

CANYON R.E.O. RIVER EQUIPMENT OUTFITTERS



Trip Leader's Handbook

Deluxe Outfitting Package
Canyon Gear Package
Food & Shuttle Package

1-800-637-4604
info@canyonreo.com

Dear Trip Leader,

Thank you for signing up with Canyon REO! We are here to make sure all your **group's needs are met and we hope to make your trip fun and easy.**

Feel free to call us with any questions or comments. Organizing a Grand Canyon trip is a big project and you will most likely have lots of questions. Please do not hesitate to communicate your needs and desires. We will have suggestions and information to help you make choices suitable to your trip.

This booklet contains a wealth of information that will help you plan your trip. You are welcome to copy any parts of this booklet and the accompanying material to share with your trip participants. While we are happy to get to know all of your group and welcome their questions and comments, we request that only the Trip Leader (or her/his designated proxy) communicate with us regarding logistics, finances and issues that affect the entire group.

The first few pages of this handbook contains "housekeeping" information, such as deadlines, suggested personal gear list and more.

The bulk of the handbook explains some of the systems we recommend in the Canyon, including ideas for distribution of chores. We understand that every river runner has spent time developing their own systems; you can use or discard as much of our information as you like. However, if your entire group is grounded in the same **systems before you get to Lee's Ferry, it will make your trip go more smoothly and diminish the Trip Leader's role as enforcer. We will present these same systems in our pre-trip orientation the day before your launch.**

The final section contains useful material on the Grand Canyon National Park, Flagstaff and northern Arizona. You will find information on hotels, campgrounds, transportation, stores, restaurants, and more.

Canyon REO also offers Club REO to our clients, which enables you and your group members access to special deals on equipment purchases. See the section titled *Club REO* for details.

We wish you a magical trip in the Grand Canyon!

Donnie Dove
Owner

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Important Dates

90 days prior to Put-In these are due:

- Permit and money due to NPS
- Earnest money from your trip participants

60 days prior to Put-In these are due:

- Menu Planner to Canyon REO
- 50% payment
- Club REO orders
- Logistics questionnaire

30 days prior to Put-In these are due:

- Final count on group size
- Final menu changes and request for Food Extras
- Vehicle shuttle reservation form
- Vehicle keys tagged with mandatory information
- Confirmation of launch-eve logistics

1 day prior to Put-In these are due:

- Final payment
- Confirmation of timing and logistics

1 day prior Schedule of Events:

- 9:00 a.m.: Group meets at Canyon REO
- 10:00 a.m.: Orientation
- **Noon: You're on your way to Lee's Ferry!** Lunch and vehicle storage will occur en route.

Personal Gear List for the Grand Canyon

Here is a list of items to consider for your trip...

CLOTHING

- 3 pairs shorts – fast drying
- 3 t-shirts
- 3 swim suits
- 1 pair lightweight pants
- 1 lightweight long-sleeved shirt
- 1 pair warm pants
- 1 medium-weight jacket or sweater
- 3 pairs socks
- Sturdy river sandals with ankle strap
- Wetsuit
- Sunhat
- Rain suit (not a poncho)
- Emergency warm outfit
- Shi-Tinge or lava lava (wrap-around cloth)

SLEEPING GEAR

- Medium-weight sleeping bag
- Sheet for hot nights
- Ground cloth
- Cot
- Sleep pad
- Tent

MISCELLANEOUS

- 1 small towel
- Toilet articles
- Biodegradable soap
- Sunglasses
- Sunscreen
- Moisturizer
- Bag Balm for rower's hands**
- Lip balm with sunblock
- 2 water bottles
- Small day or fanny pack
- Books, writing paper, pen
- Walkman, tapes, extra batteries
- Camera, film, extra batteries
- Stamps for postcards (mail from Phantom)
- Carabiners, rescue & safety gear
- Chair
- Flashlight with extra bulbs & batteries

For a winter trip consider these additional items...

- 3-6 pairs of wool socks
- 2 long-sleeved warm shirts
- 2 sets of poly long underwear
- Warm pair of pants
- Warm hat
- Warm jacket
- Wind shell
- Neoprene booties
- Dry suit with liner
- Winter-weight sleeping bag
- Tent – 3 to 4 season

All of your clothing and sleep gear (except tents) should fit in the one dry bag. We can also provide two dry bags for the group to use as communal tent bags. You may need to increase the number of dry bags for winter trips (generally November through March).

Guide Books & Maps to the Grand Canyon:

• RiverMaps – Guide to the Colorado River in the Grand Canyon – Lee's Ferry to South Cove by Duwain Whitis and Tom Martin: Mile by mile text describes campsites, rapids, geological formations, botanical and historical sites of interest. Water resistant, spiral bound and includes USGS topo maps.

• Belknap's Waterproof Grand Canyon River Guide: Topo map with in depth chapters on flora and fauna of the Canyon.

• Day Hikes from the River: by Tom Martin: The most comprehensive hiking guide to trails from the river with topo maps.

Grand Canyon Climates

Weather in the Grand Canyon is unpredictable. At any time of the year visitors should bring rain gear. In winter be prepared for cold, wet weather, and snow.

South Rim (elevation 7000 ft/2135 meters) is open all year. Summer Fahrenheit temperatures range from highs in the 80s to lows in the 50s. Expect afternoon thunderstorms from mid to late summer. Winter Fahrenheit temperatures range from highs in the 30s to lows well below zero. Snow may be expected from mid-November to April, with accumulated snow usually less than 2 feet deep. Late spring and fall are characterized by moderate temperatures.

North Rim (elevation 8000-9000 ft/2400-2743 meters) is open from late May through October, weather permitting. Summer temperatures average 3 to 5 degrees cooler than the South Rim, and afternoon rain is common in the late summer. During winter months, Hwy. 67 to the North Rim is closed to vehicles and no services are available; but snowshoeing and cross-country skiing are permitted. For winter access information, contact Grand Canyon Backcountry Office, PO Box 129, Grand Canyon, Arizona 86023.

The Inner Gorge, accessible only by foot, river or mule, is open all year from South Rim access points, but summer only from North Rim access points. Elevation at Phantom Ranch, on the Colorado River, is 2400 ft/732 meters. Summer temperatures range from highs in excess of 100 degrees to lows in the 70s. Winter temperatures range from the 30s to 50s. Snow is rare at the bottom, but rain is not uncommon, particularly in late summer. Expect cooler temperatures at the rim as you hike out. Late summer often brings heavy monsoon rains in the afternoon, while spring is known for windy afternoons.

Grand Canyon - Average Temperatures and Precipitation (Fahrenheit and Inches)

Month	<u>South Rim</u>			<u>North Rim</u>			<u>Inner Gorge</u>		
	Max	Min	Precip.	Max	Min	Precip.	Max	Min	Precip.
January	41	18	1.32	37	16	3.17	56	36	.68
February	45	21	1.55	39	18	3.22	62	42	.75
March	51	25	1.38	44	21	2.63	71	48	.79
April	60	32	.93	53	29	1.73	82	56	.47
May	70	39	.66	62	34	1.17	92	63	.36
June	81	41	.42	73	40	.86	101	72	.30
July	84	54	1.81	77	46	1.93	106	78	.84
August	82	53	2.25	75	45	2.85	103	75	1.40
September	76	47	1.56	69	39	1.99	97	69	.97
October	65	36	1.10	59	31	1.38	84	58	.65
November	52	27	.94	46	24	1.48	68	46	.43
December	43	20	1.62	40	20	2.83	57	37	.87

MAJOR FIRST AID

Trauma Kit # 1

Sawyer Extractor
Hypothermia Thermometer
Hyperthermia Thermometer
SAM splint
Wound Management Kit
Surgical Gloves-6ct
Tweezers

Bandage Kit # 1

Wilderness Medicine Guidebook
Band-aids-30ct
Moleskin-1 pad
4x4 Sterile Gauze Pads-10ct
3x4 Non-stick Pads-10ct
2" Roller bandages-2ct
3" Roller Bandages
4" Roller Bandages

Bandage Kit # 3

2" Elastic Bandages-2ct
3" Elastic Bandages-1ct
4" Elastic Bandages-1ct
Aquaphor Burn Dressings- 4
New Skin- 1 Bottle
Triangle Bandages-2ct
Oval Eye Patches-2ct

Drugstore Ointments

20 Triple Antibacterial Cream Packs
Calamine Lotion, 1 Bottle
Insect repellent, 1 Bottle
Betadine, 1 Bottle
10 Secta-Sooth Swabs
Sun Screen SPF 15, 1 bottle
Hydrocortisone Cream, 1 Tube
Hydrogen Peroxide, 8 oz.
Zinc Oxide Ointment, 1 Tube
Nupercainal Anaesthetic Ointment
Aloe-Vera Gel, 1 Tube

Trauma Kit # 2

Instant Ice Packs (2)
Space Blanket
CPR Microshield
EMT Scissors

Bandage Kit # 2

5x9 Heavy Trauma Pads- 2ct
First Aid Tape-2 ct
Tampons- 10 ct

Clean-up Kit

10 Alcohol Cleansing Pads
10 Povidone Iodine Pads
10 Benzalkonium Chloride Towlettes
Q-Tips, 1 Vial
10 Sponges, 4" x 4"

OTC Drugs

Visine, 1 Bottle
Aspirin, 10 packets
Tylenol, 10 packets
Ibuprofen, 20 packets
Antacid, 40 packets
5 Ammonia Inhalants
Chloraseptic Throat Lozenges
Imodium
Pink Bismuth
Antihistamine Pills

First Aid/ Emergency Items

On the preceding page is the list of contents in our major first-aid kit. Each Deluxe Outfitting Package receives 1 major first aid and a minor first aid on each raft. Our major first-aid does not include any pharmaceuticals; these should be provided by your group based on the medical and outdoors skill level of the participants. Following are some recommended items not provided by Canyon REO.

First Aid Items Not Provided But Recommended:

- Pain Reliever
- Antihistamine
- Solarcaine
- Benadryl syrup
- Kaopectate
- Blood Pressure Cuff
- Ibuprofen
- "Gookinaid" (electrolyte replacement)
- Aloe Vera gel
- Mineral oil
- Ear drops
- Stethoscope
- Antacid
- Oil of clove
- Zinc oxide/sun block
- Syrup of Ipecac
- Insect repellent

A Note About Hypothermia (Exposure)

Should someone fall in the river, even during summer, it is extremely important to get them out of the water as quickly as possible. After 5 minutes of floating in 50-degree water, muscular strength and coordination rapidly diminish. Generally after 10 to 15 minutes in the water, a person is totally unable to help themselves.

Emergency Box Contents

- Ground-to-Air Radio or Satellite Phone
- Air Force Signal Mirror
- Orange signal panels
- Pencil/note pad

Club REO: River Equipment at Guide Prices

Below is a partial list of available equipment. Here's the way it works:

1. Orders must be faxed or emailed at least 60 days prior to your put-in.
2. Minimum \$250.00 order per shipping address. Individuals can combine orders to meet minimum.
3. The items can be drop-shipped to each individual or shipped to our warehouse.
4. Actual shipping charges will be included on your invoice.
4. Sales tax applies to orders picked up at our warehouse or shipped to Arizona.

Some Items Available:

- Lifejackets
- Wet suits
- Paco pads
- River apparel
- T-shirts
- Hats
- Books
- Dry bags & boxes
- Kayaks
- Inflatable kayaks
- Paddles & oars
- Rescue & safety gear

Many used items are also available, call us at 800-637-4604

In December we order all our new rafts. If you are interested in purchasing a new raft please contact Donnie before December regarding pricing.

Canyon REO offers this program to trip leaders to say thank you for choosing our services. On occasion, we have had clients use Club REO to browbeat their local store into lower prices. We do not want to be a part of this, and will discontinue the service if we sense this practice is happening. If you are friends with your local store, please support them.

Trip Leader Orientation: Put-In & Take-Out

This section has a two-fold purpose: to discuss logistics for the beginning and the end of your trip, and to orient you to our recommended systems on the river. Many boaters have developed their own systems, which can be incorporated into this information, but reading this will give you a good understanding of how Canyon REO rigs your trip. The suggestions are intended to expedite kitchen and camp set-up and have been tested and evolved during our 30+ years of experience with private trips. If your group understands **this information before you leave Lee's Ferry, your life as a trip leader will be much more enjoyable.**

GRAND CANYON DELUXE OUTFITTING OR FSP PRE-TRIP PROCEDURES For Groups meeting in Flagstaff

ONE DAY PRIOR TO PUT-IN

9:00 am: **The group members arrive at Canyon REO's office.** You will pack your dry bags and help load all your gear onto the trailers. Canyon REO is happy to keep any luggage or personal gear not going down the river in a corner of our warehouse—at the owner's risk. **We can also put valuables in a Tyvek envelope sealed by the client and placed in an office cupboard. All items left at our warehouse need to be clearly labeled with the Trip Leader's name.**

Don't forget to keep your picture ID and some money handy. You must have your picture ID to show the ranger at Lee's Ferry and you may need money for Marble Canyon Lodge, Phantom Ranch, and the Take-Out.

Some trip leaders choose to arrive in Flagstaff two days before Put-In. It is best to finish your last minute errands on this day. Please try to pick up any alcohol, soft drinks and final gear in town on this day, so you can get to Lee's Ferry the next day with plenty of daylight to rig the rafts.

Orientation

10:00 am: Your group gathers together for a video presentation on the equipment, food, and river etiquette. The presentation helps your group understand how our food and camp systems work on the river. Following the video, **Donnie or another of Canyon REO's staff will be available to answer your questions.** The video and question/answer session present a wealth of valuable information..

12:00 pm: We will begin the three-hour trek to Lees Ferry around noon. As we head out of town we will

stop for a quick lunch and deliver any vehicles to secure storage. Anyone storing or shuttling a vehicle needs to confirm all information with Canyon REO's office staff before leaving Flagstaff.

Also, before leaving Flagstaff, make sure everyone has their picture ID's to show the ranger. You will not be allowed on the river without a picture ID or a notarized form verifying who you are.

ARRIVE AT LEES FERRY!

Upon arriving at Lees Ferry, the entire group will need to pitch in with the unloading of gear. As ramp regulations are frequently changing, look to our riggers for a plan on organizing the equipment and rigging the rafts on the beach. Not only will an organized and consolidated beach aid with efficient rigging, but it also greatly improves private boater relations with ranger and commercial boatmen.

If you are unsure of exactly what gear Canyon REO is providing, let someone at REO know while you are still in Flagstaff and we can arrange for the rigger to go over our Load-Out form with you. As the Trip Leader, you are ultimately responsible for lost or **damaged equipment at the trip's end. It is advisable that you are aware of which gear belongs to REO and to decide amongst the group how damages will be covered.** These small formalities can ease future stress for you. If you have booked an FSP our riggers will be departing before dark. If you have booked a Deluxe Outfitting Package, read on.

Around 6:00 pm, the group will head to Marble Canyon Lodge for dinner. Depending on the Ferry shuttle, your group will either pile into the remaining REO vehicle(s) or we will arrange for a Marble Canyon Lodge shuttle service. The chances of anyone tampering with or stealing gear from the beach are extremely slim. To further reduce the chances, gear should be consolidated and valuable items (cameras, etc.) should be left in a vehicle. Our rigger will help you with these issues at the Ferry. Your group members should bring your wallets for money for dinner, last-minute purchases, fishing permits, and to protect your picture ID!

Your group will camp at the Boatman's Camp about a quarter mile downstream from the Put-In ramp in the area reserved for private boaters.

THE PUT-IN

On the morning of your launch, the REO rigger will help fix a quick breakfast of granola, yogurt, fruit, and coffee cake. Hot drinks are provided. It is illegal to prepare food (even coffee) on the ramp, so your continental breakfast will be prepared at your camp. After the NPS Ranger does a final check of the equipment and gives the NPS orientation, your group is responsible for the final rigging of personal gear

—NOW, IT'S CANYON TIME!

Put-In & Take-Out continued . . .

ONE DAY BEFORE TAKE-OUT

The final night's camp is a perfect opportunity to organize and separate your group's gear. This is the time to find all your personal gear and put REO gear and straps back in original containers. Keep in mind that you can save de-rig time and confusion on the hot Diamond Creek beach by organizing the night before.

THE TAKE-OUT

On the morning of your last day, you should arrive at Take-Out and begin to de-rig (**don't miss the eddy at Diamond!**). We typically arrive at your Take-out around 9:00 to 10:00 am, unless other arrangements have been made. Try to keep your group in as small an area as possible. If you arrive before the REO drivers, stack gear in similar piles (e.g. ammo cans, coolers, soft goods, etc.). If the drivers are there, check with them on derigging and loading strategies. Generally, REO gear is placed in the truck or trailer first to avoid burying your gear. Please leave all trash as in the boxes. All frame straps and drop bags should stay attached to the frames. Consolidate all loose cam straps into a pile or milk crate. These will be counted and re-sorted by the REO cleaning crew. Canyon REO will deal with the cleaning of the boxes and toilets!

Before the rafts are deflated and loaded, they should be washed out and taken to the rocks or tarps to dry. After drying, please roll and load. We strive to be at the Take-Out before your scheduled time of arrival. However, occasionally delays occur, especially when vehicle shuttles are part of the package. If our vehicle shuttle drivers have to wait for your group, we will charge you an hourly fee per driver if they must wait more than one hour for your group, so try and be on time.

Take-Out Lunch: **Canyon REO's fresh lunch will be provided** somewhere other than Diamond Creek beach to help cut down on the congestion. We can also stop at **De-gadillo's Snow Cap Inn in Seligman for a delicious taste of some ice cream and the comfort of "real" bathrooms!**

It's about a 2.5 hour drive from Peach Springs to Flagstaff. If your final destination is Flagstaff, we will deliver you to your vehicles, or to a motel for the long awaited hot shower.

On returning to the warehouse, we spend several days or more inspecting your boxes and equipment for loss and damage. Once all the equipment has been checked in and any lost or broken items evaluated, we will call the trip leader to discuss problems (if any). Your damage deposit will be returned within 30 days

of your Take-Out. We are working very hard to provide you with **great equipment.** Since we aren't the ones rowing the boats and using the equipment, any input you can provide on needed maintenance will be greatly appreciated by our staff and the next trip.

Monsoon Floods

Occasionally in July and August the rains are heavy enough to wipe out the Diamond Creek road. The rains usually come in the afternoon. Just before the Take-Out the creek and road run along the same path. For this reason we highly recommend scheduling Take-Outs in the morning (around 10:00, not noon!) during these months. The Hualapai work very hard to keep the road maintained. Occasionally we have had to follow the graders down the road, so wait patiently and we will be there.

If Diamond Creek is flooding at your scheduled Take-Out, but you can still land on the beach, here is the plan. We will come as far down the road as possible, getting as close to Take-Out as we can. Your group should try to hike up to us, and we will get you back to Flagstaff. We will need to make other plans for the equipment.

The second option is to float out to Pearce Ferry. Those waiting at Diamond Creek should proceed downstream if the water in the creek does not recede on the day you arrive. This usually only happens if there has been a steady rain for two or three days straight. If your group has a satellite phone, you can get a message out to us. We will meet you at Pearce Ferry at noon the day after your scheduled Take-Out.

Gratuities

Many people ask us about gratuities. Tips are not an entitlement, but a reward for excellent service. Canyon REO employees work very hard to make your trip a success. If you feel we have done a great job and want to tip our crew, please enclose the tip **in an envelope with the Trip Leader's name on it.** This way we can distribute the tip to everyone involved with your trip. If you wish to acknowledge a particular person, please leave an **envelope with that person's name in the office, and we will make sure that the correct person gets it.**

Trip Leader Orientation: On The River

WATER FLOW

Glen Canyon Dam water releases will fluctuate between 5,000 and 26,000 cfs, depending on the time of year. Releases will not ramp up or down more than 500 cfs in a one-hour period, and not more than 10,000 cfs in 24 hours. If you would like more specific water flows for your trip dates, please call 800-752-8525 or check the [USGS website](#).

However, take all water flow information with a grain of salt as surprises happen.

RAFT MAINTENANCE IN CAMP

When looking for your camp at night, always assess your landing point. Look for calm eddies — usually after the rapids — for boat safety. Be aware that the water level will rise and fall considerably during the night. Tie your boats up accordingly! Make sure that rocks and/or sharp branches will not damage the boats, and tie your bowlines to shore securely. Some people like tying their boats together side by side for extra security and stability but be sure that boats are not rubbing against each other or rocks. Oar clips, ropes, and other sharp objects can easily wear a hole in a raft overnight. If all bowlines are tied to only one point or the majority of the ties look weak, attach a long safety line to a couple of boats and find a secure tie point. You can use a throw bag for extra length.

If you get stranded on a beach, the easiest way to get boats back to the water is to use the Egyptian Roll. Find three or four **2" to 4" diameter driftwood logs about 4' to 7' long**. Make sure no sharp edges are on the logs: Place the first log under the front of the boat and subsequent logs 2 to 3 feet apart in front of the raft leading to the water. Once you break suction, the fully loaded boat will race to the water.

Always tie down or stow oars and loose articles on boats at night. A howling wind can blow almost anything off the boats and nobody can predict an unexpected gust. Also secure all **coolers and food boxes so that critters can't make off with your food**. To prevent ringtail cats and mice getting onto the boats via the bow line, cut a hole in a Frisbee and string it on the bow line — this will discourage critters from walking the tightrope to the boat.

Most mornings you will need to pump up the rafts a little. Just remember that the hot sun can have a pressure effect on the tubes. At lunch time, if the tubes are hard, let a little air out, or throw buckets of cold water on them — works like a cold shower! The sun can pop a tube if you give it a chance.

Be extra careful of sharp rocks between miles 116 and 158. The Canyon walls through here are serpentine limestone and will rip a raft quite easily.

CAMP RESPONSIBILITIES

To help set up and break camp, the trip leader needs to assign everyone camp responsibilities for the whole trip. This will keep chaos and confusion to a minimum. Unloading and setting up should be done when the group first arrives at camp and the chores should be done before dealing with personal gear. The kitchen can be assembled in 10 minutes and the food can be ready in 40 to 60 minutes if you follow this procedure. Each responsibility also includes breaking down and rigging in the morning where appropriate. Some easier chores can be combined. For example, the following list shows one way to unload and load gear:

- 1 person: 3 tables
- 1 person: Camp food box
- 2 people: 4 Chickie pails—2 filled with hot water, 2 with cold water
- 1 person: Fire pan and charcoal
- 1 person: Stove and propane
- 1 person: 2 lanterns and small propane
- 2 people: Kitchen comm. Box
- 2 people: Water purification — Katadyn
- 1 person: Spice and staples box
- 1 person: Food maintenance

KITCHEN CREWS

On a 16-person trip we recommend splitting in 4 crews of 4 people. Disperse the people who like to cook among the various crews. Each crew will cook and clean 1 camp — **dinner, breakfast, lunch, and then you're off for 3 nights**.

GROOVER CREWS

Either 2 people handle groover duty for the entire trip and these people do not have to cook; OR, everybody takes a turn at the groover and kitchen duties, e.g. kitchen crew does groover duty next camp and so on.

On The River continued . . .

DISHWASHING SET-UP

Washing dishes is an important part of sanitation and keeping everybody healthy. We recommend a trash-plus-four-bucket system. The chickie pails for the washes and the rinses are kept in the aluminum box.

- Scrape food and trash into trash bag .
- First chickie pail, cold-water rinse
- Second pail, warm-water wash with soap (place the soap bottle in front to let people know it is the wash pail).
- Third pail, hot-water rinse (water should start out too hot to touch).
- Fourth pail, cold-water Clorox rinse — use a capful of liquid Clorox in this pail only. As long as the dishes dry completely before their next use, the Clorox will dissipate killing all germs and keeping everyone healthy.
- Next, use the large mesh bag to dry dishes. It is designed to attach to one of the camp tables.

Heating the two dishwater pails should be one of the first jobs for the kitchen crew. Your best bet is to use the blaster, but keep an eye on it and be sure to turn off the tanks at night — not just the stove — or propane will leak and you will run out.

The kitchen crew can wash utensils and cooking items as meals are cooking, but wait until all the passengers have washed their plates and utensils before washing the greasy pots and pans.

Every night after all the dishes have been washed, the kitchen crew needs to drain the dishwater through the sump screen. Usually it takes two people for this process. Take your sump screen and dishwater buckets to the river and try to get into the moving water. While one person holds the screen. All the food particles left in the screen need to be scraped into the trash. Coffee pots also need to be strained through the sump screen — coffee grinds belong in the trash not the river!

ANIMAL PROTECTION

Several animals, particularly mice and ringtail cats are quite pesky in the Canyon. They know you have a free meal for them if they can reach it.

Areas to watch are chickie pails and fresh food. Dump and **clean chickie pails each night so mice won't visit them during the night.** They can crawl up the pails, fall in and drown. Ravens and ringtail cats will get into your fresh food and produce if you leave any out. Place all fresh food back in coolers and bilges before going to bed and secure the lids.

GARBAGE

Everything that goes in with you must come out: charcoal, ash, trash, cans, coffee grinds, all trash. We have tried to eliminate most of your paper and cardboard trash by transferring a lot of food items to Ziplocs. You can reuse these Ziplocs for storing cooked food and other leftovers. Any paper trash that you do have should be burned in the fire pan. All trash goes back into the daily 20 mil boxes. When you leave camp each day, you are finished with the dry goods, and you have an empty 20 mil box. Put the trash back into this box, the box gets rigged back in the boat, and you should **n't have to move the box again until Take-Out**, and then we dump the trash!

Never put trash in the coolers or dry bags. This renders them useless and we have to charge you. Your last chore before leaving camp should always be to patrol your camp for any overlooked trash.

Aluminum cans should be collected and kept separate from other trash, so we can recycle them. Crush the beer and soda cans using two rocks. Store crushed cans in the same burlap and mesh bags that contained the full cans.

Water Purification

To protect yourselves from giardia and other diseases, we provide an expedition-size Katadyn to purify your water.

Clean water is available at:

- **Lees Ferry**
- **Phantom Ranch (faucets located 1/8 mile up from the boatmen's beach)**

Some groups refill their water jugs at:

- **Vasey's Paradise:** mile 32
- **Tapeats Creek:** mile 134
- **Deer Creek:** mile 136

These are major flowing streams with clear water. We still recommend that you treat this water with filtration (Katadyn) or Clorox. To purify with Clorox, add 5 drops of Clorox to 5 gallons of water (eye dropper is in the utensils box). Leave the lids off for about an hour to let the smell dissipate.

The Colorado River is often muddy, so it's very time-consuming to filter. One recommended way around this is to fill bail buckets with water, let the sand settle overnight, then filter.

A scrubby is provided with the Katadyn. When the filtering process slows down, remove the porcelain filter, and clean with the brush. Please brush vertically, not horizontally. NOTE: Do NOT tighten or loosen the bolt in the middle of the lid of the Katadyn; just the two bolts on the side. If you tighten the bolt in the middle you can break the filter element, a very expensive piece of equipment to replace.

Trip Leader Orientation: The Food Pack

THE FOOD PACK

Following is the synopsis of your food pack. Our menus and food are organized by camp. A camp starts with dinner, then breakfast in the morning, and ends with lunch.

DAILY ROCKET BOXES

All dry goods for each camp are packed in one rocket box - either a 20-or 25-mil size. Bring this box up to camp with you each night. Contents include trash bags, the recipes for the **camp's meals, coffee, tea, hot chocolate and all the dry goods** needed for the next three meals.

Each box is labeled by camp (Camp 1, 14, etc.) so at **Camp 1, bring only the box labeled "Camp 1."** This system reduces a lot of searching for food. But it also works well if you need to substitute meals. For instance, if an extra long hike puts you in camp late, you might want to have spaghetti or some other quick-and-easy meal if a Dutch oven meal is planned. Check your menu overview for the camp that has spaghetti, and bring up that rocket box.

An occasional camp towards the end of the trip will have dry goods in two rocket boxes, clearly marked as such on their lids. The trash from each camp will be stored in these rocket boxes, so once a camp is finished - **you're done with the box.**

We purposely pack more food than you can eat. If you choose to take extra unopened, packaged food home after your trip, it will cost your group \$200.

STAPLES & SPICES

These are two important boxes that need to come up to camp every night. They have lots of items used almost every **night, and allow you to personalize your meals. You don't have to follow our recipes - be creative!**

The staples box is a 25-mil rocket box filled with liquid and dry staples - oils, vinegars, soy sauce, Tabasco, Worcestershire, salt, pepper, garlic powder, ketchup, etc. If you get a penchant **to bake, or catch a fish and need corn meal, it's in the staples** box. A list of contents is on the inside lid.

The spice box is a small 50-cal box filled with all kinds of spices. There are even some non-spice items like birthday candles in case a group member is celebrating. A list of contents is on the inside of this box as well.

CAMP COOLERS

These coolers have all items that would normally come out of a refrigerator. We try to pack the camp coolers from left to right as you open the cooler. We also label Ziplocs with the corresponding camp number. Depending on your food choices, coolers will be labeled 1-3, 4-7, or similarly. All coolers past the **first will be duct taped. Do not open later camp coolers until it's** time to use them!

In the later coolers, some contents will be defrosted when you open the cooler. This is okay, but if some food is defrosting too quickly go ahead and cook it before it goes **bad. It's easy to switch meals** - if chicken is for Camp 10, but **it's defrosted by Camp 8, just switch your meals. Pull the daily box for Camp 10, and you'll have all the ingredients for** cooking your chicken.

PRODUCE COOLER & CRATES

The produce cooler has all your perishable produce: lettuces, cucumbers, zucchini, bell peppers, kiwi fruit, etc. Mushrooms are in here also - use these within the first 2-3 days. In the heat of the Canyon they turn brown very quickly.

Each head of lettuce is wrapped in a paper towel to keep the lettuce from sweating. As soon as you see lettuce and cabbage leaves turn brown, remove those leaves. The brown spots are like a fungus that take over all the produce if you **don't do some maintenance. If you take care of this cooler** you should have fresh produce for the first half of the trip, and iceberg lettuce even longer. As you notice certain vegetables ripening, use them first even if they are not called for.

Soft produce is in the cooler. Hard vegetables and fruits like tomatoes, avocados, melons, oranges, and apples are in milk crates, packed in the bilges. Oranges, apples, tomatoes, and potatoes should last the entire trip. On self-bailing rafts spoilage of this produce is minimal. On non-self-bailers you need to watch the hard produce. If it gets too damp or wet, you need to bring the produce up to the beach and let it dry in the sun.

LUNCH COOLER

This holds each days' lunch. Please see the Lunch Time section.

COOLER MAINTENANCE

Coolers (except for the lunch cooler) remain in the rafts and should not be de-rigged. Find out what items you need for your meal from the recipes, then grab a bailing bucket and shop for all the items at one time. Open the coolers as little as possible. Repeated trips to the coolers will melt the ice quickly and spoil your food.

All coolers should be drained around day 4 and day 8. Water can aid in spoiling food, so drain as necessary to keep food fresh (Do not leave the drain plug open -- **lazy man's** drain -- this will allow hot air in the cooler and melt the ice). Do not use the coolers as trash receptacles. This ruins them! **When they're empty you can store your personal gear and** other items in them, but not trash!

Food Pack continued . . .

Whenever you leave the rafts during the heat of the day (lunch time, hiking, lazing around) throw a wet life-jacket or two on top of the coolers. (Snap the jackets to the handle so **the wind doesn't claim them.**) **This will create much more insulation and keep your food fresher even longer.**

Cooler Consolidation

When each camp cooler is empty of food, use the leftover ice to re-supply the lunch cooler. We recommend washing out the lunch or other coolers at this time. When you open your last camp cooler, consolidate any leftover produce and dairy into this cooler.

LUNCH TIME

We have packed your first day's lunch for you. The lunch is self-contained in the lunch cooler - food ingredients, utensils, trash bag, cutting boards. The only other items you will need are the round Gott cooler for mixing juice, and one table for preparing the lunch.

The kitchen crew is responsible for repacking the lunch cooler every morning from the menu. If you pack the lunch completely - trash bag, utensils, spices, cutting boards, in addition to the food - **you won't have to scramble around the rafts at lunch time.**

At the end of lunch repack everything in the lunch cooler. **At camp that night it is the next crew's responsibility to clean out the cooler and wash the utensils.**

The utensils and cutting board that start out in the lunch cooler should stay with that cooler. There are plenty of camp utensils in a separate box.

Rolling Food Over: Often lettuce, bread, cheese, meat, etc., are not finished at one lunch. If the food still looks good, go ahead and leave it for the next lunch. However, after about one rollover, throw the food away. This may seem like a waste of food, but it prevents a lot of sickness. Some items are lunch extras and can last more than two meals: peanut butter, jelly, honey, mustard, pickles, pepperoncini, salsa. They are restocked in your daily dry goods box every few days.

Mayonnaise: Never keep mayonnaise past one lunch. Throw it away every night! Mayonnaise is the number one carrier of salmonella. We have stocked a new mayo in each daily **dry goods box, so you'll have plenty for lunch.**

Salmonella Warning

1. Mayonnaise: Do not rollover open mayonnaise from one lunch to the next. Throw open jars away each night. New mayonnaise is always provided for each lunch.
2. Chicken: Rinse chicken before cooking. Also rinse cutting boards and utensils used in preparing the chicken in filtered water, even spritzing with a little Clorox may help.
3. Eggs: Throw away rotten eggs, then wash your hands in filtered water. If you keep eggs out of the sun, you will have no problems.

ADDITIONAL FOOD BOXES

1. Eggs are packed in separate rocket boxes.
2. **All bread is packed in an aluminum bread box. Here you'll find lunch bread, French bread, bagels, English muffins, pita bread, and thick challe loaves for French toast.** The loaves of bread should be aired every 4 days. Set the bread in the sun and let the condensation evaporate. Do not open the packages. Tortillas are in the produce cooler or box marked tortillas.

FOOD MAINTENANCE PERSON

A food maintenance person is someone who always knows where things are to avoid creating chaos. The food maintenance person tries to keep the food organized for easy access by rotating excess dry goods in an easy to find storage area and keeping a list of the items. The food maintenance **person can also be the person that brings each night's cooler items to the preparation table, thereby limiting access to the coolers and ice melt-down.** Each boatman should take responsibility for draining their coolers and rotating produce.

LEFTOVER FOOD OPTION

We purposely pack more food than you will probably eat to ensure that you will not run out. Typical value of the leftover non-perishable, unopened food is \$200. Your group or part of your group can take the extra food when the trip is over, but you must pay \$200. We are able to reuse canned and sealed food and we frequently donate the extra food to the local food bank.



Trip Leader Orientation: The Kitchen

THE KITCHEN—PROVIDED WITH DELUXE OUTFITTING

Except for electric appliances, you have virtually a complete kitchen. To make sure the kitchen isn't floating downstream in the morning, place your kitchen area above the recent high-water mark. Just like at home, the kitchen typically becomes the social gathering place each evening, so look for an area large enough for your group to place camp chairs and gather together.

Setting up your kitchen usually depends on your camp environment, but a fairly standard kitchen set-up begins with taking the large tarp from the kitchen box and placing it on the ground where the cooking area will be. Then place your tables in a L-shape or U-shape on top of the tarp, with the dish drying bag hung on one of the tables near the planned dishwashing area. Bring propane tanks, blaster, and stove from the kitchen box and place them near each other for convenience in using the propane -- the stove should be on the table with the blaster and propane tank on the ground. You can also hang a garbage bag from a table in addition to using the daily rocket box as the garbage.

Following is the major equipment we send along with you to cook your food, as well as tips on how to keep it all clean and working.



STOVES & PROPANE

Canyon REO provides a 6-burner commercial propane stove. The hose connecting to the propane tank has reverse threads: To tighten, turn to the left. Always turn the propane tank off at night so you don't needlessly lose propane. Repair parts for the stove are in your major repair kit. All fittings should be hand-tightened only. Rubber O-rings seal the fittings. To keep your stove clean, do not set wash buckets in the sand before putting them on the stove. The wet sand, clinging to the bottom of the bucket, will fall into the burners and clog the propane holes. Dishwater should be the first thing on the stove at camp, unless you use the blaster.

DUTCH OVENS

Dutch ovens should be cleaned with salt whenever possible, not water. If you have to use water, set the Dutch oven on the stove briefly over low heat to dry the water (to prevent rust). Lightly oil your Dutch oven after each cleaning.

FIRE PANS

Fire pans need to be cleaned the morning after use. First scrub the grill with brush to loosen food. Then take a little river water to mix with the ash, creating a paste that can be transferred to the garbage. Sloppy ashes make a heck of a mess. Any ash spills should be cleaned up by using a sump screen, then putting the ashes back in the trash. Make sure the coals are out.

BLASTER

This handy burner heats a large amount of water quickly, but it is somewhat noisy, especially early in the morning. Usually, hot coffee and drinks make up for the jet-engine wake-up call. Be mindful of its high use of propane.

Trip Leader Orientation: The Toilet System

THE GROOVER

Our available groover systems are modified 25-mil rocket boxes. The Park Service has approved this system and it works quite simply!

Provided Supplies include:

- Toilet boxes
- Supply box with 1 seat, toilet paper, dry bleach, and rubber gloves.
- Hand-wash set-up.

(Knockout & Groover Tamer are no longer available)

GROOVER SET UP

One person can do this on the first day, but after Day 1 it will most likely be a two-person job. Find a private spot under some trees or with a gorgeous view. Take the toilet box, toilet supply box, and hand-wash system to the favored place - far away from the kitchen! Remove lid from the toilet box. Shake a small handful of dry bleach into the toilet. Place the seat with lid down on the opening. Make sure the toilet paper and hand-wash are close by.

To minimize accidents during trips to the river at night, place a separate pee bucket beside the groover for later emptying into the river. Do not use water-only buckets for this. We send a special pee bucket for this purpose. When finished, **WASH YOUR HANDS!**

As a matter of etiquette and to ensure privacy, place a **padle or other "flag" a short distance away, so when the person using the toilet takes the item with them, it will signal "occupied". Put it back when you're done.**

USE

Everyone should pee into the river or the pee bucket - the groover capacity cannot hold urine too. These toilets are for dumps, not tinkles! Make sure you leave the lid down on the toilet seat when done. And please wash your hands.

NO NO'S IN THE GROOVER

Feminine products belong in the groover, except for plastic applicators. If it will break down in a waste treatment **plant, it's okay in the groover. Plastic bags and rocks have** been found in the groovers. This is a big no-no, as it breaks the cleaning equipment, and will result in a charge to the group.

GROOVER BREAK DOWN

The toilet should be one of the last things you rig into the rafts. Give everyone a loud last call before you close up the toilet for the day. To break down the toilet, simply shake another small handful of dry bleach in the toilet, remove the seat and replace with the toilet lid. Some disinfectant is provided to wipe down the seat as necessary. Repack the seat, toilet paper, and other supplies in the supply box. When you reach a high pyramid level, you will need to add a half gallon of water and cap off this toilet. Move onto the next box. Each box will take about 70 uses.

DRY BLEACH

As indicated, you only need to add a small handful of dry bleach when you set up and break down the toilet, not after every use!



Grand Canyon Information

Grand Canyon National Park Service
PO Box 129
Grand Canyon, AZ 86023-0129

General Information:
928-638-7888
www.nps.gov/grca

River Permits Office
928-638-7843

Backcountry Permits
928-638-7875 (1-5pm MST M-F)
Info 928-638-7950
FAX 928-638-2125

Grand Canyon South Rim Lodging & Tours

Advance reservations are a must
General Information & Reservations
888-297-2757
Outside US 303-297-2757

www.grandcanyonlodges.com
for online reservations

The following lodging and services are operated by Xanterra also contacted at above website or phone numbers.

Bright Angel Lodge	Yavapai Lodge
El Tovar Hotel	Phantom Ranch
Kachina Lodge	Bus tours
Maswick Lodge	Mule trips
Thunderbird Lodge	

Camping at South Rim

Mather Campground is an extensive campground within the boundaries of Grand Canyon National Park at the South Rim. Advance reservations are a must – up to 6 months in advance during the summer months through National Recreation Reservation Services:
877-444-6777 or 800-365-2267
www.recreation.gov

Phantom Ranch mailing address
Attn: River Runner
Name
c/o PO Box 1266
Grand Canyon, AZ 86023
928-638-2401

Other Useful Information for the Colorado River Corridor

Marble Canyon Lodge (**near Lee's Ferry**)
1-800-726-1789 local 928-355-2225
www.marblecanyoncompany.com

Hualapai Tribal River Running Office
928-769-2219
For Diamond Creek Take-Outs. Put-ins at Diamond Creek require permits from both the NPS River Office and the Hualapai Tribe.

Havasupai Camping Reservations
928-448-2141
To obtain hiking and camping reservations to Havasu Falls.
www.havasupai-nsn.gov/

Lodging in Flagstaff

As far as convenience goes, the hotels located on Lucky Lane (Holiday Inn, Motel 6, Super 8, Ramada, HoJo) are the closest hotels to us, however, we recommend Aspen Inn Suites of Flagstaff. We just recently started contracted rates with this company as well as Holiday Inn Express on Lucky Lane. There are some blackout dates please contact the hotels for details.

Holiday Inn rates: \$62.00 – 82.00 per night (Includes breakfast, has shuttle van for around town). Around 2-3 miles from REO.

Aspen Inn Suites: \$49.00 - 69.00 per night (includes happy hour breakfast and for \$10.00 more you can get a hot tub in the room, pretty nice for the post-canyon stay). Aside from that, all the rooms are suite style and are recently remodeled. Also for \$20.00 more you can upgrade to a two room executive suite, which may be cost efficient for your group if people will be sharing rooms. This hotel is located on Rt. 66, closer to downtown (about 2-3 miles from Canyon REO)

Aspen Inn Suites Hotel
1008 E. Route 66
Flagstaff, AZ 86001
(928) 774-7356

Holiday Inn Express
2320 E. Lucky Lane
Flagstaff, AZ 86004
(928) 714-1000

Flagstaff Services & Gear

River Equipment

Canyon REO's Club REO -- for the best prices! See the section titled Club REO for details.

Camping Equipment

Aspen Sports
15 N. San Francisco St.
928-779-1935

Babbitt's Backcountry Outfitters
12 E. Aspen
928-774-4775

Big Five Sporting Goods
2775 S. Woodlands Village Blvd
928-214-0590

Four Seasons Outfitters
107 W. Phoenix Ave
928-226-8798

Mountain Sports
24 N. San Francisco St.
928-779-5156

Peace Surplus
14 W Route 66
928-779-4521

Camping Info

Flagstaff KOA
(east side of town)
5803 N Hwy 89
928-526-9926
800-KOA-FLAG

Woody Mountain Campground
(west side of town)
2727 W Route 66
928-774-7727

Rental Car Companies

Avis
Pulliam Municipal Airport
928-774-8421 or 800-831-2847

Budget Rent-a-Car
Pulliam Municipal Airport
928-779-5525
800-527-0700

Enterprise Car Rental
2136 E Route 66
928-526-1377

Hertz
Pulliam Municipal Airport
928-774-4452 or 800-654-3131

National Car Rental
2320 E Lucky Ln
928-779-1975 or 800-227-7368

Airlines

US Airways
Best rates are when connecting through Phoenix

Airport Shuttle Companies from Phoenix to Flagstaff

Canyon REO Shuttle Service
800-637-4604
Call for quote

Arizona Shuttle
800-766-7117

Flagstaff Services continued . . .

Bus

Greyhound Bus Lines
928-774-4573

Train

Amtrak
1-800-872-7245

Grand Canyon Railway
1-800-THE-TRAIN

Taxi

A Friendly Cab
928-774-4444

Flagstaff Taxi Cab
928-526-4123

Automobile Services

Ascot Automotive
1608 N East St
928-774-1582

P&M Trailers
7899 N Hwy 89
520-526-2466

Anderson General Tire
2400 E 2nd Ave
928-774-6635

Muffler Magic
1508 E Route 66
520-774-9276

Grocery Stores

Albertsons
1416 E Route 66
928-773-7955

Farmer's Market
1901 N 4th Street
928-774-4500

Safeway - East Side
4910 N. Hwy 89
928-526-6116

Sam's Club
1851 E. Butler
928-774-9444

New Frontiers Natural Foods
1000 S. Milton
928-774-5747

Alcohol

Cork 'n Bottle
824 N Beaver St
Contact: Richard
928-774-8502

With three weeks' advance notice. Wide selection of domestic and international beer in cans. Richard will deliver your order to Canyon REO in the week preceding your launch.

Safeway - West Side
1201 S. Plaza Way
928-779-3401

Walgreen's
1500 E Cedar Ave
928-773-1011

Flagstaff Services continued . . .

Restaurants

Alpine Pizza
7 N Leroux St
928-779-4138

Beaver Street Brewery
11 S Beaver St
928-779-0079

Brandy's
1500 E Cedar Ave
928-779-2187

Cafe Express
16 N. San Francisco
928-774-0541

Chili's
1500 S Milton
928-774-4546

Cracker Barrel
2560 E. Lucky Lane
928-773-1524

Dara Thai
14 S San Francisco St
928-774-0047

Hunan West
1302 S Plaza Way
928-779-2229

Macy's European Coffee House & Bakery
14 S Beaver St
928-774-2243

Mountain Oasis
11 E Aspen Ave
928-214-9270

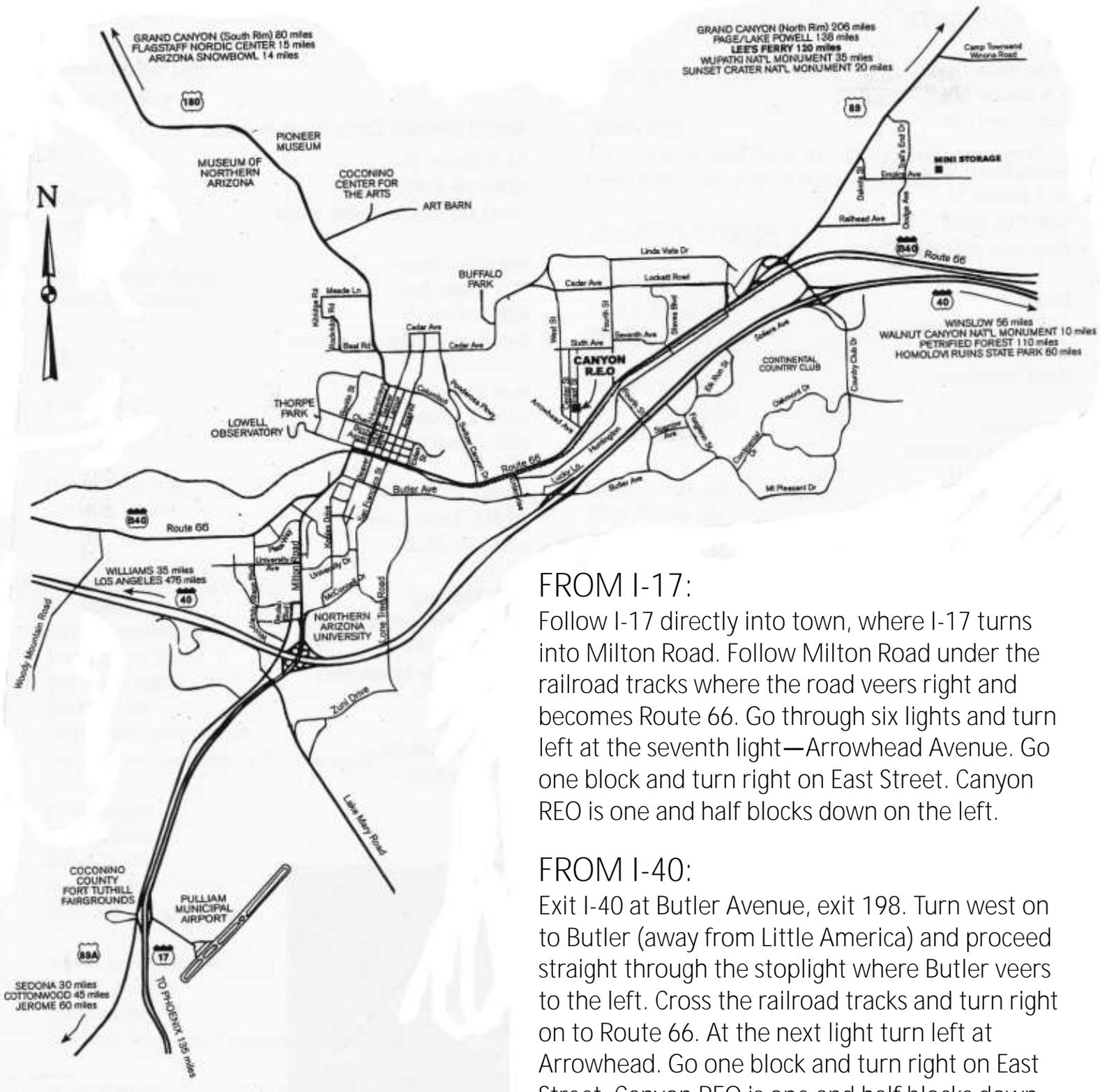
Olive Garden
2550 S. Beulah Blvd
928-779-3000

Outback Steakhouse
2600 E. Lucky Lane
928-774-7630

Pesto Brothers
34 S. San Francisco St.
928-913-0775

Salsa Brava
1800 S Milton Rd
928-774-1083

Flagstaff Area Map



FROM I-17:

Follow I-17 directly into town, where I-17 turns into Milton Road. Follow Milton Road under the railroad tracks where the road veers right and becomes Route 66. Go through six lights and turn left at the seventh light—Arrowhead Avenue. Go one block and turn right on East Street. Canyon REO is one and half blocks down on the left.

FROM I-40:

Exit I-40 at Butler Avenue, exit 198. Turn west on to Butler (away from Little America) and proceed straight through the stoplight where Butler veers to the left. Cross the railroad tracks and turn right on to Route 66. At the next light turn left at Arrowhead. Go one block and turn right on East Street. Canyon REO is one and half blocks down on the left.

CANYON REO RIVER EQUIPMENT OUTFITTERS

For more information, please contact us:

Mail:

PO Box 3493
Flagstaff, AZ. 86003

Shipping:

1619 N. East Street
Flagstaff, AZ 86004

Phone:

800-637-4604
928-774-3377

Fax:

928-774-3343

Website:

www.canyonreo.com

E-mail:

info@canyonreo.com