# *WOW on the Water*

## First Edition for Field Testing and Comment

Prepared by the
American Recreation Coalition
in partnership with the
Bureau of Reclamation

September 1, 2005

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**American Recreation Coalition**
*Dedicated to the protection and enhancement of everyone's right to health and happiness through recreation.*

RECLAMATION
*Managing Water in the West*

# *WOW on the Water*

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# Introduction

Going on a hike. Camping out. Sitting around the campfire. Catching a fish. Jumping in the water. These experiences were readily available to many of us as children. However, as the United States becomes increasingly urbanized, these opportunities continue to decrease.

The recreation patterns of adults are largely established in childhood. Few adults participate in recreational activities they did not first enjoy as children.

*WOW—Wonderful Outdoor World (WOW)*, created in 1995, has offered more than 8,000 urban and minority youth an opportunity for outdoor recreation. *WOW on the Water* will target the same kids. The overnight camping experience, however, will be replaced by a full-day, adventure-packed learning experience on and near urban bodies of water. Water is a recognized magnet for outdoor fun, hosting many of the most popular recreation activities. Water is also an especially critical environmental issue — an issue involving both quality and quantity.

*WOW—Wonderful Outdoor World* began in 1995 at a Partners Outdoors session, as leaders of the nation's outdoor recreation community reviewed data on recreation participation by American youth, and especially urban and minority American youth. The news was not good. For virtually every traditional outdoor recreation activity — hiking and fishing, camping and boating, skiing and more — participation was down by 10 percent or more.

Several participants at the Partners Outdoors session committed to a public/private effort to overcome barriers to recreation participation by youth. They developed an initiative that brought outdoor fun normally associated with wild land settings to overnight campouts in the heart of America's cities. In partnership with local park and recreation agencies and community groups, the new program was designed to operate within blocks of the homes of the targeted youth — those who appeared least likely to participate in outdoor adventures. The targeted youth were urban, economically disadvantaged and non-Caucasian in race.

The program was piloted in Los Angeles, with The Walt Disney Company and the Los Angeles Department of Recreation and Parks as partners. It was immediately clear that *WOW* had tremendous potential. Media highlighted the Los Angeles campouts repeatedly and requests for *WOW* programs were received from more than a dozen cities.

*WOW*'s success continues today through established and on-going efforts in Los Angeles, Phoenix, Tucson, Denver, Washington, Salt Lake City and Albuquerque — as well as special events across the nation. Through partnerships with federal, state and local agencies, nonprofit, and for-profit organizations, we are unlocking America's natural health and fitness centers for city kids. *WOW* has played a role in six Tournament of Roses parades and has been highlighted at the White House. White House staff and Cabinet members have participated in the program.

In most *WOW* cities, our campers are offered chances to continue beyond the initial campout with a *WOW II* expedition to a more traditional outdoor recreation setting. And in every case, *WOW* campers are urged to become part of organizations like the Boy Scouts and Girl Scouts, the YMCA and YWCA, the Boys and Girls Clubs and other organizations with active outdoor recreation programs.

*WOW* has won awards and recognition and will continue to grow. Yet the *WOW* Executive Committee recognizes that the overnight campout focus of *WOW* adds complexity and limits the number of participants. Moreover, *WOW*'s involvement with water and water-based recreation is limited — often limited to casting fishing lines at cardboard targets on fields of dirt and weeds. The *WOW* Executive Committee has therefore approached old and new partners to develop a new concept: *WOW on the Water*.

Like the original *WOW—Wonderful Outdoor World* program, *WOW on the Water* is anchored in a partnership of public/private partnerships. The legal basis for both programs is a Memorandum of Understanding (MOU) in force through September 30, 2007. A copy of that MOU is found later in this document. Principal partners in *WOW on the Water* include the Bureau of Reclamation, the American Recreation Coalition, the National Marine Manufacturers Association, the Association of Marina Industries and the Professional Paddlesports Association. Other federal, state and local agencies and private organizations will take an active part in *WOW on the Water* nationally and locally.

September 1, 2005

# *WOW on the Water:* Overview

**Overview:** *WOW on the Water* is a day-long experience merging fun with learning. There are four core elements:

Water Safety and Awareness
Passport to Fishing and Boating
I Didn't Know Water Did That!
A Boating Adventure

After registration, the *Water Safety and Awareness Session*, designed to ensure that recreational activities on and near waters are fun and not tragic, is presented for all participants. The subsequent three elements are each approximately 90 minutes in length and may be presented sequentially or on a continuing basis, with participants rotating through each in any order.

**Audience:** Urban and minority youth, 10 to 14 years of age.

**Goals:** *WOW on the Water* is especially important because water is a traditional magnet for outdoor recreation and leisure activities. Basic safety information and introduction to recreational activities will produce life-long benefits to individuals and society.

**Curriculum:** The *WOW on the Water* Curriculum/Program Manual contains water-related activities and lessons for each core element. They are suitable for various locations and can be modified, extended, or revised as needed. They were developed by a team of environmental education professionals.

**Requirements:** Requirements for *WOW on the Water* operations resemble those for *WOW*'s camping program, and it is expected that many *WOW on the Water* programs will utilize volunteers, staff and equipment from *WOW*'s camping program. Materials needed to plan and promote an event are available from the *Take Me Fishing* website at http://www.nationalfishingandboatingweek.org.

**Background:** *WOW on the Water* was inaugurated in Washington, D.C., during Great Outdoors Week 2002. Several hundred inner city kids were introduced to canoeing and fishing and had a fun lesson in aquatic science on the Anacostia River. Since then, the program has attracted the attention of potential partners and cities across the country.

Additional *WOW on the Water* events have taken place at Lake Mead, utilizing the Outside Las Vegas Foundation's Forever Earth partnership, and as part of Great Outdoors Week 2003. Each has included hands-on research regarding water quality and fisheries, fun physical activities, and an on-the-water activities fair.

## Typical *WOW on the Water* Schedule

**8:30 am** **Registration and T-shirt hand-out**

**9:00 am** **Welcome and program overview**

**9:10 am** **Session 1:**
**Module 1: Water Safety and Awareness**

**10:00 am** **Break**

**10:15 am** **Session 2:**
**Module 2: Passport to Fishing and Boating**
**Module 3: I Didn't Know Water Did That!**
**Module 4: A Boating Adventure**

**11:45 am** **Lunch break**
**Optional Module: Money Down the Drain**

**12:15 pm** **Session 2:**
**Module 2: Passport to Fishing and Boating**
**Module 3: I Didn't Know Water Did That!**
**Module 4: A Boating Adventure**

**1:45 pm** **Break**

**2:00 pm** **Session 2:**
**Module 2: Passport to Fishing and Boating**
**Module 3: I Didn't Know Water Did That!**
**Module 4: A Boating Adventure**

**3:30 pm** **Final Gathering**

**3:45 pm** **End of *WOW on the Water* Session**

# Module 1: Water Safety and Awareness

Water Safety and Awareness provides the basic foundation for a safe, fun and enjoyable day on or near the water. The information in this session is **critically important** and must be shared before anyone participates in a water-based activity such as boating.

Although this session has no lesson plan or curriculum, it is important to cover all the material presented below. This session should take approximately 50 minutes to properly address safety concerns about water. We encourage you to develop activities that youth can participate in such as a guessing game, charades, tossing dice, or another activity appropriate to positively convey safety messages.

The information below, used by permission of the American National Red Cross, can be duplicated and used as hand-outs.

## GENERAL WATER SAFETY TIPS

- Learn to swim. The best thing anyone can do to stay safe in and around the water is to learn to swim. Always swim with a buddy; never swim alone. The American Red Cross has swimming courses for people of any age and swimming ability.

- Swim in supervised areas only.

- Obey all rules and posted signs.

- Watch out for the "dangerous too's"— too tired, too cold, too far from safety, too much sun, too much strenuous activity.
- Don't mix alcohol and swimming. Alcohol impairs your judgment, balance, and coordination, affects your swimming and diving skills, and reduces your body's ability to stay warm.
- Pay attention to local weather conditions and forecasts. Stop swimming at the first indication of bad weather.
- Know how to prevent, recognize, and respond to emergencies.

## BEACH

- Protect your skin. Sunlight contains two kinds of UV rays — UVA increases the risk of skin cancer, skin aging, and other skin diseases. UVB causes sunburn and can lead to skin cancer. Limit the amount of direct sunlight you receive between 10:00 a.m. and 4:00 p.m. and wear a sunscreen with a sun protection factor containing a high rating such as 15.

- Drink plenty of water regularly and often even if you do not feel thirsty. Your body needs water to keep cool. Avoid drinks with caffeine or other substances in them that can make the heat's effects on your body worse.
- Watch for signs of heat stroke. Heat stroke is life-threatening. The victim's temperature control system, which produces sweating to cool the body, stops working. The body temperature can rise so high that brain damage and death may result if the body is not cooled quickly. Signals include: hot, red, and dry skin; changes in consciousness; rapid, weak pulse; and rapid, shallow breathing. Call 911 or your local EMS number. Move the person to a cooler place. Quickly cool the body by wrapping wet sheets around the body and fan it. If you have ice packs or cold packs, place them on each of the victim's wrists and ankles, in the armpits and on the neck to cool the large blood vessels. Watch for signals of breathing problems and make sure the airway is clear. Keep the person lying down.
- Wear eye protection. Sunglasses are like sunscreen for your eyes and protect against damage that can occur from UV rays. Be sure to wear sunglasses with labels that indicate that they absorb at least 90 percent of UV sunlight.
- Wear foot protection. Many times, people's feet can get burned from the sand or cut from glass in the sand.

## BOATING

- Learn to swim. The best thing anyone can do to stay safe in and around the water is to learn to swim. This includes anyone participating in any boating activity. The American Red Cross has swimming courses for people of any age and swimming ability.
- Alcohol and boating don't mix. Alcohol impairs your judgment, balance, and coordination — over 50 percent of drownings result from boating incidents involving alcohol. For the same reasons it is dangerous to operate an automobile while under the influence of alcohol, people should not operate a boat while drinking alcohol.
- Look for the label. Use Coast Guard-approved life jackets for yourself and your passengers when boating and fishing.
- Develop a float plan. Anytime you go out in a boat, give a responsible person details about where you will be and how long you will be gone. This is important because if the boat is delayed because of an emergency, becomes lost, or encounters other problems, you want help to be able to reach you.

- Find a boating course in your area (Red Cross, U.S. Power Squadron, the U.S. Coast Guard Auxiliary, US Sailing, etc.). These courses teach about navigation rules, emergency procedures and the effects of wind, water conditions, and weather.
- Watch the weather. Know local weather conditions and prepare for electrical storms. Watch local news programs. Stop boating as soon as you see or hear a storm.

## KEEPING CHILDREN SAFE IN, ON AND AROUND WATER

- Maintain constant supervision. Watch children around any water environment (pool, stream, lake, tub, toilet, bucket of water), no matter what skills your child has acquired and no matter how shallow the water.
- Don't rely on substitutes. The use of flotation devices and inflatable toys cannot replace parental supervision. Such devices could suddenly shift position, lose air, or slip out from underneath, leaving the child in a dangerous situation.
- Enroll children in a water safety course or *Learn to Swim* program. Your decision to provide your child with an early aquatic experience is a gift that will have infinite rewards. These courses encourage safe practices.
- Parents should take a CPR course. Knowing these skills can be important around the water and you will expand your capabilities in providing care for your child. You can contact your local Red Cross to enroll in a CPR for Infants and Child course.

## LAKES AND RIVERS

- Learn to swim. The best thing anyone can do to stay safe in and around the water is to learn to swim — this includes adults and children. The American Red Cross has swimming courses for people of any age and swimming ability.
- Select a supervised area. A trained lifeguard who can help in an emergency is the best safety factor. Even good swimmers can have an unexpected medical emergency in the water. Never swim alone.
- Select an area that is clean and well maintained. A clean bathhouse, clean restrooms, and a litter-free environment show the management's concern for your health and safety.
- Select an area that has good water quality and safe natural conditions. Murky water, hidden underwater objects, unexpected drop-offs, and aquatic plant life are hazards. Water pollution can cause health problems for swimmers. Strong tides, big waves, and currents can turn an event that began as fun into a tragedy.

- Make sure the water is deep enough before entering headfirst. Too many swimmers are seriously injured every year by entering headfirst into water that is too shallow. A feet first entry is much safer than diving.
- Be sure rafts and docks are in good condition. A well-run open-water facility maintains its rafts and docks in good condition, with no loose boards or exposed nails. Never swim under a raft or dock. Always look before jumping off a dock or raft to be sure no one is in the way.
- Avoid drainage ditches and arroyos. Drainage ditches and arroyos for water run-off are not good places for swimming or playing in the water. After heavy rains, they can quickly change into raging rivers that can easily take a human life. Even the strongest swimmers are no match for the power of the water. Fast water and debris in the current make ditches and arroyos very dangerous.

## OCEAN SAFETY

- Learn to swim. The best thing anyone can do to stay safe in and around the water is to learn to swim — this includes adults and children. The American Red Cross has swimming courses for people of any age and swimming ability.
- Stay within the designated swimming area, ideally within the visibility of a lifeguard.
- **Never** swim alone.
- Check the surf conditions **before** you enter the water. Check to see if a warning flag is up or check with a lifeguard for water conditions, beach conditions, or any potential hazards.
- Stay away from piers, pilings, and diving platforms when in the water.
- Keep a lookout for aquatic life. Water plants and animals may be dangerous. Avoid patches of plants. Leave animals alone.
- Make sure you always have enough energy to swim back to shore.
- Don't try to swim against a current if caught in one. Swim gradually out of the current, by swimming across it.

## WATERPARKS SAFETY

- Learn to swim. The best thing anyone can do to stay safe in and around the water is to learn to swim — this includes adults and children. The American Red Cross has swimming courses for people of any age and swimming ability.

- Be sure the area is well supervised by lifeguards before you or others in your group enter the water.
- Read all posted signs. Follow the rules and directions given by lifeguards. Ask questions if you are not sure about a correct procedure.
- When you go from one attraction to another, note that the water depth may be different and that the attraction should be used in a different way.
- Before you start down a water slide, get in the correct position — face up and feet first.
- Some facilities provide life jackets at no charge. If you cannot swim, wear a Coast Guard-approved life jacket. Check others in your group as well.



# Module 2: Passport to Fishing and Boating

The Passport to Fishing and Boating Program is an introduction to a lifetime of recreation. No previous fishing and boating experience is required. By participating in the program, participants have fun while learning basic skills and needed techniques. The Passport Program includes strong stewardship messages as part of each learning activity. While summary information on the Passport Program follows, up-to-date, detailed information on planning a Passport to Fishing and Boating program can be found at http://www.nationalfishingandboatingweek.org/passport/.

## Passport Program

Six different "hands-on" stations with activities focused on fishing, boating and aquatic stewardship have been developed. The program is designed to give participants the chance to be actively involved in each of the activities. Studies show that information is remembered better when participants physically do things and actively think about the activity compared to when they listen to a lecture on the same material.

Six groups of about 10 people each rotate between the six stations, accommodating a total of 60 people at one time. Stations may be completed in any order. Reading levels and activities are designed for 4th graders, about age 10.

The program takes about 90 minutes for participants to rotate through all six stations. Each station takes approximately 15 minutes.

The program is designed so that lay volunteers can conduct the station activities. A ratio of one volunteer per 10 participants is recommended, allowing for optimal learning experiences for both participants and volunteers. In addition, it is recommended that an adult (or older student) serve as a "group guide" for each group of students.

Passport to Fishing and Boating is a simple, effective and inexpensive program designed to be:

- Easily used and easily understood
- Delivered by lay volunteers
- Hands-on and interactive learning
- Easily adapted to diverse settings, whether at the water's edge or where fishing and boating options are not immediately available.

## Passport Stations

The six stations are rotational, may be accomplished in any order and include:

- Fish Habitat and Handling
  Building a watershed and habitat helps participants understand how to promote healthy places to fish and boat. As part of this activity the participants also learn where to look for fish in the habitat. The second section is about the parts of a fish, how to handle a fish, and how to safely release fish you do not want to keep.

- Fishing Knots and Rigging
  Learning the Palomar Knot by first observing how it is tied, then tying it at the same time as the instructor, then tying a hook to the fishing line, is part of the rig building activity in this station. Also covered are crushing the barb on the hook, and attaching a splitshot and bobber to the line. Looking at various baits, lures and flies completes this activity.

- Boat Smart, Boat Safe
  Oh no, we forgot to make our boat safe! On a virtual boat ride, a scramble for life jackets results in a lesson about the importance of wearing a life jacket and the way to select the proper one to wear. The second activity gives participants a chance to practice some rescue techniques through Reach, Throw, Row, and Go.

- Ready, Set, Boat
  This boating basics station allows participants to see themselves boating using cards illustrating boating activities in a special game of charades. With the second activity the group figures out how to load a boat and what essential items to take with them.

- Casting
  Learning how to cast is so much fun. Participants receive instruction in safety and then get their hands on a rod and push button spincast reel for some practical learning and practice casting at targets. Participants also practice casting sitting down and in close quarters, like the casting that would be experienced on a small boat.

- Local Information
  Rules for fishing and boating vary greatly from state to state. This station explores how to find out what the rules and regulations are in your state, touches on fish identification, and helps participants find places to fish and boat. This station also offers time for you, as the Event Host, to customize the program to your needs by adding important local information and a presentation about special practices and activities in your region.

# Module 3: I Didn't Know Water Did That!

I Didn't Know Water Did That offers simple activities and discussions that will provide students a better understanding of water in their everyday world. These educational activities address health, resource stewardship, the water cycle and water safety. The module is divided into four stations that will each take approximately 20 minutes. If this module is used in conjunction with Passport to Fishing and Boating, volunteers may want to coordinate with the Passport to Fishing and Boating volunteers. Students should be broken down into smaller groups and rotated through the four stations.

The module is designed so that lay volunteers can conduct the station activities. Stations may be completed in any order.

For more information on each of these activities, visit the Project WET website at http://www.projectwet.org/.

## Stations 1 and 2: Water, Water Everywhere!

**1. "AQUA BODIES"** (Adapted from *Project WET Curriculum and Activity Guide*, pg. 69)

Bodies of most living organisms are at least 50 percent water. Do students think humans have water in their bodies? Have students guess what percentage of their bodies is made up of water. Explain that the percentage of water in their bodies is approximately 70 percent!

**Activity**

Supplies needed:

• Butcher paper, crayons, calculators, paper and pencils

Procedure:

• Have students get in groups of four or five. Choose one of the group members as the person to be traced. The rest of the group will trace the body shape of that individual onto the butcher paper.

• Explain to students again that the human body is composed of about 70 percent water. Using crayons, have the students color about 70 percent of the figure that they have traced onto the paper all one color. Using a contrasting color, have the students color the rest of the body. Discuss how essential water is to our bodies.

• Ask students to calculate the approximate amount of water in their bodies. Use the following formula:

Body weight x 0.70 = amount of water

EX: 100lbs x 0.70 = 70lbs of water

• Containers can then be filled to demonstrate how much water is in their bodies. Call on a few students to tell the group how much water is in their body and hold up containers for children to visualize:

> 1 gallon of water weighs 8.3 pounds. Using the example of body weight as 100, we can therefore calculate that about 8.4 gallons of water are inside that individual:
> 70lbs x 1 gallon/8.3lbs = 8.4 gallons.

Discuss:

• Present the following situation to the students: Two people are stranded in a desert. One person has a basket of food including canned meats, bread, cake, etc. — enough to last a month. The other has only a one month's supply of water. Which of the two will survive longer? Compare how long we can go without food (about a month) to how long we can go without water (about three days).

Conclusion:

• Our bodies are about 70 percent water. If humans lose more than eight percent of their body water, they will die. What happens if humans fall slightly below the 70 percent mark? Explain dehydration and preventative measures.

**2. "FOODS ARE MADE OF WATER, TOO!"** (Adapted from *Project WET Curriculum and Activity Guide*, pg. 69)

Food is also made of water. Some foods have a higher percentage of water than others. Use this activity to compare the amount of water in various foods.

**Activity**

Supplies needed:

• Banana, grapes, oranges, carrots, tomatoes, lettuce, potato chips, cutting knife

Procedure:

• Hold up each food item one by one and have the kids guess what percent of it is composed of water.

| | | |
|---|---|---|
| Banana | — | 74% |
| Grapes | — | 81% |
| Orange | — | 87% |
| Tomato | — | 94% |
| Lettuce | — | 96% |
| Potato Chips | — | 2% water |

Discuss:

• Display a variety of foods (fruits, vegetables, junk food, etc.). Explain that just as humans are composed of about 70 percent water, plants and animals are as well. Whether you are investigating a desert plant, such as a cactus which is 90 percent composed of water, or an ocean animal, organisms are able to acquire and maintain a healthy water balance. Demonstrate the percentage of water that a carrot is composed of — 88 percent. Hold up a whole carrot and cut off about 88 percent of it. This part of the carrot represents the amount of water in the individual carrot. Ask the kids if they know why water didn't come pouring out when you cut it. Or, for that matter, why water doesn't pour out of our mouth, nostrils, ears. Explain that water is not loosely sloshing throughout organisms. In humans, about 67 percent of the water in the body is located within our cells; about 25 percent is located between our cells; and the rest, about eight percent, is located in our blood. In plants, similarly, the water stays within tissues and cells and this is why water does not pour out.

Conclusion:

• Because we humans need to have about 70 percent of our bodies made out of water, it is essential that we eat healthy foods that are also high in water percentage, therefore keeping us hydrated and healthy.

## Station 3: Dirty Water

**"DILUTION OF POLLUTANTS"** (Adapted from *Project WET Curriculum and Activity Guide*, pg. 316)

The water that we drink has been treated to be clean. Drinking water standards are set so that we, the consumers, are able to trust that the water is clean and drinkable. Ask questions to help students understand standards. What other standards exist in the world? Do your parents set standards for your room to be clean? Academic standards? What is the importance of setting standards? This demonstration illustrates how polluted water requires more energy for treatment to meet standards than cleaner water and why it is essential that we all do our part in keeping water as clean as possible. Ask the students if they can think of any ways that they can personally keep water from becoming extremely polluted.

**Activity**

Supplies needed:

• Four 100 ml containers, water mixed with coloring, clean water and a dropper

Procedure:

• Show students a glass of clean water — do not tell them that it is clean. Ask them if they think the water is safe to drink. Why or why not? Why would you drink water from a faucet and not a local stream or river?

• Have four clear containers with 90 ml water in each. (Or equal amounts.)

• To Container #1, add 10 ml of food coloring. Tell the students that the coloring represents pollution. Ask the students whether they would drink the solution. Why or why not?

• To Container #2, add 10 ml of the solution in Container #1. Ask the students whether they would drink the solution. Why or why not?

• To Container #3, add 10 ml of the solution in Container #2. Ask the students whether they would drink the solution. Why or why not?

• To Container #4, add 10 ml of the solution in Container #3. Ask the students whether they would drink the solution. Why or why not?

Discuss:

• Have students comment on the decrease in coloring present in the containers. Explain that in the following:

In container #1, 1/10 of the water is polluted
In container #2, 1/100 of the water is polluted
In container #3, 1/1,000 of the water is polluted
In container #4, 1/10,000 of the water is polluted

• Remind students that although dilution is a method of reducing the concentration of a pollutant within a sample, to ensure the water is safe enough to drink, other forms of treatment are necessary. Ask students again why setting standards for water sanitation is necessary: to avoid disease, protect water sources, etc. In order for water to be safe enough for us to drink, it is essential that the water is filtered to allow sediments to settle. Additionally, disinfectants added to the water, such as chlorine, kill bacteria and other germs. Water treatment centers obtain the water that they treat from reservoirs, rivers and from the ground.

• Ask students more questions. Why is water pollution so detrimental to our environment? What measures can you personally take to reduce your role in polluting water?

• Ask students to think about how polluted water would affect plants and animals. Unlike humans, plants and animals do not have the option of treating the water in which they live. As water quality in a river or

lake decreases, plant and animal life also changes. Most fish and wildlife species have a range of tolerance within which they can survive. For example, if a fish is adapted to living in a cool, clear, shallow stream and feeds on insects, changes affecting these stream characteristics will affect the survival of the fish.

Conclusion:

Contaminants can enter the water cycle in numerous ways. It's our responsibility and to our advantage to dispose of harmful contaminants. Not all contaminants have an odor. They can go undetected in a drinking water supply if it is not regularly tested and cleaned. Encourage the students to talk to their parents and other adults about taking steps in the community to avoid ground water contamination from storage tanks, septic tank systems, chemical landfills or wastewater disposal ponds. These efforts will assist in keeping drinking water clean and useable.

## Station 4: Water Management

**"THE THUNDERSTORM"** (Adapted from *Project WET Curriculum and Activity Guide*, pg. 132)

Thunderstorms are one of nature's most spectacular phenomena and are common throughout the country. The purpose of this exercise is to learn about the importance of measuring rainfall during thunderstorms so that watershed managers may predict and prepare for possible flooding when thunderstorms produce a large amount of rain in a short period of time. On the other hand, if rainfall is scarce, a water shortage may result and water managers may have to ask people to conserve water. This activity will require students to work cooperatively to mimic the sounds of a thunderstorm. What results from a thunderstorm and how does it affect the students?

**Activity**

Supplies needed:

None

Procedure:

• Ask students to stand in a semicircle (or circle) around you.

• Explain that when you make eye contact with the student/point to the student, he or she should imitate the motion that you are performing. The student should continue that motion until you make eye contact with/point at the student and tell them to start a different motion. Tell the students that they are not to keep a steady beat with their motion.

• Start with a student and walk slowly around the circle, making eye contact as you pass students and begin the first motion. When you get back to the first person, change your motion and continue to walk slowly, motioning for students to change their motion as you pass. Continue walking in a circle. The motions proceed in this order:

-rub your hands together
-snap your fingers
-slap your hands on your knees
-stomp your feet while slapping your hands on your knees
-slap your hands on your knees
-snap your fingers
-rub your hands together
-silence

Discuss:

• What is the importance of monitoring rainfall and precipitation that occurs from thunderstorms?

• Why is monitoring and anticipating spring runoff important for water managers and basin planning?

• How might runoff affect a river, lake or stream in your area. In other parts of the country?

• What could you and your parents do in your home to use less water?

Conclusion

• It's important to monitor the amount of precipitation released by a thunderstorm. Measuring can help water managers predict possible shortages, excess or normal water years. Knowing and understanding the effects of a thunderstorm can better prepare students if they are in a thunderstorm.

## Wrap-Up Activity: The Reclamation Water Wheel

Originally designed for the Bureau of Reclamation, the Water Wheel was created as a way to encourage youth to learn about water related issues and to demonstrate what they have learned.


Group division is not necessary for this activity; however, organizing how participants will approach the wheel and in what order is essential. Keep in mind that timing with other modules is necessary and may require advanced planning among volunteer instructors. Additionally, the questions that have been provided are simple, so any volunteer can assist and take charge of the event.

Rather than using a typical wheel device, such as the one pictured on the previous page, the Water Wheel concept can be adapted into other forms that are easier to assemble or move. For example, cards, dice, matching games, numbered boards or even a drawing on the ground that you develop with chalk can be used to teach the game. Ultimately, organize the game so that it is fun and easy for you and participants.

**Activity**

Supplies needed:

• Should be predetermined and based on your location and needs. Prizes should relate to the day's activities or water education.

Procedure:

• Each participant gets a chance to spin the wheel. The wheel spins with the pointer ending up on a number on the wheel — or in the Reclamation version, the spinner can also land on a duck. If the participant spins a number, he or she must answer a question that corresponds to that number section. For example: the participant spins the wheel and lands on #5. The volunteer instructor then gives the participant a corresponding #5 question from the list. If the participant answers the question correctly, then he or she will win a prize. Participants lucky enough to land on a duck will receive a prize although they should still be encouraged to answer a question. Group discussion should follow once the question has been answered.

Sample questions have been provided; however, we encourage you to develop your own set of questions that are tailored to your event. Utilize the *Additional Resources* section of this packet to assist you further in your question development.

Discuss:

• Discuss the issues related to the question with the group of students and how they can best incorporate them into their water related activities.

Conclusion:

• Water safety is important and can be fun. Knowledge about water safety, conservation and best water practices is simple to incorporate into everyday living.

## Water Wheel Questions

The following questions can be used for possible inclusion in your Water Wheel activity. The *Additional Resources* section of this packet lists supplementary websites where water questions and facts can be accessed. Development of alternative questions is encouraged. Questions should be tailored to your event.

**# 1. What is the proper way to help someone who falls in the water?**

a. Swim to them.
b. Throw a floatable object.**
c. Laugh at them.

(Discuss the importance of not going into the water to help someone. The person in trouble could panic and grab the rescuer, dragging them underwater, too. Practice the rule of dropping — i.e., lying down (not sitting or bending over) and reaching to help the person in distress or throwing something floatable. If you just bend down and offer a hand, you could become off balance and fall into the water yourself.)

**# 1. What do you do if the weather turns bad while you are in or on the water?**

a. Keep on playing.
b. Put on a raincoat over your lifejacket.
c. Find shelter and stay indoors.**

(Discuss the importance of seeking shelter from bad weather. Lightning could strike you and electrocute you. High winds could cause your boat or canoe to turn over. Flying objects could hit you, knocking you unconscious.)

**# 1. Before jumping off a dock or raft into the water, you should always _____:**

a. Wave.
b. Look.**
c. Wink.

(Discuss the importance of always looking before you leap. You could jump on someone who is already in the water, causing them harm, or there could be a submerged item — such as a tree stump or dumped car body — and you could hurt yourself, maybe even kill yourself; other boaters might not see you and you would risk getting run over.)

**# 1. Only water your lawn when it is _____:**

a. Thirsty.**
b. Newly mown.
c. Full of weeds.

(Discuss good water conservation practices, such as making sure that the sprinkler is placed where it is watering the grass and not the street, pavement, etc. Only water in the evening after the sun has gone down to prevent loss of water through evaporation.)

**# 2. Which item will keep your head above water if you fall in?**

a. Chair
b. Lifejacket**
c. UFO

(Discuss the importance of wearing a lifejacket when on or near water, whether you are fishing or swimming or boating. A child can drown in less than two minutes. Don't rely on water toys (such as beach balls) and flotation devices (such as "water wings") to prevent you from drowning. You should depend only on a certified Personal Flotation Device for safety.)

**# 2. If your _____ are still clean, you should wear them again.**

a. Eyeglasses
b. Clothes**
c. Hats

(Discuss good water conservation practices such as not washing clothes until you have a full load — the same for the dishwasher.)

**# 2. Don't use this as a wastebasket:**

a. Toy box
b. Toilet**
c. Car

(Discuss good water conservation practices like throwing tissues in a wastebasket because using the toilet as a wastebasket is just wasting water.)

**# 2. Water left in buckets, wading pools, bathtubs, toilets, etc., can be dangerous to** toddlers.

a. True**
b. False

(Discuss the dangers of leaving bathroom doors open, toilet seats up, mop buckets out and un-emptied ice chests open with melted ice. A toddler can drown in less than an inch of water. For example, a drowning can occur if a toddler bends over an open container with liquid, falls in head first, and is not strong enough to lift himself out.)

**# 3. Instead of running the faucet until the water gets cool, keep a container of water in the _____.**

a. Stove
b. Refrigerator**
c. Garden

(Discuss good water conservation practices. Explain that water is being wasted when you run the faucet until the water becomes cool.)

**# 3. You should always swim with a _____.**

a. Pet
b. Innertube
c. Buddy**

(Discuss water and swimming safety practices. It is important to always swim with a friend because if one of them gets in trouble, then the other one can run for help. Most important, though, discuss that a child should never swim or be around water without adult supervision.)

**# 3. If you own a pool, you should learn _____.**

a. CPR**
b. Water Sports
c. Diving

(Discuss the importance of knowing life-saving techniques. Most drownings occur in the family pool. Keep on hand life-saving equipment, know how to use the equipment and always have a phone by the pool. Call 911 for help and keep other emergency numbers on hand, too.)

**# 3. What should you throw to someone in the water who is having trouble swimming?**

a. Baseball
b. Rock
c. Life Ring**

(Discuss the importance of knowing life-saving techniques. Most drownings occur in the family pool. Keep on hand life-saving equipment, know how to use the equipment and always have a phone by the pool. Call 911 for help and keep other emergency numbers on hand, too.)

**# 4. What are the only safe and dependable flotation devices?**

a. Water Wings
b. Lifejackets**
c. Flippers

(Discuss the importance of wearing a lifejacket when on or near water, whether you are fishing or swimming or boating. A child can drown in less than two minutes. Don't rely on water toys (such as beach balls) and flotation devices (such as "water wings") to prevent you from drowning. You should depend only on a certified Personal Flotation Device for safety.)

**# 4. Avoid using sprinklers that spray a fine mist, which increases:**

a. Evaporation**
b. Sleepiness
c. Rain Clouds

(Discuss good water conservation practices, such as making sure that the sprinkler is placed where it is watering the grass and not the street, pavement, etc. Only water in the evening after the sun has gone down to prevent loss of water through evaporation.)

**# 4. Make sure the _____ is full before using it.**

a. Dishwasher**
b. Horse
c. Purse

(Discuss good water conservation practices such as not washing clothes until you have a full load — the same for the dishwasher.)

**# 4. Remember, even good swimmers can _____.**

a. Do the belly flop
b. Drown**
c. Scuba Dive

(Discuss the importance of not becoming over-confident of your own swimming abilities. Factors such as being overtired, being cold, poor weather conditions, etc., can affect your ability to swim.)

**# 5. When is it safe to swim in a canal?**

a. When you're with a bunch of friends.
b. When your dog is with you.
c. NEVER.**

(Discuss the fact that canals are dangerous and deceiving to the eye. The water under the surface is rapid, the sides are slick and steep, and there are very few hand-holds or ladders in which to help a person get out. It's also against the law. The water is filthy and full of pesticides from agricultural runoff.)

**# 5. Only dive from _____.**

a. Diving Boards**
b. Skateboards
c. Bridges

(Discuss the importance of diving in designated areas only. Bridges are dangerous and it is against the law to dive from them. You never know what might be below the surface: a tree stump, a discarded car body or refrigerator, and/or shallow water depth could all cause bodily danger, even death.)

**# 5. Clean cement driveways and sidewalks with a _____ instead of a hose to conserve water.**

a. Rake
b. Broom**
c. Shovel

(Discuss good water conservation practices such as sweeping the driveway instead of wasting water to wash it off or using a bucket filled with soap and water to wash the car instead of leaving the hose running.)

**# 5. What should you wear when you are in a boat or around water?**

a. Blue Jeans
b. Shorts
c. Life Jacket**

(Discuss the fact that even though you might have strong swimming skills, factors like being over-tired, having had too much sun, etc., can affect those skills. It is always wise to wear a life jacket when on the water.)

**# 6. Before going swimming, you should first _____.**

a. Eat a big meal.
b. Learn to swim.**
c. Put on suntan lotion.

(Discuss that suntan lotion or sun block is important, but none of those items would do you any good if you didn't first know how to swim when you are around or on water — lotion cannot prevent drowning!)

**# 6. To save water, you should do what when brushing your teeth?**

a. Turn off the faucet.**
b. Run the air-conditioner.
c. Take a shower at the same time.

(Discuss good water conservation practices such as not washing clothes until you have a full load — the same for the dishwasher. Don't waste good water down the drain — if you get a glass of water and don't drink it all, instead of dumping the leftover water, water a plant instead.)

**# 6. If you need help in the water, relax, float, and signal for help.**

a. True**
b. False

(Discuss the importance of not becoming panicked, but instead, to relax, to roll over on your back and float and signal or yell for help.)

**# 6. Be water smart! If in doubt, stay out of the water.**

a. True**
b. False

(Discuss the rule: <u>If you don't know, don't go!</u>)

**# 7. Don't try to rescue someone by yourself, get help or call 911.**

a. True**
b. False

(Discuss running or calling for help. Never get into the water to go after a person in distress — both of you could then be in trouble.)

**# 7. Always enter unfamiliar water _____.**

a. Head First
b. Feet First**
c. Backwards

(Discuss never diving into unknown waters. Only dive from a designated diving area where the depth is known; ease feet first into unfamiliar waters.)

**# 7. Do not _____ near docks, boats, and water skiers.**

a. Swim**
b. Drive
c. Eat

(Discuss swimming only in designated areas. Swimming where there is boating and skiing activities is dangerous — a swimmer risks getting run over.)

**# 7. There should always be an adult along when operating a motorboat. Why?**

a. To help in an emergency**
b. To hand out cookies

(Discuss that only a responsible adult who knows boating rules should operate a motorboat. In case of an accident or problem, the adult would know what to do.)

**# 8. Before riding on a boat, make sure everyone has on a PFD. Why?**

a. To make them look cool
b. To keep them safe**

**# 8. Why should people remain seated in a boat?**

a. If standing, you could hit a wave and fall overboard.
b. If you fall overboard, you could get hit by another boat.
c. Both A and B.**

**# 8. If your boat turns over, you should stay with the _____.**

a. Toys
b. Boat**

(Discuss that, if necessary, most boats can act as a flotation device until help arrives. The rule is to stay with the boat so rescuers can find you more easily.)

**# 8. If you see lightning, even if it was far away, and you are on or in the water, you should go back to _____.**

a. Shore**
b. School

(Discuss weather safety factors, such as high winds, electrocution, etc.)

**# 9. Obey the _____ of the pool.**

a. Rules**
b. Games
c. Owner

**# 9. Walk, don't run on the pool deck; it's slippery.**

a. True**
b. False

(Discuss the fact that "walk, don't run" is one of the rules of a pool. Not only is the pool deck slippery, but you could accidentally run into people, knock them down, push them in the pool, etc.)

**# 9. Always have a lifesaver near the pool, such as a hook, pole, or ring.**

a. True**
b. False

(Discuss that fact that having a lifesaver near the pool is one of the rules of a pool. Always be prepared, always have life-saving equipment on hand, know how to use the equipment.)

**# 9. Drowning is referred to as the "Silent Killer." Do you know why?**

a. Because when someone goes under water, they cannot call for help.
b. Drowning happens quickly and without warning. There is often no cry for help.
c. It's a myth that a drowning child will struggle or yell for help.
d. All of the above.**

**#10. Why is it important that you don't chew gum or eat while swimming?**

a. It is dangerous and you could easily choke.**
b. It's fattening.
c. It's bad manners to chew and swim at the same time.

**#10. Stay out of the water when you're:**

a. Too tired
b. Too overheated
c. Too cold
d. Too far from safety
e. All of the above**

(Discuss that all these are factors when it comes to water safety. Know your limits; quit before you reach them.)

**# 10. Never leave a child alone in or near the pool, even for a moment.**

a. True**
b. False

(Discuss how it takes as little as two minutes for a child to drown.)

**#11. Why should all toys be removed from the pool area after you have finished using the pool?**

a. Because it looks messy.
b. So children aren't tempted to reach for them and accidentally fall into the water.**

(Discuss that most children see only the toy, not the danger.)

**# 11. Many children drown in items or areas containing water found around the home, such as bathtubs, buckets and pails, ice chests with melted ice, toilets, hot tubs, irrigation ditches, fish ponds and fountains. Remember to:**

a. Empty all buckets, pails, and bathtubs after each use — do not leave them filled and unattended.
b. Keep bathroom doors closed.
c. Stay out of wells or irrigation and drainage ditches.
d. All of the above.**

**#11. Why is it important to stay out of canals?**

a. They are dangerous.
b. The swift current could pull you down, and you could drown.
c. It's against the law.
d. All of the above.**

# Module 4: A Boating Adventure

The boating adventure of a lifetime can begin today. Many youth have never been near a boat, much less in one. This unstructured session allows participants to become familiar with boats. In addition, it allows participants a "hands-on" opportunity.

How this 90-minute session is structured depends on the type of boat(s) you have available, volunteer instructors, and the number and age of participants. For information on planning this session, consult http://www.nationalfishingandboatingweek.org/planning_materials/eventplanning.cfm

# Optional Module: Money Down the Drain

(Adapted from *Project WET Curriculum and Activity Guide*, pg. 306)

Through observation and simple calculations, students learn that a dripping faucet wastes a valuable resource. In about a 30-minute period, you can illustrate and calculate the amount of water wasted by a dripping faucet.

**Activity**

Supplies needed:

• One gallon-sized milk jug of water and one empty gallon-sized milk jug to collect the water.

Procedure:

• Puncture a small hole in the bottom of the full gallon of water.

• For the time allotted for lunch, allow the water to drip into the empty container.

• When lunch is almost over, measure approximately how much water was wasted in only 30 minutes.

Discussion:

• Ask a series of questions. How many of the kids have leaking faucets at home? Do you think that a leaking faucet wastes a substantial amount of water? Why or why not? Explain that every drop of water leaking from a faucet is wasted water. To make up for that loss, water treatment centers are forced to treat more water to meet needs, thus making your water bill higher. So not only are you wasting water, you are wasting money!

For example, if a faucet leaks 100 gallons (380 liters) per day for 30 days, 3,000 gallons (11,400 liters) will be wasted. If the water bill is $3.50 per thousand gallons of water consumed, the leak will add $10.50 to the monthly bill. And if the water is heated, financial losses will be even greater.

Conclusion:

• Students should think about what they can do to prevent wasting water at home. Examples include turning off the faucet while brushing teeth, taking short showers and fixing leaking faucets.

# Additional Resources

The following resources can be used to complement any of the modules or activities that your group participates in. These resources also provide additional materials or direction that may be needed during the activities.

**American Recreation Coalition**
1225 New York Avenue, N.W., Suite 450
Washington, D.C. 20005-6405
(202) 682-9530; http://www.funoutdoors.com

**American Red Cross**
2025 E Street, N.W.
Washington, D.C. 20006
(202) 303-4498; http://www.redcross.org

**Bureau of Reclamation**
1849 C Street, N.W.
Washington, D.C. 20240
http://www.usbr.gov
To download or order the Otto the Otter Coloring Books
http://www.usbr.gov/pn/about/otto/otto.html

**Healthy Water, Healthy People**
This site can assist with Module 1 or with The Water Wheel
http://www.healthywater.org/resources.html

**National Fishing and Boating Week Resource Materials**
This site can be used in conjunction with Module 2
http://www.nationalfishingandboatingweek.org/resource_materials/tipsheets.cfm

**Project Wet**
1001 West Oak, Suite 210
Bozeman, MT 59715
Toll free: (866) 337-5486;(406) 585-5685
To access information on training and to access the Project WET Handbook
http://www.projectwet.org/

**Take Me Fishing Resources**
This site can be used in conjunction with Module 2
http://www.takemefishing.org/sponsorList.aspx

**Wonderful World of Aqua Smart**
This site can be utilized to assist with younger children
http://dbw.ca.gov/AquaSmart/html/kids_activity_books.html

**MEMORANDUM OF UNDERSTANDING**

**Among**

**THE WALT DISNEY COMPANY**

**And The**

**AMERICAN RECREATION COALITION**

**And The**

**UNITED STATES DEPARTMENT OF AGRICULTURE**
**Forest Service**
**Natural Resources Conservation Service**

**UNITED STATES DEPARTMENT OF THE ARMY**
**U.S. Army Corps of Engineers**

**UNITED STATES DEPARTMENT OF THE INTERIOR**
**Bureau of Land Management**
**Bureau of Reclamation**
**National Park Service**
**U.S. Fish and Wildlife Service**

**ENVIRONMENTAL PROTECTION AGENCY**

This Memorandum of Understanding (MOU) is made and entered into among The Walt Disney Company, a Delaware Corporation (hereinafter referred to as "TWDC"); and the American Recreation Coalition, a Washington-based, not-for-profit organization (hereafter referred to as "ARC"); and the United States Department of Agriculture, USDA Forest Service (hereinafter referred to as "FS") and Natural Resources Conservation Service (hereinafter referred to "NRCS"); United States Department of the Army, U.S. Army Corps of Engineers (hereinafter referred to as "COE"); United States Department of the Interior, Bureau of Land Management (hereinafter referred to as "BLM"), Bureau of Reclamation (hereinafter referred to as "BOR"), National Park Service (hereinafter referred to as "NPS"), and U.S. Fish and Wildlife Service (hereinafter referred to as "FWS"); and the Environmental Protection Agency (hereafter referred to as "EPA").

## I. PURPOSE

The purpose of this MOU is to establish a general framework for coordination and cooperation among the FS, NRCS, COE, BLM, BOR, FWS, NPS, EPA and TWDC and ARC.

This agreement will provide a foundation for the FS, NRCS, COE, BLM, BOR, FWS, NPS, EPA, and TWDC and ARC to work together in partnership on issues of common interest and to jointly plan and implement mutually beneficial programs and activities consistent with each organization's mission and objectives.

## II. BACKGROUND

FS is a land and resources management agency of the United Stated Department of Agriculture. FS is responsible for providing national leadership in forestry stewardship, conservation, research, and recreation.

NRCS is a national resources conservation agency in the United States Department of Agriculture. NRCS is responsible for providing national leadership and technical assistance on non-Federal and private lands in partnership with Conservation Districts and other State and local entities.

COE is an agency of the United States Department of the Army that plans, designs, builds, and operates water resources and other civil works projects in cooperation with other Federal and State agencies and local sponsors. These activities include: flood protection; navigation channel and harbor improvements and maintenance; and as the Nation's largest provider of water recreation, administration of almost 12 million acres of land and water in 43 States. The COE further performs military construction for the Army and Air Force and provides design and construction management support for other defense and Federal agencies. In addition, the COE conducts innovative research and development, furnishes emergency operations support in response to natural disasters, and executes a fast-growing environmental restoration program for the United States Department of Defense and the Environmental Protection Agency.

BLM is a land and resource management agency of the United States Department of the Interior. BLM is the Nation's largest land manager with administrative jurisdiction for over 264 million surface acres, primarily in the Western United States and Alaska, and an additional 570 million subsurface acres of mineral resources. Under its multiple use mandate, BLM manages these public lands and waters for a wide variety of resources and uses, including energy and minerals; timber; forage; wild horse and burro populations; fish and wildlife habitat; wilderness areas; archaeological, paleontological, and historic sites; recreation and visitor services; and other natural heritage values.

BOR is an agency of the United States Department of the Interior. BOR assists in sustaining the U.S. economy; improving the environment; and improving the quality of life in the 17 Western States by providing reliable supplies of water and energy. BOR's infrastructure of dams, hydroelectric power plants, and water conveyance facilities provide flood protection, fish and wildlife habitat, river regulation, water quality protection and improvement, and recreation.

FWS is an agency of the United States Department of the Interior. FWS is the lead Federal agency in the conservation of the Nation's migratory birds, threatened and endangered species, certain mammals, and sport fish. FWS manages over 500 national wildlife refuges, regulates the taking of migratory waterfowl, provides technical assistance to States and foreign governments, and administers fish and wildlife restoration grant programs to States and territorial governments.

NPS is an agency of the United States Department of the Interior. NPS preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of current and future generations. NPS cooperates with partners to extend the benefits of natural and cultural resources conservation and outdoor recreation throughout the United States and the world.

EPA's mission is to protect human health and to safeguard the natural environment – air, water, and land – upon which life depends. For 30 years, EPA has been working for a cleaner, healthier environment for the American people.

TWDC is a diversified, international entertainment company with operations in the following businesses: theme parks and resorts, film entertainment and broadcast media, and consumer products.

ARC is a Washington-based non-profit organization working at all levels to develop public/private partnerships to enhance and protect outdoor recreational opportunities and the resources upon which such experiences are based. ARC conducts research on a regular basis, organizes and conducts national conferences and meetings, and disseminates information through a variety of newsletters, columns, and other media regarding recreational needs and initiatives. ARC also monitors legislative and regulatory proposals that influence recreation and works with Federal agencies and the U.S. Congress to study public policy issues that will shape future recreational opportunities.

## III. STATEMENT OF MUTUAL BENEFITS

FS, NRCS, COE, BLM, BOR, FWS, NPS, and EPA are responsible for the management of Federal resources, lands, and waters, and are dedicated to the wise management of the Nation's national and cultural resources. These cooperating agencies are responsible for increasing the public's knowledge, awareness, use, enjoyment, and appreciation of these lands and resources and their management. These cooperating agencies also provide technical assistance to help insure the sustainable development and use of non-Federal lands.

TWDC is dedicated to integrating business needs with environmental values and concerns, and communicating the need to conserve resources to the public.

ARC is dedicated to the protection and enhancement of everyone's right to health and happiness through recreation.

FS, NRCS, COE, BLM, BOR, FWS, NPS, EPA and TWDC and ARC agree that it is to their mutual benefit to work cooperatively, whenever possible, on issues of common interest to promote public knowledge, awareness, and commitment to sustaining natural resources.

## IV. RESPONSIBILITIES

FS, NRCS, COE, BLM, BOR, FWS, NPS, EPA and TWDC and ARC agree to collaborate on the following projects to the extent allowed by each agency's statutory authority to:

- Work together to assess, plan, and implement activities that further the purpose of this MOU. Focus areas will include joint environmental education/interpretation efforts with an initial focus on meeting the needs of urban and disadvantaged youth.

- Explore avenues for conducting joint research on issues of common interest which emphasize a collaborative, community-based approach to natural resource management.

- As desirable and appropriate, exchange information and resource expertise on management of outdoor recreation and natural resource management issues.

- Explore avenues to share training opportunities and to cooperate in providing information to the public regarding opportunities for outdoor recreation on public lands and opportunities to assist in managing and protecting those public lands, including through volunteerism.

- As desirable and appropriate, exchange information and expertise on the Americans with Disabilities Act, including issues of universal access.

## V. IT IS MUTUALLY AGREED AND UNDERSTOOD BY AND AMONG THE PARTIES THAT:

1. All parties will meet periodically to assess, plan, problem solve, and implement strategies to improve the WOW - the Wonderful Outdoor World (WOW) program , and WOW On The Water – and any other programs contemplated by this MOU.

2. This MOU is neither a fiscal nor a funds obligation document. Any endeavor involving reimbursement or contribution of funds between or among the parties to this MOU will be handled in accordance with applicable laws, regulations, and procedures including those for Federal financial assistance, procurement, and printing. Such endeavors, if any, will be outlined in separate agreements that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate statutory authority. This MOU does not provide such authority. Specifically, this MOU does not establish authority for noncompetitive award to TWDC and/or ARC of any contract, grant, or other agreement.

3. Nothing in this agreement shall obligate the agencies or the United States to any current or future expenditure of resources in the absence or in advance of the availability of appropriations from Congress. None of the parties to this MOU will submit a claim to any other party for compensations for services rendered for activities undertaken in furtherance of this MOU.

4. This MOU in no way restricts FS, NRCS, COE, BLM, BOR, FWS, NPS, EPA or TWDC and ARC from participating in similar activities or arrangements with other public or private agencies, organizations, or individuals.

5. No member of, or Delegate to, Congress shall be admitted to any share of part of this MOU or any benefits that may arise from the execution of this MOU. This provision shall not be construed to extend to this MOU if made with a corporation for its general benefit.

6. This MOU may be modified or amended only upon written consent of all parties. Any party may, without affecting the rights and obligations of the other parties, except as hereafter provided, withdraw from this MOU upon giving thirty (30) days written notice. If TWDC and/or ARC however, should withdraw, this MOU shall terminate with all parties effective upon TWDC's and/or ARC's termination. Unless otherwise terminated, this MOU will remain in full force and effect until September 30, 2007, at which time it will be subject to renewal or expiration.

7. It is understood that none of the Federal agencies that are party to this agreement may endorse any product, service, or enterprise of TWDC or ARC. Therefore, TWDC and ARC will not publicize, or otherwise circulate promotional material which states or implies endorsement of a product, service, or position which TWCD and/or ARC represent. No release of information relating to this agreement may state or imply that any Federal agencies approve of TWDC's and/or ARC's work product or considers TWDC's and/or ARC's work products to be superior to other products or services.

8. FS, NRCS, COE, BLM, BOR, FWS, NPS, or EPA shall acquire no right under this MOU to use, and shall not use, the name TWDC or ARC; the name "Disney" (either alone or in conjunction with or as part of any other word, mark, or name); or any marks, fanciful characters, or designs of TWDC and/or ARC; or any of its other related, affiliated, or subsidiary companies in any of its advertising, publicity, or promotion; nor to express or imply any endorsement of the agencies; nor to use any of said names, characters, or designs in any other manner whatsoever.

9. TWDC and ARC shall acquire no right under this MOU to use, and shall not use, any shield, badge, or other symbol of any Federal agency that is a party to this agreement or to the characters of "Smokey Bear," "Woodsy Owl," or "Otto Otter," or the message (either alone or in conjunction with any part of any other word, mark, or name) in any advertising, publicity, or promotion, or in any manner whatsoever, without the proper written approval of any agency.

10. The parties to this agreement shall obtain prior approval of all press releases, published advertisements, or other statements intended for the public that refer to this agreement or to the parties thereto, or the name or title of any employee of the parties in connection with this agreement.

## VI. PRINCIPAL CONTACTS

To provide for consistent and effective communication between the parties to this MOU, each cooperator shall appoint a representative to discuss and consider activities that may be pursued under this MOU. The following persons will be the principal contacts for the purposes of this Agreement at the time of execution.

Kym Murphy
The Walt Disney Company

Derrick Crandall
American Recreation Coalition

Dave Holland/Jacqueline Leonard
USDA Forest Service

Rosann Durrah
Natural Resources Conservation Service

George Tabb
U.S. Army Corps of Engineers

Anthony Bobo/Michelle Dawson-Powell
Bureau of Land Management

Bruce Brown/Mollie Buckey
Bureau of Reclamation

Debbie McCrensky
U.S. Fish and Wildlife Service

Tom Ross/Bill Jones
National Park Service

Tom Basile
Environmental Protection Agency

## VII. SIGNATORIES

Kym Murphy, ~~Senior Vice President~~
Corporate Environmental Policy
The Walt Disney Company

06/18/03
Date

Derrick Crandall, President
American Recreation Coalition

APRIL 28, 2003
Date

Dale Bosworth, Chief
USDA Forest Service

4/30/03
Date

Bruce Knight, Chief
Natural Resources Conservation Service

6/4/03
Date

Kathleen Clarke, Director
Bureau of Land Management

April 9, 2003
Date

John W. Keys III, Commissioner
Bureau of Reclamation

APRIL 10, 2003
Date

Fran Mainella, Director
National Park Service

APR 16 2003
Date

General Flowers
U.S. Army Corps of Engineers

JUN 2 2003
Date

Steve Williams, Director
U.S. Fish and Wildlife Service

APR 14 2003
Date

Christine Todd-Whitman, Administrator
Environmental Protection Agency

JUNE 12, 2003
Date