunches

Schools: students bring sack lunches that are collected at check-in and placed in a box marked with their class number. That box is then taken to them at their last session scheduled before lunch. Through a donation from a local distributor, juice is provided for them. A decision was made not to provide student lunches as this would require additional donations and finding volunteers to make up the lunches. There was also uncertainty as to our liability for providing special diet lunches.

Volunteers: lunches are provided, through donations, for all of the presenters and volunteers. Participants receive a ticket in their check-in packet for lunch. DMACC's cafeteria is also open through the lunch hour for anyone wanting to purchase other items. Lunches are delivered to the Exhibit Hall since there is not a lunch break scheduled for them.

Facilities

The Des Moines Area Community College has been the home of the Iowa Children's Water Festival for each of the past 5 years and will continue to be into the foreseeable future. The amount of support provided to the festival is immeasurable. DMACC provides the entire campus to us for the day, free of charge. They also make sure the lawns are mowed, distribute A/V equipment to the classrooms, provide last minute secretarial support, clean up after and many of their personnel work as volunteers. We are incredibly lucky to have this facility available to us.

This is a very large campus. We use 9 of the 20 building available. One of our biggest challenges has been the logistics of moving 2000 students, their teachers, chaperones and guides around the campus without them getting lost. Our first step is to help the volunteers become as familiar with the campus as possible. Color coding the buildings on the general campus map and then printing the maps of each building on color-coordinated paper has aided all of the volunteers. There are also many entries into each building. This year we numbered the doors and named the hallways. This helped, along with having a building monitor in each building to send people in the right direction.

The past two years golf carts have been donated for the day. These have proven to be an enormous help to the members of the Steering Committee as we are called from building to building to answer questions or provide other assistance. This year port-o-potties were placed outside of the Exhibit Hall. With over 200 students in the hall at one time, the restroom facilities had been used beyond their capacity in the past.

Scheduling

Schools: The schools are scheduled to arrive at the Festival at four staggered time slots. Each school is given an opportunity to request their arrival time on their registration form. The Scheduling & Program Committee Coordinators sit down approximately two months before the festival to fill in all of the time slots. The Committee selects the activities each school will attend. There have been requests from the teachers who want to be able to pick which activities they attend. To avoid everyone selecting the same presentation or teachers being unhappy about not getting their first choices, the committee will continue to do the scheduling selections. There are seven time slots to fill for each class (classroom presentation X3, exhibit hall, game, entertainment & lunch). No class is scheduled for more than one outdoor classroom presentation (in case of bad weather) and each class schedule is reviewed to assure a variety of educational content (a good description from your presenters explaining their activity will be helpful.)

Classroom Presentations: Each presenter provides information regarding what time they are available (morning, afternoon, all day) and how many times they are willing to give their presentation in a day. Presenters are not scheduled for more than seven or eight classes to avoid burnout (the average is 5-6.) It is also best to avoid scheduling more than one class from a school to each presenter; this eliminates the possibility of gaps in time should a school cancel at the last minute. Flexibility is the key to scheduling. Look for at least three or four classroom presentations that can be doubled up if there are Presenters who are unable to attend at the last minute. Presenters are encouraged to find a suitable replacement on their own if possible.

Volunteers

Each year over 200 volunteers help to make the day run smoothly. Simple, easy to read maps and instructions, and adequate training is vital. Volunteers are required to arrive on campus at least one hour before their scheduled shift. This allows time to attend a training session and an opportunity to walk around the campus. A suggestion for volunteer training is to have the classroom guide volunteers come the day before the event and send them on a scavenger hunt that takes them to all the classrooms they will be visiting with their class.

Most volunteers are recruited from sponsoring businesses and agencies. High schools are also a great source for student volunteers. We have had very little success getting college students to participate since our Festival is held so late in the school year, most colleges have already dismissed.

We have found that older, more mature volunteers are needed as class guides to ensure adequate control of the classes and to keep them on schedule. Teachers are advised in advance, however, that the volunteers are not responsible for the overall discipline of the classes. Younger volunteers lead the game activities and run errands.

Education

A new committee was formed within the past year to evaluate the educational content of the festival. The Steering Committee felt that the basics of organizing the Festival are now in place, but if there is not a proper learning opportunity, this becomes just another field trip. A committee consisting of a representative from the Iowa Groundwater Association, State Education Association, several faculty members from the teaching college of a local university, a teacher and other interested volunteers has met to create an action plan

for evaluating the age appropriateness of the presentations and to assure that curriculum objectives of the schools are being met.

Fundraising

The ICWF was initially funded by a financial contribution from a professional water association. Ongoing funding comes from financial and inkind contributions solicited from water utilities and major corporations.

An excellent source of funds comes from the communities that are sending students to the festival. There is also large variety of grants available.

Support from the community hosting the event can be invaluable. The Nebraska festival receives support from an organization called the Friends of the Festival. This is a group of local volunteers who approach the businesses in the community asking them to sign a pledge card committing to a financial contribution for a period of one, three or five years. Reminder cards are then sent out each year. Another idea is to us to ask each person attending the festival to give an approximate dollar amount of money spent in the community while they are in town. This can include hotel rooms, gasoline, meals, or even supplies. The total can then be submitted to the local Chamber of Commerce showing the economic impact of the Festival and can be used when looking for financial support. This was the first year this information was requested on the evaluation forms. The response was not as significant as anticipated but these figures will continue to be collected for future use.

In-kind contributions can range from time donated by the companies with representatives on the Steering Committee to the local grocer who provides fruit for lunches. There are stationery stores, dairies, and bakeries, printing companies that provide a variety of items. A local screen-printing company donates all of the t-shirts that are worn by the volunteers and committee mem-

bers. Do not be shy about asking for donations. Unless there is someone to underwrite the entire cost of your Festival, you will need to ask for help. Once you have received a financial or in-kind contribution, make certain to properly recognize the contributor.

Publicity

Getting the word out about your festival is crucial. The more well known the Festival is the more participants, volunteers and contributors will come on board.

Our first priorities were to create a logo and a web site. The logo is used on all letters, brochures, t-shirts, signs, etc. The web site www.uni.edu/contined/ncp/waterfestival was designed to be interesting and informational. All presenters at the Festival are offered the opportunity have their own web site linked to the Festival's. In turn we ask all of the participants to create a link back to the Festival from their home page. School and Presenter registration forms are available on the web site making it very easy for those who prefer using the electronic format.

There are a number of professional organizations with periodic newsletters. These people are almost always looking for content. Ask if they will put an article in about your Festival. This will be a valuable source for presenters and volunteers.

Media coverage has been another challenge. One year a local weather forecaster did a live remote for the noon news but has been unable to return. We will continue to build our working relationship with the local media. There have been several articles in some of the hometown newspapers about the students who have attended the festival.

The media and elected officials seem to go hand-in-hand. Getting one should get the attention of the other. Our festival is held just north of Des Moines, the State's capitol, so there is not a shortage of legislators available. Getting them to the Festival has been a challenge. This year the students who were going to be attending the Festival were provided post cards to send to their local representatives asking them "Will You Be Our Leader?" There was a brief explanation of the Festival along with an invitation for them to "lead" the class as they went to their sessions. Three legislators did attend and all were very enthused. This program will be continued next year and it is anticipated that even more representatives will participate.

Evaluation

Each year a festival evaluation form is distributed to presenters, teachers, guides and other volunteers. The comments and suggestions are compiled into a report that is reviewed by the Steering Committee at the wrap-up meeting following the festival. This input helps to determine which sessions were most educational (usually the ones where students get to be actively involved in the presentations rate the highest.) Many good ideas for additional presentation topics and ways to make the festival a worthwhile day for all involved are also received. This feedback is posted on the water festival web page. A pre/post festival test is also provided to the teachers to help measure the success of the event as a learning tool. Submitted results show a 25% increase in the number of questions answered correctly after the festival.

Miscellaneous Items

First Aid: There is a Nurses Office on the DMACC campus that serves as the First Aid station. A nurse from the local Red Cross is hired to handle any emergency that may arise.

Medications: A number of students take prescription medications.

Teachers have been asked to carry the meds with them or to have the students carry their own. The Festival workers cannot be responsible for storing these medications.

Severe Weather: Have a safety plan in place for whatever severe weather may occur in your part of the country.

Cell phones: A local cellular phone company donates phones for the Steering Committee to use the day before and the day of the Festival. This is one of the most valuable tools we have to help the day go smoothly especially given the size of the campus.

Theme: Each year a new theme for the Festival is used to highlight a new emphasis. This provides a focus for planning.

Poster & Essay contest: Each student is invited to submit either a poster or an essay explaining "Why Water is Important To Me." A local amusement park donates passes for the winners of the contests. All participants received a certificate acknowledging their participation.

Recognition Party: Exhibitors and classroom presenters are encouraged to set up the day before the festival. That evening a pizza and pop party is held in DMACC's cafeteria with an open invitation to anyone involved in the Festival. This gives everyone a chance to meet in an informal environment before the big day. The Steering Committee and Contributors are recognized here also.

Organizational Structure

One of the most unique aspects of this festival is the overall coordination effort. Unlike many festivals that are coordinated by a single office, many with paid staffs, the Festival's Steering Committee is made up of volunteers representing a variety of governmental agencies and educational institutions from across the state. The cooperation and synergy of the committee members is what makes this an event a nationally recognized event. The dedication of the presenters, demonstrators and volunteers to make the festival a fun educational experience solidifies the ultimate success of the festival. The committees:

Registration/Scheduling: University of Northern Iowa point of contact for all teachers

Program: U.S. Geological Survey

classroom presentations, exhibit, entertainment and games

Fundraising/Promotion: Des Moines Water Works

financial and in-kind contributions, grant writing

Facilities: Des Moines Area Community College

Volunteers: this committee rotates the chair position among it's

members

Education: Iowa Groundwater Association

evaluates the educational content of the Festival

Sponsors

This is mentioned separate from fundraising to emphasize the importance of recognizing those who provide time, money and energy. It is not difficult to get participants but it is much more difficult to keep them coming back if they do not feel a connection to the event. It is important to make each and every participant feel that they are the one that makes the event a success.

Finally

This type of event can be based upon a variety of objectives. Overall themes, number of participants, facilities, funding and scheduling variations should all be considered when looking to produce an environmental education festival. Anyone interested in planning such a festival should start by checking around in their local area to see what is already being done and talking to those who coordinate those events regionally and nationally. Look for people to help with organizing your event who love to do this type of work. It takes an outgoing personality that is not shy about asking others to participate or to make donations. There are many sources for new exhibitors and presenters. Talk to everyone; you never know who may be interested or may know someone else that may be. Surf the web; there are a number of professional organizations and associations that link to each other. Read the newspapers; especially the sections on the environment. A simple change in personnel may provide a new lead.

HAVE FUN!!!!

Helpful websites:

Iowa Children's Water Festival www.uni.edu/contined/ncp/waterfestival

U.S. Geological Survey

www.usgs.gov/education.html

Groundwater Foundation

www.groundwater.org

National Science Teachers Assoc

www.nsta.org

U.S. Environmental Protection Agency www.epa.gov/kids/