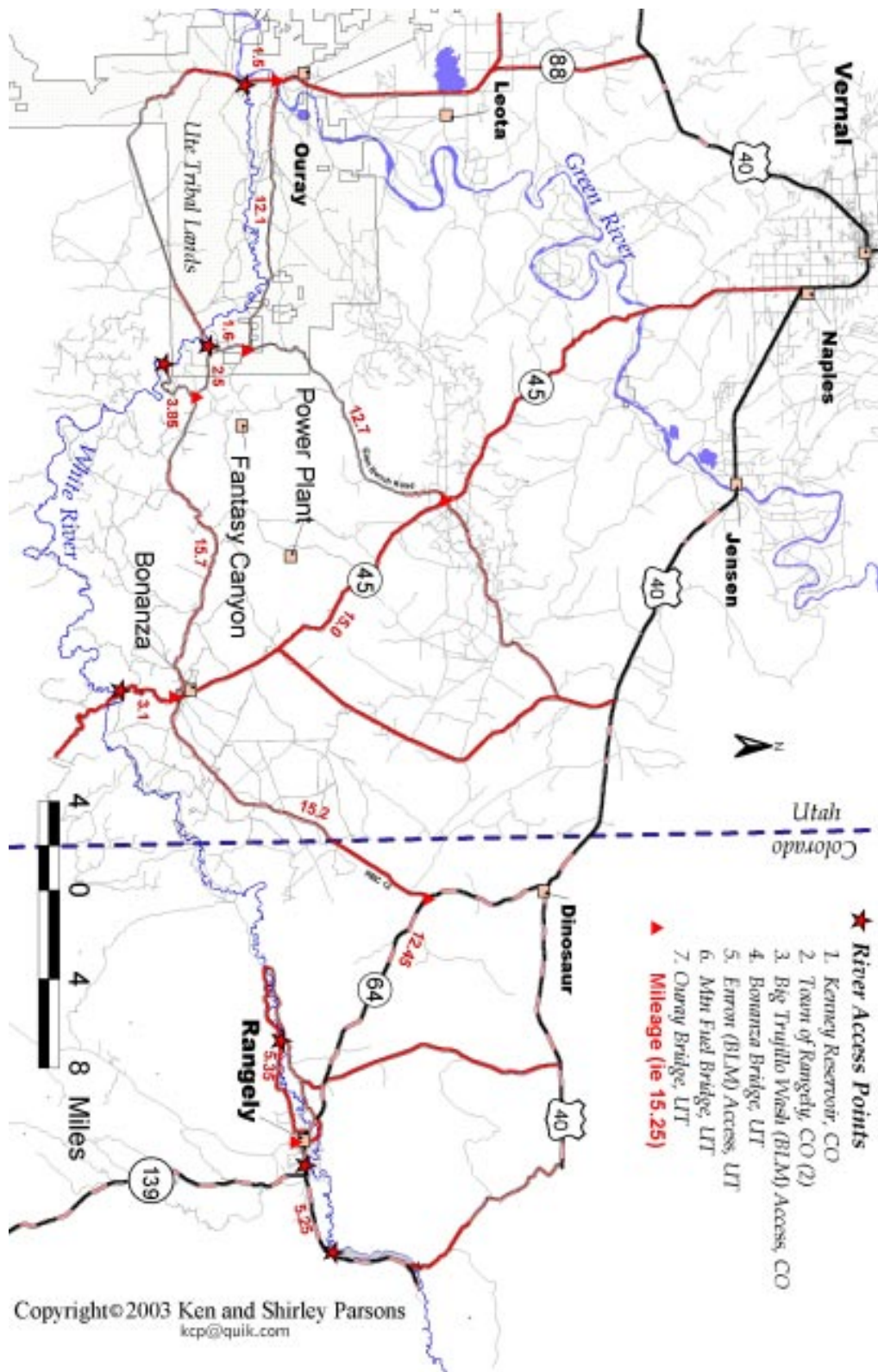


A dramatic sunset or sunrise over a river valley. The sun is a bright, glowing orb in the center, with long, dark rays extending outwards. The sky is a mix of orange, yellow, and blue. In the foreground, there are dark silhouettes of trees and a river. In the background, there are dark silhouettes of mountains.

A Boating Guide to the White River

of Western Colorado and Eastern Utah



CONTENTS

Dedication -----	1
Introduction-----	2
Hazards -----	3
Camping considerations -----	5
Principles of low impact river camping-----	7
Natural features -----	9
Wildlife and vegetation -----	13
Human settlement -----	15
Resource exploitation along the White River -----	17
Shuttle route details -----	19
Alternative shuttle routes -----	24
River trip resources -----	26
Acknowledgements and using the river map -----	27
River guide sponsors -----	28
GPS mileage coordinates -----	29
River map (navigate from back cover)-----	48

Dedication



Two friends have frequently come to mind as I've been assembling this guide. Mike Jensen with whom the author made many river trips and Don Peach with whom he has never

boated. Mike died young in 1998 and is missed by those who knew him and enjoyed his spirit of fun and adventure. Don has done much to encourage everyone to respect nature but get out and enjoy it. In particular, as founder of the *Maybe Annual Almost Meeker to Rangely* canoe race, he has encouraged us all to get out and enjoy the White River.



Ken Parsons, February, 2004

Introduction

This guide is intended to provide basic background on the lower White River and the surrounding environs of Colorado and Utah. Having a context into which the boater can place what is encountered will enrich the boating experience. The river map will keep the boater located and a detailed shuttle route description with GPS coordinates will enable drivers to locate river access points.

No permit is required to float the White River unless one wishes to take out or put in on Ute tribal lands. A use permit is required for fishing, camping, or boating on tribal land and permits are available for a fee from the Ute Tribal Offices in Duchesne, Utah. Their contact information is in the River Trip Resources part.

Once beyond the outskirts of Rangely, the river traverses a desert wilderness until just a few miles above its confluence with the Green River. Although there has been considerable exploitation of mineral resources in the area, there are virtually no signs of this visible from the river and one seldom encounters other humans during a float trip, excepting perhaps Memorial Day. The river is virtually the only source of water in the desert and attracts much wildlife; as a critical part of the ecosystem, the river corridor needs the respect of and protection by the boater.

This is a unique and fragile landscape where the river has a gentle, constant gradient, no rapids above Class II, and is ideal for open canoes. This description of gradient should not lull the boater into a false sense of security. The boater bears the responsibility to be adequately prepared for the river, the weather, and the environment. There are hazards in every such trip to a remote area and the boater must be ready for the encounter; among other things, the cell phone is useless here. Leave it and your portable music behind and enjoy the isolation and the sounds of nature. In short, you are responsible for a safe trip and this guide is only that: a set of general guidelines.

You need to give time and forethought to your safety and that of those who will float with you. Carry a well-stocked first aid kit (including a snakebite kit), always wear the best personal flotation (type III or above), and carry extra paddles/oars, repair kit(s) and rescue gear. You will be on your own, your cell phone will be useless, and you must be self-reliant.

Be informed about the river's general flow level and the type of weather forecast during your trip. The White River presents the boater with class I and II waters but different flow levels present the boater with very different looking rivers. A clear and lazy river with many shallow riffles across sandbars at low water in late summer and fall can be a swift, muddy torrent pushing the boat around during spring runoff or after thunderstorms. At such times there can be floating logs and other flotsam from the banks and normally dry tributaries. The following graph shows

the historical median flow by time of year. Current flow data can be found on the web at <http://waterdata.usgs.gov>, and navigating their map(s) to *White River near Watson, UT*. (<http://waterdata.usgs.gov/ut/nwis/uv?09306500>)



The river is boatable when free from ice, generally from mid-March until mid-November. Inflatable rafts up to sixteen feet in length can be used over about 1500 cfs and smaller rafts, around twelve feet in length, can be used above 600 cfs as can a lightly-loaded cataraft. Above 1500 cfs intermediate canoeing skills are needed.

Depending on one's skill, weather, and the river's flow a canoe can easily cover 15 to 25 miles in a 6-to-10 hour day with a stop for lunch. If one hikes or is in a raft on a windy day the distance can be noticeably less.

Hazards

Disclaimer: River channels are dynamic features and thus change frequently. Rocks, sandbars, large trees, or other obstructions may suddenly appear or just as quickly vanish. The boater must be aware these hazards exist and be wary of them. The author and publisher cannot be held responsible for differences between the guide map and reality.

People place an amazing array of junk in the river in the hopes of controlling erosion of the river banks. Some of this material contains sharp and pointed pieces of metal and needs to be avoided. Most of this junk coincides with human habitation and is seen between MM-105 and MM-88. Car bodies placed in the river along the bank usually create turbulence which actually increase erosion rather than reducing it. In particular, an old Corvair auto body about MM-88.5 has migrated into the center of the main channel as the river undercut it and you need to

keep your eyes open for it, particularly below 1500 cfs. Ralph Nader was right in pointing out that these cars were unsafe at any speed, even zero. The bottom of the highway 64 bridge (MM-95.5) is relatively near the channel level and at high water, over 3500 cfs, has little headroom to spare.



Highway 64 bridge (MM-95.5) at 3,500 cfs

The section of the river between Rangely and the Mountain Fuel bridge commonly contains several “strainers” in the channel. This is the result of the river actively undercutting the bank, toppling trees into the channel. These strainers may block much of the channel, migrate down river during high water, and present a serious hazard to the boater. As a result of the river dropping about 300 acre-feet of sediment in Kenney Reservoir each year, the river has increased the rate at which it shapes the channel below the Taylor Draw dam. The boater should give these strainers a wide berth as hydraulic pressure, even in a small stream, can pin a person below the surface and prevent escape or rescue. Generally, these are easily avoided by keeping a sharp eye out and giving them a wide berth. Still, accidents will happen and it is always a good idea to be well prepared for a river rescue.

Channel modifications have been created in the past to direct water into irrigation ditches. These diversion structures, now illegal to construct, made it possible for farmers and ranchers to irrigate fields and pastures without the expense of operating a pump. These irrigation diversions can present obstacles and riffles at unexpected places in the river. In particular, there is one such diversion at the Taylor Draw river access point. The diversion is immediately below the access point and the boater needs to navigate to river-right upon launching to avoid it.

The Mountain Fuel Bridge take-out is considered difficult having 5 foot vertical, sand-cut banks in a turbulent backwater.

This guide assumes that you know something about handling and navigating your boat. If you are a complete novice, you should read a good book about rafting or

canoeing to get the basics down. Give all logs, strainers, and rocks a wide berth and, in open canoes, skirt the main wavetrain through riffles when possible. The wind is a blessing for keeping insects away but can be a problem when boating. It will work to turn your boat sideways across the current and/or push you into a bank, and can even overturn a boat. Mild breezes occur in the morning and evening and are associated with the heating and cooling of the land. Much stronger winds are associated with weather fronts and occur most frequently in the spring or near thunderstorm cells in the summer. It takes some skill and lots of effort to keep your boat going downstream in these winds and you might find it better to just go to shore and wait it out, especially if a thunderstorm is approaching. Lightning most often hits the canyon rim but can and does strike trees and even the river itself. It is safest to bring your boats to shore and stay away from the taller trees when lightning is near or impending.

Should illness or injury occur to a member of your party while on a river trip, the following procedures are recommended. If the injury or illness is not serious, it is usually best to continue floating downstream to a point where the person can be evacuated by vehicle. In the event of a serious injury, such as when body movement must be constrained or a life is threatened, helicopter evacuation should be considered. In most cases, the injured party is billed for this service. Helicopter evacuation may be initiated by contacting the Life Flight, Grand Junction, CO.

Camping considerations

Depending upon the season, insects can be more than just an annoyance. Usually the mosquitoes are not notably bad along most of the river, but in the last few miles above the confluence with the Green River they can be. West Nile virus is spreading westward and although no cases have been reported in the area you should take care to wear mosquito repellent and long sleeves. When you get off the water there may be deer fly, depending upon whether or not there has been a recent hatch. Where you see a few on the water you will see many on the shore. The gnats or no-see-ums can be horrific during the summer months and, when there has been a recent hatch, a headnet is desirable. Fortunately, they congregate in drier locales and stay away from the river for the most part. Still, they can make camping chores such as cooking difficult at times.

One very important aspect of river travel and desert camping is keeping yourself hydrated. When exercising in a dry climate you will need to drink about one gallon of water per day per person. Drinking alcohol or caffeinated soft drinks is no substitute and actually exacerbates the problem with more frequent urination leading to dehydration and loss of electrolytes. Further, alcohol reduces awareness of the onset of hypothermia and it is generally a bad idea to drink while floating.

There is no potable water anywhere along the lower White River. You must either carry sufficient water with you or filter river water. Be aware that during times of

high sediment load, such as spring runoff and after severe thunderstorms, your water filter will be challenged to remove this sediment and may clog quickly. Allowing water to stand in a bail bucket overnight will help but it is wise to carry backup filters. Leaving a bucket of water uncovered overnight is to invite a bucket full of drowned mice by morning.



Never camp in a dry wash!

The presence of mice raises the specter of hantavirus. Humans don't usually contract the virus directly from rodents but rodents shed hantavirus particles in their saliva, urine and droppings. People usually contract the illness by inhaling particles that are infected with the virus. Infection from the hantavirus is rare but not unknown in this area and presents one more good reason to be a careful camper. Encounters with snakes are infrequent along the river but occasionally it happens. Even more rare are poisonous snakes; rattlers and faded midget rattlers.

Respect private land and don't trespass. There are patches of private and Ute Tribal land all along the river, as noted in this guide. Below MM-75 the land is seldom fenced but there are BLM markers near most boundaries in Colorado. However, in Utah, public land is unmarked along the river, making it difficult to distinguish ownership.

Camping is allowed anywhere on BLM land. However, you are strongly encouraged to use only the sites marked on this guide and thereby minimize human impact upon this fragile desert river corridor. You also should use firepans, river toilet systems and carry out all of your waste. Doing so will help preserve this isolated section of river for others in the future.

Low impact river camping (Principles of Leave No Trace as modified for the river)

The most significant and negative impact boaters will have upon the river corridor is a result of their camping. This area gets less than 10" of rainfall a year and the soils have a high clay content which limits percolation of that water through the ground. What this means is that what is left behind doesn't go away unless it is edible and edible waste, in a land of scarce resources, attracts unwanted wildlife such as red ants and flies. The quality of the river corridor can be preserved if each boater takes part in that preservation by leaving no trace and removing the traces others have left behind.

1. Plan Ahead and Prepare

- Know the regulations and special concerns for the area you'll visit. If canoeing through Ute Tribal lands, obtain a permit in advance. Respect the rights of private property ownership.
- Prepare for extreme weather, hazards, and emergencies. This includes sunscreen with SPF 30 or above, insect repellent with *permethrin* or *DEET*, a complete first aid kit and appropriate attire.
- Properly equip yourself and your boat. Use personal flotation devices – jackets and not horsecollar types - and carry a repair kit appropriate for your boats and spare paddles or oars. Don't forget river rescue gear.
- Be aware of the river flow rate as well as air and water temperatures. Hypothermia is a threat when the sum of air and water temperatures is below 120; wind chill only makes it worse.
- Do not use marking paint, rock cairns or flagging to mark trails or campsites. Remember, the idea is no trace left behind.

2. Travel and Camp on Durable Surfaces

- Protect riparian areas by camping only in designated campsites. You may be tempted to camp on sandbars and beaches at low water but remember that flash floods can occur without warning in the desert. The sky may be clear over you but severe thunderstorms can occur tens of miles away over the headwaters of side canyons, causing the river to rise quickly and without warning.
- Good campsites are found, not made. Altering a site is not necessary. Concentrate use on existing trails and campsites. When you make camp be sure things are staked down and secured; strong wind gusts can do more than just scatter your gear, they can even pull up tent stakes and take your tent for a ride. Keep your campsites small and focus activity in areas where vegetation is absent. This will protect the surrounding natural area for others.
- Walk single file in the middle of the trail, even when wet or muddy. Watch for and avoid cactus!

3. Dispose of Waste Properly

- Pack it in, pack it out. Inspect your campsite and rest areas for trash or spilled foods. Pack out all trash, leftover food, and litter. Using a tarp under your cooking area helps with litter, especially microtrash (which attracts insects).
- Deposit solid human waste in a river toilet system for later disposal in appropriate septic facilities. Non-solid waste should be deposited directly in the river current or river toilet system. Again, this stuff doesn't decompose or go away in the desert. No one wants to camp with the smell of old urine or place their foot where others have gone before. Use antibacterial soap on your hands and rinse with river water after using the toilet.
- Use catholes only in emergencies. Catholes should be dug 6 to 8 inches deep at least 200 feet from water, camp, and trails. Cover and disguise the cathole when finished. It is a much better idea to keep your river toilet easily accessible for emergency deployment.
- Pack out hygiene products. Waste disposal facilities are designed only for human waste and toilet paper.
- To wash yourself or your dishes, use small amounts of biodegradable soap. Strain your used dishwater directly into the current and place the solids from the strainer in your trash bag. A 3-bucket system with a cap of clorox in each bucket is recommended: a wash with biodegradable soap, a rinse, and a final rinse. Bacterial dysentery is never any fun and especially not in the wilderness. Keep your kitchen clean, hygienic and leave nothing out overnight. Hanging your garbage bag will help keep mice and other scavengers out but nothing works perfectly; bring extra, tough garbage bags.

4. Leave What You Find

- Preserve the past: examine, photograph, but do not touch, cultural or historic structures and artifacts.
- Leave rocks, plants and other natural objects as you find them.
- Avoid introducing or transporting non-native species.
- Do not build structures, furniture, or dig trenches.

5. Minimize Campfire Impacts

- Campfires can cause lasting impacts to the backcountry. Use of a self-contained stove for cooking and a lantern for light are preferable.
- When a fire is made, use a fire pan. Placing a fire blanket under the pan will help you keep ash and coals together for safer, easier disposal. Take care to keep any fire away from brush and grass and be aware that wind-borne sparks can be carried some distance and then ignite a wildfire.

- Keep fires small. Only use sticks from the ground or driftwood. Do not cut or break limbs from living or standing dead trees.
- Burn all wood and coals to ash, put out campfires completely, then place cool ashes in your trash or other appropriate container for disposal. Any floatable material should be packed out. Ashes will stay hot, even overnight, so a little water will cool and extinguish the embers. A rocket box of hot ashes is not what you need in your boat.

6. Respect Wildlife

- Observe wildlife from a distance. Do not follow or approach them.
- Never feed animals. Feeding wildlife damages their health, alters natural behaviors, and exposes them to predators and other dangers.
- Protect wildlife, your health, and your food by storing rations and trash securely. The desert comes to life at night!
- Control pets at all times, or – better yet - leave them at home. You love them but others don't and they have no concept of hygiene. A dog leaping to shore after a raccoon can easily tip a canoe.
- Avoid wildlife during sensitive times: mating, nesting, raising young, or during winter. In May, young goslings on the river can easily be separated from parents when fleeing long strings of canoes.

7. Be Considerate of Other Visitors

- Respect other visitors and protect the quality of their experience. There are many reasons to float the river but few involve discourteous, boisterous strangers.
- Be courteous. Yield to other users on the trail or river. If traveling with a group, move to one side and let swifter boaters pass through your group (or let goslings flee into the bank).
- Let nature's sounds prevail. Avoid loud voices and noises. The sounds of nature are one of the major attractions of the wilderness and a key factor in having an enjoyable trip.

Natural features

The landscape around you is a balance between the forces of change (wind, water, chemistry, and gravity) and the resisting structural forces within the soil and rocks which have been emplaced by tectonic forces within the earth. The balance is a dynamic one as climate, elevation, and structural renewal vary with time. And geology has lots of time. Pioneering geologist Alfred Wegner expressed its vast extent in stating “...*no vestige of a beginning, no prospect of an end*”.

A float trip of 100 miles will take you through 100 million years of geology with half of that transpiring in the first 20 miles below the Taylor Draw dam. The creation of the Rangely oil field by bending and pushing up lower and older rocks is the cause of this uneven age distribution of rocks. After passing the “pyramids”, formed by the hard rock of the Castlegate Sandstone protecting the softer Mancos Shale on the west side of the oil field the rest of the visible geology is pretty much the Green River and Uinta formations. The canyon is steep near the top and rounding out at the bottom reflecting the harder rocks near the top protecting the softer ones near the bottom. The eroded sediments fan out near the bottom as is typical in desert climates where the brief storms don’t provide enough water to carry the bulk of the sediments very far.

Several bands of flat-topped hills and terraces along the sides of the canyon mark breaks between times of moderate down-cutting of the canyon and rapid down-cutting resulting from glacial melting. The canyon shows no evidence of being glaciated as glaciers were confined to higher mountain elevations but the increased river flow as they melted has left its mark. A river seeks equilibrium between the energy of its flow and the work done in transporting sediment and water down the channel. The resulting form of meandering then is for more meanders in areas of steeper valley slope and fewer meanders where the valley gradient is less. There are many variations superimposed on this including variations in stream flow, bed rock, and sediment load. The completion of the Taylor Draw dam and Kenney Reservoir in 1985 changed the dynamic equilibrium which existed at that time.

The dam impounds 13,000 acre-feet of water for recreational and hydroelectric purposes but, once filled, has no significant ability to regulate river flow. Regulation of flows is a major habitat-modifying practice being challenged at Flaming Gorge, Glen Canyon and many other western water storage dams but it is not an issue on the White River. On the White River the major effect has been the dropping of 300 acre-feet of sediment into Kenney Reservoir every year.

This has created the wetlands at the upper end of the reservoir (great bird watching locale) and will eventually limit the recreational uses of the site as the reservoir fills. It also is modifying the downstream channel. The river is now working to pick up that 300 acre-feet of sediment it can carry in its current configuration. This means the river is cutting downward and outward at an increased rate and will do so until a new equilibrium is achieved (or more likely the reservoir is filled and the river reverts to its earlier flow regime). It is easy to see why there are lots of strainers on the lower White River: the banks are being cut from under large cottonwoods which then topple into the channel. Spring runoff is not great enough to move these large objects immediately out of the channel and flush them on out of the canyon.

The arch formed near the top of the canyon about MM75 is the most direct evidence of the erosional power of wind and the freeze-thaw cycle. Formation con

tacts and some of the more interesting features are noted directly on the river guide as they are encountered by the boater. The remainder of this section is geology reference material which can be read at the boater's leisure.

Divisions of Geologic Time. While the rock formations you will float past on this portion of the river are all less than 100 million years old, you can't get to Rangely without driving through or past much older rocks. These older formations have been exposed by the Laramide orogeny (mountain-building episode) which built the modern Rocky Mountains. The subsequent work of wind and water have eroded these rocks into our modern landscape. Even if you are familiar with the span of geologic time, it is difficult to grasp its vastness. The approximate location of geologic formation contacts, the time period during which deposition occurred, as well as other notable features along the river are referenced to the river mileage markers (ie MM-87).

Precambrian eon: the vast expanse of time from the formation of the Earth until the appearance of fossils of well-developed multicellular life. Approximately 4 billion years in duration and ending 570 million years ago (mya). Rocks of this age may be seen in the canyons of the Green and Colorado rivers.

Paleozoic era: the time from the development of multicellular life until a major extinction associated with the breakup of the supercontinent Pangaea which began around 240 mya. Once again, these formations are seen in both the Green and Colorado river canyons.

Mesozoic era: the time associated with the rise of the dinosaurs as the dominant creatures on earth. It is defined from the breakup of the supercontinent Pangaea until the extinction of the dinosaurs around 65 mya. These are the oldest rocks exposed along this lower section of the White River and occur only in the first few river miles (MM-106 – MM-87) around Rangely. These formations locally take the shape of an anticline or arching in the formerly horizontal beds. This arching is a result of the forces which built the Rocky Mountains. The upper part of the anticline has been eroded away but its presence can be detected by noting that all formations surrounding the Rangely oil field dip (tilt) away from its center. Oil, being lighter than water, has migrated to the top of the dome.

Cenozoic era: the time from the extinction of the dinosaurs until the present day. It is associated with the rise of mammals. Rocks of this era are exposed in the Wasatch (MM-87), Green River (MM-87 – MM-60), and Uinta (MM-60 – MM-0) formations. Both the Wasatch and Uinta formations represent deposition by streams and rivers. They are separated by the lake deposits of the Green River Formation which can be found throughout the region. This system of three lakes was both stable and extensive covering portions of modern Colorado, Utah, and Wyoming with the largest lasting for some 17 million years

Geologic structures: the following structural forms can be noted within the small scale of a few feet and also on the scale of several miles along the White River.

Anticline: a fold in the form of an arch as seen in cross section. In three dimen

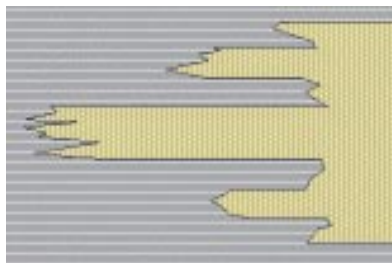
sions the form often resembles the upper half of a football. The form is illustrated in the leftmost half of the diagram.

Syncline: a fold in the form of a trough which can be generally thought of as an upside-down anticline. This form is seen in the rightmost half of the diagram and generally resembles the bottom half of a football.



Unconformity: an erosional break in deposition between older beds below and younger beds above the break. Sometimes the beds are dipping at differing angles and/or are of different colors/materials, making the break easier to detect. Otherwise, breaks such as the one between the Wasatch Formation and the underlying Mesa Verde Group, are difficult to detect by casual inspection.

Intertongueing: a series of overlapping wedge-shaped layers. This occurs when the boundary between deposited material of different types at an environmental border changes repeatedly. This can be most easily seen in the Buck Tongue of the Mancos Shale just above the first sandstone bed (Castlegate Sandstone) of the overlying Mesa Verde Group and below the second sandstone. The river crosses it between MM-91 and MM-90 and the intertongueing is exposed on the north (river-right) side. Intertongueing also occurs between the Green River Formation and each of the underlying (Wasatch) and overlying (Uinta) formations.



Geologic formations of the river valley: the rocks of five different formations are seen along the lower White River. They range in age from the Mesozoic Mancos Shale to modern river terrace gravels and the alluvial fans from the side canyons. A stratigraphic column representing these formations, ages, relative positions, and rock type is shown on the next page.

Modern surface deposits: benches and terraces formed by the river during its process of cutting the modern valley. Such terraces correlate with glacial cycles and provide gravel resources in this area.

Uinta Formation: relatively dark yellow and brown sandstones interbedded with terrestrial shales. Reflects the return to a subaerial deposition by rivers from the lake environment of the Green River Fm. Contains the fossils of many giant mammal species of about 42 mya age. (MM-60 – MM-0)

Green River Formation: grey to white shale and marlstone (mixture of limestone and clay) several hundred feet thick. This reflects an alternating annual sedimentation cycle within a large lake system for millions of years. Contains many fish and insect fossils as well as leaf and other plant imprints. Intertongues with the overlying Uinta Fm. as river-deposited sediments were advancing into the lake and alternately being covered by the lake. Thin dark black beds near the top are oil

shale. They represent one of the largest petroleum deposits in the world. The horizontal beds are cut by vertical veins of gilsonite (natural asphalt) in several areas, particularly near Bonanza, UT. (MM-86 – MM-60)

Wasatch Formation: soft yellowish to white sandstones and dull grey to bright shades of red and purple in the shales. Reflects sedimentation on a river plain. Bird, crocodile, and small mammal fossils are found within the formation. Intertongues with the overlying Green River Fm. (MM-87)

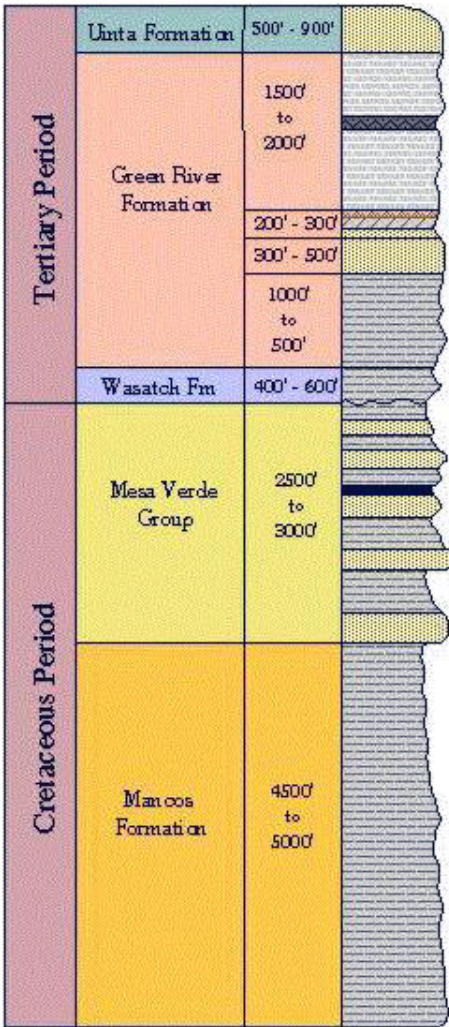
Mesa Verde Group: alternating hard sandstones and soft shales with occasional coal beds in the lower half. Reflects the change from near-shore, delta and swamp environments to river-dominated plains. The end of the Cretaceous period occurred during an erosional unconformity at the top of the formation. (MM-91 – MM-87)

Mancos Formation: yellowish-grey slope-forming shale. Deposited in a shallow sea in the late Cretaceous period. Intertongues with the overlying Mesa Verde formation with *Bacculites* ammonite fossils in the *Buck Tongue* (just above the basal Mesa Verde sandstone named the Castlegate sandstone at MM-90). (MM-106-91)

Wildlife and vegetation

The physiographic setting along this section of river is a high desert (river elevations 5300’ – 4700’) lying entirely within the Uinta basin and situated on the northeast edge of the Colorado Plateau. The basin receives less than 10” of annual rainfall, mainly in March and April. The drop in elevation along the river is fairly continuous and gentle at about 5.7 feet per river mile.

Native cottonwood and willow trees along with invasive russian olive and tamarisk line the river. The tamarisk and russian olive have spread extensively throughout the west and are crowding out the native species. The adaptive advantage of the invaders is aided by beaver who prefer to feed on the cottonwood and willow which creates additional openings for the non-natives. Add to this the downcutting



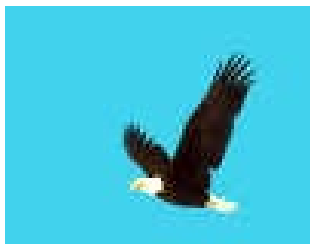
of the river since construction of the Taylor Draw dam and you further endanger the native trees. The downcutting has limited the areas flooded in the spring and these areas are critical to the sprouting of new cottonwoods and willows. Both the russian olive and tamarisk are targets of campaigns to eradicate invasive species and restore the native vegetation.

Pampas grass is seen on point bars occasionally. Greasewood, sage, salt grass, and cactus commonly cover the flats just above the river. Farther up the hillslopes there are juniper and pinyon, sagebrush, occasional mountain mahogany and the endangered Uintah Hookless cactus. When you see extensive spreads of grass you are probably seeing cheat grass. Cheat grass is another non-native species and is a result of overgrazing in the late 19th and early 20th century. It gets its name from the fact that grazing animals will not eat it and what appears to be good pasture is of no value to the rancher. The stuff is also miserable to hike through as the seeds have barbs which stick in socks and pants and are very difficult to remove.



For mammals you commonly will see mule deer, coyote, cottontail and jack rabbits, and the occasional raccoon along the riverbanks. You may even spot a beaver or two as well as muskrat along the river. The beaver have been reintroduced into the area after being nearly eliminated during the era of fur trapping and their slides and lodges are fairly common now. The beaver can't dam the White River and don't try to but their dams are an important part of controlling erosion on Douglas Creek, south of Rangely. That area was grossly overgrazed in the late 19th century by the Philadelphia Cattle Company, resulting in Douglas Creek entrenching its floodplain up to 20 feet. A reintroduction of beaver in the 1990's is showing results in restoration of a new base level and the spreading of willows in these areas. Rarely, you may spot mountain lion, bobcat, elk and fox near the river or up the hillsides. Pronghorn can be seen at a distance from the river and along the shuttle route. The author has seen bear tracks along the river but hasn't actually seen one of the bears there.

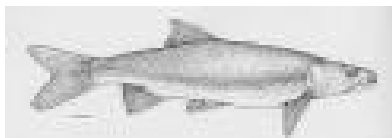
There are numerous birds. Migrating waterfowl and shorebirds are common in the spring and fall when you can watch for marbled godwits; avocets; phalaropes; dowitchers; willets; yellowlegs; sandpipers and occasional snowy, cattle, and American egrets. In March and September migrating sand hill cranes overnight



in this area. Gulls, terns, and grebes. Loons, ospreys, swans, cranes, and white pelicans are less common. Blue herons, geese, and diving ducks are common most of the year. The White River is a wintering ground for bald eagles and rough-legged hawks. The eagles nest along the lower stretches of the river and can be seen year

around when they are raising a fledgling. Golden eagles, red tail hawks and great horned owls are occasionally seen, and in the case of the owls, heard. Lots of magpies.

The fish in the river are warm water species; catfish, carp, sucker, and the Colorado pikeminnow. The pikeminnow is an endangered species and the lower White River, from Taylor Draw dam to the confluence with the Green River, is critical habitat for it. There are few snakes, usually garter snakes along the river and an occasional rattler on the flats and hillsides. A few leopard frogs and occasionally a bullfrog represent the amphibians.



Human Settlement

Hunting/gathering cultures were in this area during the middle archaic (2000 BC – 1000 BC), leaving sites in Dinosaur National Monument to the north. The lower White River drainage is at or near the northwest extent of the Fremont culture. The Fremonts were a marginal horticultural and hunting/gathering culture from the Great Basin to the west but with trading ties to the Anasazi culture to the south. Major components of their diet are thought to be goosefoot, pig weed, and pinyon nuts with corn, squash, and small game making up most of the remainder. The Fremonts have left masonry structures, petroglyphs and pictographs (largely in Canyon Pintado Historical District along Douglas Creek) and occasional points, blades, and other cultural artifacts. Most Fremont sites date from between 500 BC and 1300 AD. It is thought that the major drought of the 12th and 13th centuries A.D., which led to the demise of the Anasazi, also ended the Fremont culture. It is



possible that archaic and Fremont people camped on terraces above the modern White River as flakes of chert and flint are occasionally found there.

The Uintah and White River Utes occupied the area after the Fremonts and into historical times. These are two of an original seven tribes who then occupied much of Utah (named for the Utes which in turn means Land of the Sun), western and central Colorado, and northern New Mexico. Linguistic studies place the Utes in the Shoshonean group, indicating they probably came into the area from the northwest. They were a more nomadic hunting/gathering culture, and have left behind wooden wickiup (living quarters) and sweat lodge structures, arrow points, and crude pictographs, usually in areas some distance from the river. Many Ute pictographs depict horses which had been introduced to the Utes by the Spaniards in the mid-17th century. Almost all occupation sites along the river have been destroyed by later European-descent settlers.

In recorded history, Dominican fathers Escalante and Dominquez journeyed north along Douglas Creek naming the area Canyon Pintado for the rock art they found there. They crossed the White River (naming it the San Clemente) near the present-day site of Rangely. Their party traveled on in the direction of modern Jensen, Utah, and beyond in 1776 seeking but failing to find a trail from Santa Fe, New Mexico, to Monterrey, California.

William Ashley ventured into the Green River valley just to the northwest of the White River in 1824. Ashley creek, a tributary of the Green River, is named in his honor. Trappers and explorers passed through the area, notably Denis Julien and Warren Ferris along the Green and lower White around 1836. Julien inscribed his name and the date along the Green River over several hundred miles, indicating that he was working his way upriver. Mormon pioneers settled in Utah in 1847 and soon after began moving into the Uintah Basin.

Several government-sponsored expeditions passed through area in the 1840's to 1860's and in 1868 the first treaty between the Ute tribes and the U.S. federal government was signed. John Wesley Powell, famed for his navigation of the Green River, took a brief journey up the White River in 1869 from where it joins the Green River. Three men from his second expedition in 1871 hiked to Goblin City, a lost feature until it was relocated by Clay Johnson in the late 1980's. F.V. Hayden surveyed the area for the USGS in the mid-1870's and first noted the potential for oil in the Rangely area.

Cultural differences, accentuated by the destruction of a Ute horse racing track, led the White River Utes to burn the Indian agency west of modern Meeker and kill the Indian agent, Nathan Meeker in 1878. The last Ute-settler conflict in Colorado reportedly occurred about 9 miles west of modern Rangely along the White River. The White River and Uintah Utes were then removed to the extent of their current reservation lands in Utah in 1881.

The first settlers of European descent in the Rangely area came in from Vernal, Utah. The Goff family founded a trading post beside the wagon road from Vernal between MM73 and MM74. In 1882 the community of Rangely was founded. However, it wasn't until 1946 that it was incorporated as a town with Fred Nichols as its first mayor.



Resource exploitation along the White River

The search for mineral wealth had brought persons into the vicinity of the White River even prior to the Hayden survey (1876). Hydrocarbons have been the major focus although some coal, and, more recently, nacholite have been mined. The earliest exploitation was of the mineral gilsonite. Gilsonite is a glossy black, hydrocarbon resin resembling coal or tar. It is used in inks, paints, oil well drilling muds and cements. Gilsonite occurs in vertical veins varying from inches to 22 ft wide, up to 1500 ft deep, and as much as 12 miles long. The origin of these veins, which occur within the Green River and Uinta formations, is linked to the oil shales of the Green River formation. The mineral was discovered in the 1860's and commercial mining operations began in 1885. Bonanza is the only survivor among the mining camps of Dragon, Watson, Rainbow, Rector, and Bonanza which were established to exploit the gilsonite. The Uintah Railroad, constructed to carry ore out to the south over Baxter Pass to Mack, Colorado, was completed in 1904 but abandoned in 1939. Five stage stations sat on a toll road constructed from Vernal to the railroad terminal at Watson, UT. One of these, White River City was located at the mouth of Evacuation Creek (MM-61.5). Ice jams and floods have destroyed the station but the old road and shoring can be seen to the south and rock riprap that supported a wooden swinging bridge is on the north side of the river.

Current gilsonite production is trucked out to the north. Nearest veins to river are about MM-64-MM-65 on the north rim of the canyon. Two of these veins, most



notably the Cowboy vein, are crossed by the shuttle road between Rangely and Bonanza.

F.V. Hayden first noted the oil potential at Rangely in 1876 and early settlers in the Rangely area were aware of oil seeps along Stinking Water Creek north of the White River. Wells developing the Rangely oil field began to be drilled in the early 1900's. These wells were relatively shallow and

produced oil from the Mancos formation which is exposed at the surface there. The Rangely field consisted only of this shallow well production through the 1920's until the Raven A-1 well struck oil in the deeper Weber formation in 1933. The major exploitation and development of the field waited until the 1940's and was driven by the oil needs of WWII.

A pipeline to carry the oil to a refinery in Salt Lake City, Utah, was then built along the White River to near the state line (between MM-75 and MM-76) where it leaves river valley to the northwest. The Rangely Weber field was unitized in 1957 and waterflooding (to increase oil production) was begun. The water intake for

the field is on the north bank of the river just below MM-81. To further enhance production, CO₂ injection was introduced in 1986 with a pipeline from Wyoming supplying the CO₂. Approximately half of the estimated original 1.6 billion barrels of oil has been recovered by the turn of the century.



There is also considerable oil and natural gas production in the area between Bonanza, UT, (MM-59.5) and the Mountain Fuel bridge (MM-20.5). The oil exploration and production has left this area with a maze of poorly marked and unmapped roads and trails.

Oil shales within the Green River formation were first noted in the 1850's and early retorts were built near the gilsonite camps of Watson and Dragon between 1919 and 1930. The Paraho demonstration plant near Rifle, CO, was constructed in the 1950's and remained in production until the oil crisis of the late 1970's led to a new "oil rush". This brief boom ended in the early 1980's after the expenditure of hundreds of millions of dollars. Most of this was spent in the Piceance Basin south of the White River between Meeker and Rangely but some was spent in smaller operations south of Bonanza in Utah. The modern bridge over the White River, a popular river access point south of Bonanza, was constructed during this boom. The estimated reserves of around 1.5 trillion barrels of oil in place hold the promise of future reenactments of the oil boom. The only active research into economic extraction of these reserves is being conducted by Shell Oil in the Piceance Basin southeast of Rangely.

The first coal mine in the area was opened in 1906. Intermittent small production continued until the 1980's when the Deserado mine just northeast of Kenney Reservoir was developed to provide coal for the electric generating station constructed north of Bonanza, Utah. The coal is transported from the mine to the generating

station by an electric locomotive. The shuttle route passes underneath the railroad tracks just west of highway 64 heading toward Utah.

The only other mineral being extracted in this area is nacholite, a bicarbonate of soda. Reserves of this mineral are currently being solution mined in the Piceance Basin. Cavities in the upper Green River formation near Evacuation Creek (MM-61.5) are left by the natural dissolution of nacholite nodules. Among other things, bicarbonate of soda is a key ingredient of the commercial product Alka-Seltzer.

Shuttle route details

Take care when setting up and running your shuttle. The road on the Utah side is in poor condition with numerous potholes, washboard, and blind corners. Even very mild rain showers can turn the clays into extremely slippery surfaces which are virtually unnavigable, even with four wheel drive. Make sure that you have a jack, lug wrench, and a good spare tire. An extra few gallons of water is a great idea whether you need it on the shuttle or just for a drink when you get off of the river. There are persons providing shuttle services out of Vernal, UT, and they are listed in the River Trip Resources section. GPS coordinates marking key points along the way are also included in that section.

The beginning reference point for the shuttle routes is at the Rangely stop light, the corner of Main Street (Highway 64) & White Avenue (Dragon Trail). RHS (Right-Hand Side) and LHS (Left-Hand Side) notation applies to navigation landmarks. The first three shuttles appear in their entirety on the river map. Reference the shuttle map inside the front cover for a general map of the longer shuttles.



Canoeing party in May near MM83

- A. Rangely to Taylor Draw River Access:
- Proceed east down Main St. for 5.25 miles past the junction with highway 139 (1.40 mi RHS), Columbine Park and Cedar Ridge Golf course (2.60 mi RHS) and the *Buck' N' Bull Camper Park* (3.15 mi RHS) to the parking lot at the base of the Taylor Draw Dam.
 - Turn left into the paved parking lot. The river access is through the lot to the north by a gazebo beside the river. Note the irrigation diversion immediately below this point on river left. This shuttle is on your river map.
- B. Rangely to Rangely Camper Park River Access:
- Proceed east down Main St. for 0.55 miles past the U.S. Post Office (0.25 mi LHS) to the Rangely Volunteer Fire Department (LHS).
 - Turn left (north) on Nichols Street for 2 blocks (pavement ends) and turn right (east) for 0.15 mi into the Rangely Camper Park. Take the first turn to the left (north).
 - River access is due north of the camping area across an open lawn and over the levee to the river. This section is on your river map.
- C. Rangely to White Avenue Bridge River Access:
- Proceed north up White Ave. for 0.72 miles past the Radino Senior Center (0.20 mi LHS) to the Green bridge (0.70 mi) and a stop sign.
 - Turn right (east) on the county road for 50 yards; river access is down the short steep trail to the right. This section is on your river map.
- D. Rangely to Big Trujillo Wash (BLM) River Access:
- This section is 5.35 miles total distance.
 - Proceed west down Main St. for 0.50 miles around the bend to the northwest (0.20 mi) to just past the convenience store (LHS).
 - Turn left and proceed down River Road (county road 2) for 4.85 more miles. The road bends back to due south for 0.50 miles and then turns sharply to the right (west) past the Rangely Middle School (0.60 mi RHS) and then winds along the south side of the river.
 - The river access is to the right (north) down a dirt trail immediately after the BLM "*Entering Public Lands*" sign. This section is on your river map.
- E. Rangely to Bonanza Bridge River Access:
- This shuttle is 20.90 miles total distance.
 - Proceed west down Main St. (Highway 64) for 0.50 miles around the bend to the northwest (0.20 mi), across the White River (0.80 mi), past the Chevron/Texaco field office (4.40 mi RHS), over Mellen Hill (9.90 mi), past the Mellen Hill Fremont Shelter (11.00 RHS) to the junction with county road 21 (12.45 mi).

- Turn left (west) and follow the county road for 15.20 miles. Proceed under the railroad tracks (2.25 mi), across the state line (4.85 mi), over the Cowboy gilsonite vein (11.3 mi) to the stop sign at the junction with Utah state road 45 in Bonanza.
- Turn left (south) down the paved road for 3.10 miles, over the bridge crossing the White River.
- Take the first possible right after crossing the bridge, down the hill sharply back to the right (north). Continue down the dirt trail, bearing right under the bridge to the river access.

F. Bonanza Alternate River Access:

- This alternate finish to route E. (above) cuts 9.5 miles off of the trip down river but is not recommended in wet conditions. It picks up at the stop sign at Bonanza.
- Turn left (south) down the paved road for 2.10 miles, looking for a dirt road to the right.
- Take the right turn (1.0 miles before the bridge), down the hill 0.10 to the first possible right fork.
- Continue up the hill for 1.3 more miles to a gilsonite mine. The road veers sharply to the right in front of the facility; you will continue to the right, up and over the hill.
- The road winds for 4.5 more miles down the bottom of a dry wash. Watch for a sharp left just as you exit the wash onto the flat. There is an oil seep to your left about 30 yards.
- Take the left, past the oil seep for 0.3 miles to the river.

G. Rangely to Enron (BLM) River Access:

- This shuttle is 47.40 miles total distance.
- Proceed west down Main St. (Highway 64) for a total of 12.45 miles around the bend to the northwest (0.20 mi), across the White River (0.80 mi), past the Chevron/Texaco field office (4.40 mi RHS), over Mellen Hill (9.90 mi), past the Mellen Hill Fremont Shelter (11.00 RHS), to the junction with county road 21 (12.45 mi LHS).
- Turn left (west) and follow the county road for 15.20 more miles, under the railroad tracks (2.25 mi) across the state line (4.85 mi) to the stop sign at the junction with Utah state road 45 in Bonanza.

Now comes the hard part.

- This next section of 15.70 miles will take you to the sign for the Enron BLM River access.
- Continue straight ahead (west) along the road as it winds around Bo-

nanza. Proceed past the end of the pavement (1.40 mi), to the right where the road forks but the branches parallel each other for several tens of yards (4.20 mi), the left fork heading to the *Seven Sisters*.

- Continue past a corral on your left (6.50 mi), straight through a cross-roads (8.35 mi), and past a shepherd's cross (9.05 RHS) on a hilltop. There is a second, smaller such hilltop cross (10.50 LHS). Keep to the right where the road branches (11.40 mi), continuing straight at the Fantasy Canyon sign (14.30 mi RHS) and finally to the *Enron Take-out* sign (15.70 mi RHS).

Descrip tion	UTM 27-Easting	UTM 27-Northing
Reservoir Launch	695154	4441730
Rangely Camper Park/Launch	688182	4439601
Turn to Big Trujillo(BLM) Launch	686564	4439832
Highway 64 Turn West to Bonanza	670107	4448337
B onanza	656200	4430679
Road Forks, Keep Right	650254	4431951
Straight Ahead	644392	4433078
Keep to Right	641360	4430282
Fantasy Canyon sign, Keep Left	637175	4431282
Enron Take-Out Sign	635073	4431937
Turn Right for BLM (Enron) Launch	634175	4429582
BLM(Enron)Launch	632735	4429845

Useful GPS points for shuttle drivers

Fantasy Canyon is a unique and ephemeral product of desert erosion. It resembles a Tolkienesque goblin city more than does the site on the White River. It is a collection of miniature arches, towers, and grotesque forms weathered out of the soft sandstone and even softer shale. It is well worth the side trip.



- Turn left (south) for a section total of 3.85 more miles to the river access, you will need to keep a sharp eye out for the small *Carsonite* BLM trail

markers (0.50, 1.00, 1.10, 1.20 mi, etc RHS) along the way. A *Carsonite* sign is a fiberglass strip 4" wide and 4' tall.

- Turn right (west) (2.70 mi) and head toward the *Enron* wellsite; bear to the right past the location and on down the hill, through the BLM campground to the end of the road for river access.

H. Rangely to Mountain Fuel Bridge (Ute Tribal Land) River Access:

- This shuttle is 46.05 miles total distance.
- You must have a Ute Tribal Use Permit!
- Proceed as in section G. to the *Enron Take-out* sign. From there:
- Continue straight ahead for a section total of 2.50 miles to the yield sign at the junction with the paved county road.
- Turn left (south) to the bridge over the White River (0.07 mi), and continue on until the first road to the right (0.11 mi).
- Turn right (west) for 20 yards and then make another right (north) down the dirt trail. Continue through the trees to the end of the road for river access.
- Remember: this takeout is considered difficult with a 5' sand-cut bank in a turbulent backwater.



If any of you lost money in the Enron scandal, you can appreciate the irony. This sign is at the third from last navigation point in the preceding list of GPS points.

I. Rangely to Ouray (Ute Tribal Land) River Access:

- This shuttle is 61.0 miles in length.
- You must have a Ute Tribal Use Permit!
- Proceed as in section G. to the *Enron Take-out* sign.
- Continue straight ahead for a section total of 2.50 miles to the yield sign at the junction with the paved county road.
- Turn right (north) for 1.60 miles to the first paved road to the left (west).
- Turn left (west) on the paved road for 12.1 miles to the stop sign at the junction with the next paved road. There are very sharp hairpin turns at 2.70 miles and 9.70 miles on this road, be wary! You will note the Green River on your right just prior to reaching the stop sign.
- Turn left (south) for 1.40 miles, crossing the White River. Turn left (east) 50 yards after the bridge, going steeply down through the brush to the end of the road for river access. In summer, put on mosquito repellent before exiting your vehicle!

Alternative Shuttle routes

With the upgrade and paving of the Glen Bench road in Uintah County, Utah, there is an alternative to the longer three of the above routes. While these alternatives are longer in distance, they may actually be shorter in time and less abusive to vehicles since they are primarily on paved roads.

G_{alt} Rangely to Enron (BLM) River Access:

- This shuttle is 63.30 miles total distance.
- Proceed west down Main St. (Highway 64) for a total of 12.45 miles around the bend to the northwest (0.20 mi), across the White River (0.80 mi), past the Chevron/Texaco field office (4.40 mi RHS), over Mellen Hill (9.90 mi), past the Mellen Hill Fremont Shelter (11.00 RHS), to the junction with county road 21 (12.45 mi LHS).
- Turn left (west) and follow the county road for 15.20 more miles, under the railroad tracks (2.25 mi) across the state line (4.85 mi) to the stop sign at the junction with Utah state road 45 in Bonanza.
- Turn right (north) on the paved road for 15.0 miles, passing the Red Wash road (4.85 mi RHS). The Glen Bench road is not well marked but is at the top of a hill and is the only possible paved road to the southwest for several miles in either direction. Turn left on the Glen Bench road.
- Continue straight ahead (southwest) along the road as it winds through the desert and finally drops off of the Glen Bench onto the lower plain. You will pass a paved road to the right (12.7 mi) and 1.6 miles later will be looking for a dirt road to the left about 100 yards before the Mountain Fuel bridge. You will be making this turn to the left (east).

- Continue straight ahead up the dirt road, out of Ute Tribal land (1.30 mi) for a section total of 2.50 miles to the *Enron Take-out* sign at the junction with a dirt road to the right (south).
- Turn right (south) for a section total of 3.85 more miles to the river access, you will need to keep a sharp eye out for the small *Carsonite* BLM trail markers (0.50, 1.00, 1.10, 1.20 mi, etc RHS) along the way. A *Carsonite* sign is a fiberglass strip 4" wide and 4' tall.
- Turn right (west) (2.70 mi) and head toward the *Enron* wellsite; bear to the right past the location and on down the hill, through the BLM campground to the end of the road for river access.

H_{alt} Rangely to Mountain Fuel Bridge (Ute Tribal Land) River Access:

- This shuttle is 57.05 miles total distance.
- Proceed as in section G_{alt}, to the left turn just north of the Mountain Fuel bridge.
- Continue ahead (south) to the bridge over the White River (0.07 mi), and continue on until the first road to the right (0.11 mi).
- Turn right (west) for 20 yards and then make another right (north) down the dirt trail. Continue through the trees to the end of the road for river access.
- Remember: this takeout is considered difficult with a 5' sand-cut bank in a turbulent backwater.

I_{alt} Rangely to Ouray (Ute Tribal Land) River Access:

- This shuttle is 68.9 miles in length.
- Proceed as in section G_{alt}, to the Glen Bench road.
- Continue straight ahead (southwest) along the Glen Bench road as it winds through the desert and finally drops off of the Glen Bench onto the lower plain. You will be looking for a paved road to the right at 12.7 miles. Again, the road is not well marked but is the only paved road turning off for several miles either side of it.
- Turn right (west) on the paved road for 12.1 miles to the stop sign at the junction with the next paved road. There are very sharp hairpin turns at 2.70 miles and 9.70 miles on this road, be wary! You will note the Green River on your right just prior to reaching the stop sign.
- Turn left (south) for 1.40 miles, crossing the White River. Turn left (east) 50 yards after the bridge, going steeply down through the brush to the end of the road for river access. In summer, put on mosquito repellent before exiting your vehicle!

River trip resources

Ute Indian Tribe

Fish & Wildlife Management

P.O. Box 190 435-722-5511

Ft. Duchesne, UT 84026 435-722-2677

2002 rates: \$10.00 per boat, \$5.00 per vehicle per day at river access points.

BLM Vernal Resource Area

170 South 500 East, Vernal, UT 84078

Telephone: (435) 789-1362

BLM White River Resource Area

73544 Hwy 64

Meeker, CO 81641

Telephone: (970) 878-3800

River Runners' Transport, Inc. (canoe & equipment rentals, shuttles, packages)

P.O. Box 1361 1-800-930-7238

417 East Main Street Bus. 435-781-4919

Vernal, UT 84078 Fax 435-781-1180

www.riverrunnerstransport.com email at rrt@easilink.com

2002 maintaining a 2-vehicle minimum on shuttles.

Colorado Northwestern Community College Outdoor Recreation Department (canoe & equipment rentals)

500 Kennedy Drive 1-800-562-1105 ext 304

Rangely, CO 81648 1-970-675-3304

www.cncc.edu

Rangely Area Chamber of Commerce

209 East Main Street 970-675-5290

Rangely, CO 81648

www.rangely.com

Vernal Area Chamber of Commerce

134 West Main Street 435-789-1352

Vernal, UT 84078

Websites

Outfitting your boat and river camping in this region:

www.nps.gov/dino/river and www.blm.gov/utah/price/riverinf.htm

www.river-management.org

Leave no trace website: www.lnt.org

www.americanwhitewater.org

Emergency Services

911

Uintah County Sheriff 435-789-2511

Rio Blanco County Sheriff 970-675-8311

Life Flight, Grand Junction, Colorado 1-800-332-4923

Acknowledgements

Several persons have made contributions toward improving the end product. The author especially appreciates the work of Herm Hoops, Kim Bartels, and Don Peach. Pictures, other than those of the author have been provided by the BLM, DOW, Rangely Museum, and the Uintah County Library Regional History Center.

A portion of any and all profits from the sale of this guide go to the support of the Rangely Museum Society. Additional copies of this guide may be purchased by contacting the Rangely Area Chamber of Commerce, 209 E. Main St., Rangely, CO, 81648; telephone 970-675-5290 or www.rangely.com. Any comments leading to the improvement of this guide are welcomed by the author.

Using the river map

The river map, used in traversing the canyon, starts at the back cover and works its way towards the middle of the guide.

The map is organized so that you will start navigating down the page and when you reach the top of a page where the guide is bound, you will simply turn the guide over. When you reach the top of the page away from the binding, you will have to turn a page but will continue on down the page with the same orientation as you had been navigating. Text is placed on the map page in a way to make it most easily read when floating down the river. The legend for the guide is shown on various map pages. The shuttle guide maps on the inside covers use the same legend but not all features will be seen. To begin your float trip, turn to the **back** page and place the bound side of this guide toward yourself.



Disclaimer: Remember, river channels are dynamic features and thus change frequently. Rocks, sandbars, large trees, or other obstructions may suddenly appear or just as quickly vanish. The boater must be aware these hazards exist and be wary of them. The author and publisher cannot be held responsible for differences between the guide map and reality.

River Guide Sponsors:

The following sponsors have contributed to the development and production of this guide.

Rio Blanco Lodging Tax Board



Author: Ken Parsons
kcp@quik.com

Mileage	UTM27-Easting	UTM27-Northing
0	612760	4435306
1	614104	4435753
2	614839	4435762
3	616363	4435690
4	617745	4435777
5	618962	4436053
6	619910	4435978
7	621165	4435737
8	622403	4435546
9	623087	4435693
10	623571	4435981
11	624251	4435806
12	625088	4436182
13	626060	4436075
14	627002	4436991
16	628108	4435879
15	627730	4436529
17	628955	4435410
18	629261	4434341
19	629844	4433235
20	630951	4432802
21	631506	4432396
22	631078	4431445
23	632147	4430938
24	632644	4429802
25	633252	4429263
26	634584	4429078
27	634903	4429036
28	634857	4427666
29	636121	4426913
30	635598	4425553
31	636980	4425022
32	637111	4423636
33	636500	4422472
34	637856	4422660
35	639078	4422250
36	640331	4421649
37	641580	4422209
38	642466	4421468
39	643431	4420840
40	644192	4422018

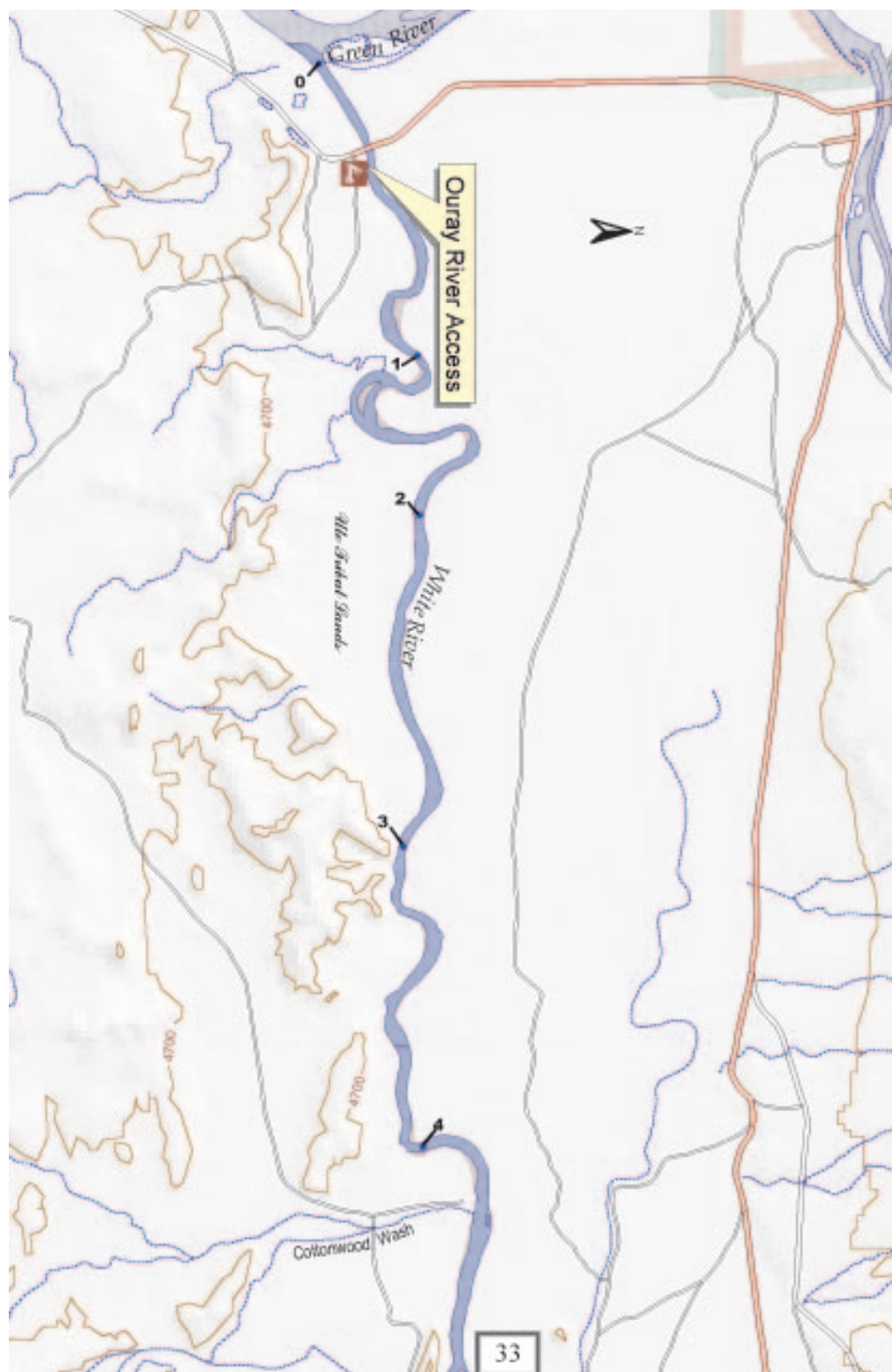
Mileage	UTM27-Easting	UTM27-Northing
41	645421	4421662
42	645550	4420510
43	646225	4420585
44	645922	4421814
45	646783	4422630
46	647535	4423862
47	648505	4424376
48	649110	4424487
49	650194	4424166
50	651032	4423127
51	652204	4422460
52	653288	4422737
53	652571	4423681
54	652720	4425034
55	653562	4424435
56	654518	4424138
57	655367	4424774
58	655661	4425459
59	655476	4426578
60	656471	4426390
61	657658	4425711
62	659159	4425544
63	659517	4426391
64	660392	4427679
65	661677	4428195
66	662636	4428229
67	662969	4429434
68	662718	4430516
69	663871	4430851
70	665150	4431032
71	665962	4431633
72	666772	4432495
73	667711	4432558
74	668709	4432489
75	669461	4433156
76	669779	4434423
77	669622	4435567
78	669257	4436896
79	670295	4436405
80	671423	4436673
81	672217	4436000

Mileage	UTM27-Easting	UTM27-Northing
82	673061	4436096
83	673710	4436281
84	674677	4436757
85	675900	4437353
86	677031	4437085
87	677755	4437644
88	678796	4437269
89	679596	4437838
90	680940	4438173
91	682288	4438129
92	683280	4438329
93	684166	4439126
94	684913	4439118
95	685857	4439684
96	686583	4440567
97	687791	4440444
98	688279	4440143
99	689347	4440302
100	689324	4441102
101	690512	4441509
102	691314	4441351
103	692298	4441364
104	693160	4441643
105	694231	4441299
106	694727	4441484
107	695170	4442965

NOTES:

NOTES:

[illegible]





McCook (top left) and other Utes who frequented the trading post and homes near Rangely.



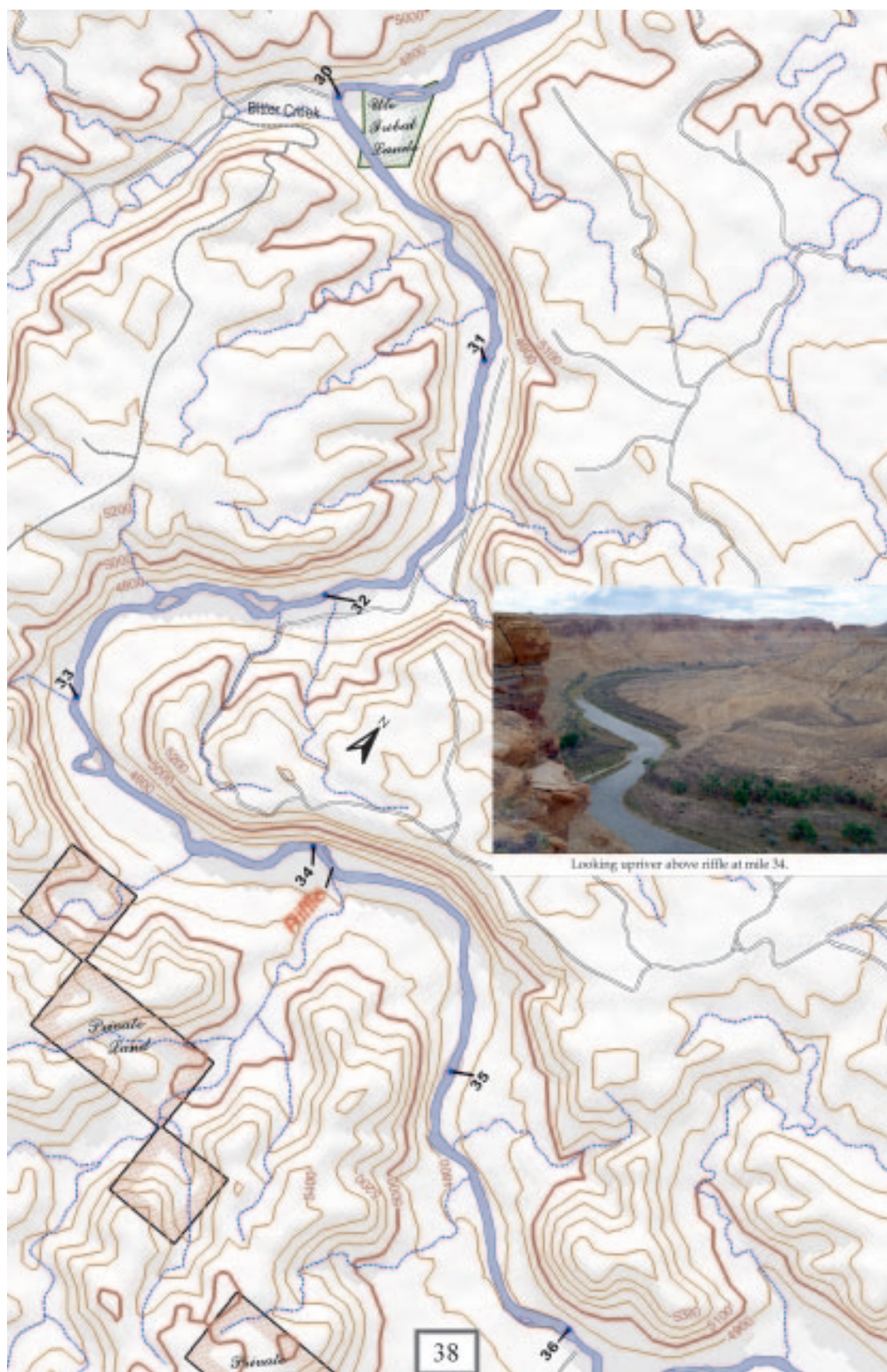
Ute Chief Atchee





BLM River Access







View north from the Goblin City trail.





