



## 50<sup>th</sup> Anniversary Roubidoux Raft Race Rules

June 4<sup>th</sup>, 2022

Event Day time line:

- 8:00 AM – Raft sign in starts
- 10:00am – Raft sign in end
- 11:00am – Best in Show raft design judging starts – Laughlin Park
- 1:00pm – Roubidoux Float Race Starts!!
- 4:00pm - Awards Ceremony

Participants can register for the Roubidoux Anniversary Raft Race on the City's website at [www.waynesvillemo.org/50th-anniversary-of-the-roubidoux-park](http://www.waynesvillemo.org/50th-anniversary-of-the-roubidoux-park)

### **RAFT RACE THEME: GET YOUR KICKS ON ROUTE 66!**

If you can find it on Route 66 then it can be the theme of your float! From rocking chairs to big blue whales the sky is the limit! Show us your best Route 66 raft!!!

**RAFTS MAY BE SPONSORED BY BUSINESSES AND OTHER ORGANIZATIONS.**

**ADVERTISEMENTS NOTING THE BUSINESS NAME AND/OR ORGANIZATIONS SHOULD NOT BE THE PREDOMINATE DESIGN OF THE RAFT.**

All entries must register before the captains meeting May 28<sup>th</sup>, 2022 or before all entry slots are filled (limit of 40 rafts). The entry fee is \$ 45.00 per raft.

A Captains' meeting will be held on Thursday, May 28<sup>th</sup>, 2022 at 6 PM. Attendance is mandatory for all team Captains. Crew members are also encouraged to attend. Location to be determined at a later date.

The Captains' meeting is used to present the specific details of the event. The items to be covered will include but are not limited to; safety requirements & equipment, race rules, raft inspection, launching procedures, parking arrangements, the starting location and line up, race-course description, finish line location, anticipated race duration, awards and any last-minute developments and/or instructions.

The race committee will also clarify any concerns and take any questions. The race committee will also hand out additional rafting information and materials as necessary.

### **SOCIAL HOUR AFTER CAPTAINS MEETING**

Once all participants are registered and event information has been presented; everyone is invited to stick around for a social hour to start some good, friendly rivalries over food and drinks.



## RACE RULES & SAFETY ADVICE

The Roubidoux Raft Race Committee promotes a safe, family-oriented event. We encourage all participants to act in a responsible sportsman-like manner, obey all safety requirements and raft race rules, assist their fellow rafters when necessary, and above all, enjoy the event. Remember, safety comes first! Watch out for fellow rafters, lend assistance when needed, and have fun.

- Race course launch is located at the I-44 bridge on the Roubidoux. The starting line will be located at the sandbar and goes downriver approx. 1.43 miles to the large sandbar located past the RV park.
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- Important times!!!
  - 8 AM - Sign in starts for all rafts
  - 10:30 AM – Raft Race Sign-In ends
  - Noon – Roubidoux Raft Race will begin!!!

\*All entries will be required to accept a tow if found to be floundering mid-race and/or have not finished by 3:30 p.m.

### RAFT RULES

1. All rafts must be of homemade construction.
2. No commercially manufactured hulls allowed on any raft. (Canoes and Kayaks are considered “hulled” crafts).
3. All entries must be solely human powered and self-propelled and make use of poles, oars, paddles, sails, etc. or any combination thereof.
4. All raft entries must have a minimum crew size of 2 and maximum size of 4.
5. The use of nails below the water line is prohibited.
6. Inner tubes or inflatable devices are not allowed.
7. Minimum raft size must be able to support the weight of the crew.
8. A raft’s deck must be securely fastened to a frame and the frame securely fastened to the flotation devices.
9. Marine rigging such as cleats & rope are acceptable.
10. All sheet metal raw edges to be turned over and taped.
11. Any protruding long bolts to be sawed off, filed, and taped.

12. All rafts should be inspected prior to launching and may be subject to modification at the discretion of the Committee.
13. All entries must display their competition number in plain sight and must be clearly visible to the finish line officials
14. All crew members must remain aboard their raft for the entire duration of the event unless low water areas are probable. Race committee members will be posted at potential areas on the river that may be impassable due to low water. Crew members may not leave their raft to move the device through a low water area by hand, until given permission from a designated race committee member.
15. All entries must run entire course under their own power to be eligible for awards.
16. All vessels must be removed from the river at the end of the day unless other arrangements have been made.
17. Derelict vessels are subject to police action and/or fines from DNR or the Waynesville Police Department and risk permanent disqualification from the event if they are not promptly removed from the river and/or park.
18. It is strongly encouraged to test your raft, with all crew members aboard, before race day!

#### **RULES & SUGGESTIONS FOR CREW MEMBERS**

1. Each participant must have a Coast Guard approved life jacket that must be worn always.
2. Each captain must review protocol for any crew members who may find themselves overboard. This will be covered in the captains meeting.
3. All crew members shall wear sneakers or other appropriate footwear to prevent injuries from submerged sharp objects.
4. Sun-sensitive participants should wear appropriate sunscreen.
5. No animals allowed on any rafts.
6. Participants should wear an appropriate hat with a large enough visor to help reduce exposure to the hot sun.
7. No Glass Containers are allowed at any time!
8. Each entry must have an adequate supply of drinking water onboard for the entire crew to prevent dehydration during the race.
9. All race entries should be outfitted with a first aid kit.

10. All race entries must have garbage bags for their own trash.
11. No mechanical devices or tubing shall be used to propel water balloons, spaghetti, snowballs, or any other dangerous objects.
12. Anyone exhibiting unsafe behavior will be disqualified and could be permanently banned from the event.
13. No diving off any vessel or jumping into the water at any time! Sections of the racecourse can be very shallow in spots and may include submerged sharp objects.

## **EVENT SAFETY**

The racecourse will be monitored & medical support provided by representatives from one or more of the following groups depending on availability: Fire Department, PCAD and/or the Waynesville Police Department.

Participants must obey all safety requirements & raft race rules. If there is an emergency and/or you see someone in trouble it is your obligation to make sure you or someone else gets to any raft and/or participant(s) as soon as possible. Lend a hand if possible. Elapsed race times will be adjusted for those providing emergency assistance to fellow competitors.

If your vessel is taking on water and is in danger of sinking, immediately head towards the nearest shore and beach your craft. All rafts are required to accept a tow if found floundering mid-race or if they have not finished the course by 3:30 p.m. Safety is the foremost concern throughout the day so please act wisely and provide help if needed. Anyone acting without regard for the safety of others, or themselves, will be disqualified and risk permanent disqualification from the event.

All crew members must be present at the morning of check in and all crew members must check in at the end of the race to ensure we haven't lost anyone along the way. If anyone on the team has to leave, please notify staff so we know how many crew members should be on each boat.

## **AWARDS**

The Roubidoux Raft Race has three categories for awards. Speed, People's Choice, and the Lawrence Beamer Creativity in Design award judged by the committee and other special guest judges. Speed categories will be awarded first, second, and third. Both the People's Choice and speed categories will be in the running for the Lawrence Beamer Award design award, so make sure your raft is decked out!

*Race Number for Awards.* A race number will be assigned to each Raft at registration the morning of the race. The numbers must be affixed so that the judges can clearly see it.

## **INSPECTION OF RAFTS**

Rafts should be inspected prior to launching and may be subject to modification or disqualification at the discretion of the Roubidoux Raft Race Committee. The main focus of inspection is to ensure that rafts have no obvious mechanical problems and the construction has been done in a safe manner. Especially important is that all sheet metal raw edges are to be turned over and taped and any protruding long bolts be sawed off, filed, and taped. Issues discovered during inspection must be corrected before the raft can be launched. The main concern here is the safety of you and your crew. Be prepared & equipped to make changes to your raft should any issues be found. You should bring along some hand tools, extra fasteners, rope, duct tape, etc.

## **LAUNCHING FACILITIES**

Raft launch information will be determined after the number of racers is known. Get everything ready before putting your raft in the water. Complete any preparations, assembly, and equipment loading for your raft in the parking area. Enter the water only after everything is in place.

There will be a lot of activity on race day. Move your raft away from the shoreline as quickly as possible to make room for the other people coming in behind you. Please don't hang around too long. Keep everything moving. Vehicle can drive close to the shore side of the road to unload equipment and launch your watercraft. Afterwards you will have to move your vehicle and/or trailer and park it in the designated parking area in Roubidoux Park.

## **FINISH AT SHARK HEAD BEACH**

The racecourse ends at the large sandbar located past the RV Park, or as we like to call it, Shark Head Beach. Contestants will see the finish line that will be hung above the river. As you approach the finish make sure your registration number is not obstructed and it is clearly visible. Pass close to the finish line so that race officials can record your raft's registration number and elapsed time in the race. All vessels are to immediately head ashore.

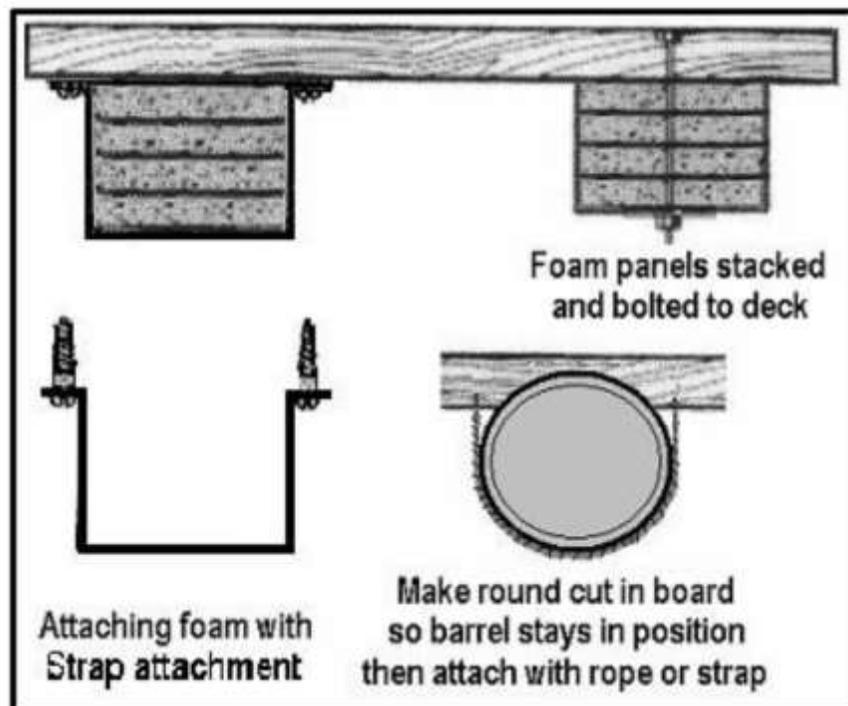
## **SPECTATOR SPOTS ALONG THE RIVER**

There is no one place for spectators to view the entire race. The best way to see the event is to make your way comfortably to the edge of the Roubidoux. Spectators can catch a glimpse of the rafts as they pass by any number of vantage points along the river. Other spots includes Spring Haven Beach the Handicap Fishing Pad in Laughlin Park, the Roubidoux Bridge, Croaker's Cove and anyplace else where the riverbank is accessible and provides a clear view.

## BASIC RAFT CONSTRUCTION

The six basic elements to join when building a raft are floatation, a deck, propulsion, steering, teamwork, and safety. The information that follows will explain each of these key principles in more detail. This knowledge should give you a good idea on how to build a raft. Rafts can be built from scrap wood, foam, plastic bottles, barrels, and recycled materials of every kind. With a little creativity you can take whatever is around you and recycle it into something that floats. Rafts are as varied as the imagination is capable of conceiving them.

*Floatation Materials – Foam.* First off, rafts are not boats and therefore don't need watertight integrity. This is because they're almost always built from materials that are naturally buoyant. A typical raft can be made of some combination of foam, plastic barrels or bottles, wood, and anything else that floats. These floating materials will continue to provide lift even when they are damaged. Since a raft doesn't require watertight integrity, it can be built out of anything that is available. The most common material used is foam. Chunks and odd scraps of foam are often found floating up on riverbanks and beaches. These can be stuffed into a frame you construct out of wood. Expandable foam in a can (used for insulation jobs) quickly spreads out to fill in gaps and cracks. It can be used as glue to hold all your floating objects together inside your hull. The trick is to fill in as much airspace as possible before using the expandable foam. Consider adding things like packing peanuts, small soda bottles with lids, and anything else that is small and will float. If you use a wooden frame to hold every thing together be sure to enclose it on all sides with wood to catch any loose pieces of foam. Sometimes foam scraps can be found at construction sites, in dumpsters, or at the landfill. Always ask for permission before taking any surplus materials being thrown out. Foam can also be bought at Home Depot or Lowes if you can't find any for free. The foam there is usually available in sheets and can be cut to size and stacked to form your floats. If you want to glue your foam sheets together, try the adhesive on a scrape piece first to make sure the glue won't dissolve the foam.



*Building Materials – Free or Recycled.* Remember, a raft is much more rewarding to build with free recycled materials and on a shoestring budget. Plastic barrels of all types & sizes can also be used as floatation. These can take a lot of abuse without puncturing. Be sure to also get the round bungs that are used to cap them and keep them watertight. Don't use a barrel which had toxic chemicals in it as these have the potential to leak harmful pollutants into the river. You could also get a good supply of plastic 5-gallon buckets & lids from a painter or sheetrock worker.

Their bulk materials come in these large containers and are perfect for building rafts. Be sure to clean out any residual soap, juice, paint, or plaster before using plastic barrels and/or buckets.

The use of plastic buckets for floatation can be very convenient. To begin with they are easy to obtain and can be used as is. They are very durable and do not breach easily when abused or dragged over rocks, mud, or submerged sharp objects. They are also of a manageable size and can be easily adopted into many raft designs.<sup>7</sup>

*How much floatation is needed?* A typical raft must use enough floatation to hold up the raft in the water and support the weight of the crew and any stuff onboard. This will vary for each raft and is dependent on your crew size, the raft's construction, and the materials being used. For each gallon of water you displace with floatation materials you will gain a floating force of about 8 pounds.

For example, a 55 gallon drum can float and/or support up to 400 pounds of weight and a 5 gallon buckets will hold up to 40 pounds. By comparison 1 cubic foot of foam will provide approximately 60 pounds of floatation. Whatever materials you use to float your raft be sure to build in some margin for error. For example, let's assume you plan to have three people on your raft and the crew's combined weight is 480 pounds. You might estimate that your raft will weigh another 200 pounds. The total weight would then be 680 pounds. Next, divide this total weight by 8. The answer reveals that 85 gallons of water must be displaced to float the combined weight of the raft & crew. If you were instead going to use five-gallon buckets for floatation, 17 would be needed to provide enough buoyancy to float the crew and the raft. If you were going to use foam you would need approximately 12 cubic feet of foam.

It is good practice to have much more buoyancy than what is necessary to just float your raft & crew. This extra floatation allows for a larger margin of safety. This is crucial because it is difficult to estimate the weight of a raft and all the stuff people may decide to bring onboard on race day. You are much better off to have too much floatation than not enough.

The placement of buoyant materials should be equally distributed in order to provide good stability. Most rafts typically place their floatation materials on each side of the raft just like on a pontoon boat. This is your best approach as it will provide good stability. Avoid placing all your floatation materials in one centralized location as this orientation will make your raft very unsteady and tipsy. Another trick to make your raft more stable is to add an outrigger. This is especially effective on longer rafts that aren't very wide.

*The Deck.* The deck of your raft is where you'll be sitting as you go down the river. It should be strong and be able to support the weight of the crew and any gear you'll have on board. The most common deck material used on rafts is plywood that is attached to some sort of wood framing underneath. Don't use old pieces of wood full of splinters as this isn't too comfortable or safe to sit on. Use newer pieces of

wood that are strong and robust. Placing a piece of old carpeting on top of the deck will provide a nice surface to sit on.

The deck should have attachment points on the underside of the framing to secure the flotation materials. By drilling small holes in the wood you will create spots where ropes can be passed thru. You can then tie the flotation materials to the bottom of the raft. A few eyebolts or cleats should also be attached to the deck or framing so that anchor ropes and tow lines can be secured someplace on the raft as well. Screws should be used to connect the deck and framework, don't use nails. Once the raft is wet and starts striking waves it will flex and nails will tend to pull out, get loose, and eventually fall out. Screws stay put much longer. A nice addition to a deck is some sort of canopy to provide shade. A large umbrella will work just fine as will a small tarp and some sort of framework to hang it on.

When designing your deck leave plenty of room for your crew to do their rowing or paddling. If the deck is too small paddlers may bang oars or not have enough room to kneel down or sit comfortably while rowing. You also want some spare room for a small cooler, your first aid kit, anchor, tow ropes, and any other supplies or tools that you will be carrying along on your raft.

*Propulsion Options.* Rafts will need some way to move through the water. Most participants will use paddles or oars. If you can build some oarlocks this makes the rowing much easier. Another popular choice is to also try using a sail made out of a plastic tarpaulin or bed sheet. Sails are great on windy days but can be unreliable. Sometimes the wind will be blowing the wrong way and other times the wind will blow fast and furious in the intended direction. There is no way to know for sure if you'll catch a favorable breeze. Be sure to support the mast holding up the sail on three sides with a sturdy rope. This triangulation is necessary to safely hold everything together in a strong breeze.

*Teamwork.* Teamwork is one of the key ingredients to raft racing. You want to join forces and ideas with as many people as you can. The benefits of this joint effort become evident when looking for building materials, coming up with ideas, and constructing your raft. One of the best parts of the race is the preparation stage. You'll all have fun together and get excited and really make great efforts to get everything done. Each person will have some special talent to contribute. All these different aspects coming together are what make the entire raft race team work.<sup>8</sup>

*Safety.* Safety must always be maintained while procuring materials and building the raft. It's no fun to get hurt, so wear safety glasses whenever handling power and/or hand tools. Also wear gloves when handling your materials and use caution whenever cutting materials. Your teammates may be working nearby on something while you're busy doing something else. Always look out for each other and help one another whenever necessary. A good practice is to use sandpaper or a file to smooth out and remove sharp edges whenever you cut something. Chances are you'll be wearing shorts out on the raft on race day so you don't want to pick up a splinter or get cut on anything sharp. Bend over exposed sharp metal edges and cut off protruding bolts. Then apply duct tape to these sharp edges. Have a first aid kit available during your build sessions and whenever you're out on the water.

*Testing your raft.* Once you've finished building your raft, test it out to see how it works. This is important because you don't want any surprises on race day. Take your raft to the Roubidoux and see if it floats with your crew aboard and everything else you will be carrying. In some cases, you may find that you need a little more buoyancy. In other cases, you might need to reposition some of the floatation materials to help stabilize the raft. Next, find out if your propulsion works as expected. Your crew should try out their rowing stations. Try putting up your sail to verify it is in working order. There is a whole list of items that contribute to your raft being a stable platform out on the water. You won't know how well it will work until you try it out. Make any adjustments beforehand and then retest your raft until you get it right. This ensures you will be ready to kick some fanny on race day. Make sure all crew members testing out the raft has on a Coast Guard approved life jacket. Never go out on the water without one and look out for each other at all times.

*Emergency Repairs.* Be sure to always carry emergency tools, duct tape, bungee cords, rope, fasteners, and anything else you can think of just in case you need to make an emergency repair out on the water. Things can break, come loose, or jam up. You want to be able to mend anything that needs fixing, tightening, or re-attachment. Sometimes periodic adjustments are going to be necessary. Tools should have a safety lanyard attaching it to the raft or enough foam attached so it won't sink if dropped overboard accidentally. Having the ability to recover from a mechanical problem can be a key factor in winning a raft race. You don't have to succumb to a simple mechanical problem if you bring emergency gear along to save the day.



**EVENT REGISTRATION FORM**  
**50<sup>TH</sup> ANNIVERSARY OF THE ROUBIDOUX PARK**

June 4<sup>th</sup>, 2022

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**Team Name:** \_\_\_\_\_

**Sponsored by:** \_\_\_\_\_

**CREW INFORMATION:**

**Captain's Name:** \_\_\_\_\_

**Phone No.** \_\_\_\_\_ **Email** \_\_\_\_\_

**Crew 2** \_\_\_\_\_

**Crew 3** \_\_\_\_\_

**Crew 4** \_\_\_\_\_

**Registration Fee \$ 45.00** – Please return your completed registration to City Hall no later than May 25<sup>th</sup>, 2022. Registration forms can be mailed to: [jen.worth@waynesvillemo.org](mailto:jen.worth@waynesvillemo.org).

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**RELEASE OF LIABILITY PLEASE READ CAREFULLY**

*I, \_\_\_\_\_, for myself, my heirs, and my personal representatives hereby assume all risk of personal injury or death from whatever causes arising, while I am participating in the Roubidoux Raft Race, which may be dangerous and risky, and release the City of Waynesville, Missouri, its officers, agents, lessees, invitees and employees from any liability therefore, directly or indirectly, and will defend, indemnify and save harmless the City, its officers agents, lessees, invitees and employees from any such liability, whether or not arising out of negligent or willful actions or the failure to act, including the City's own negligence. The consideration for my agreements herein is my being allowed to engage in the activity identified above. (Further, I certify that I am over 18 years of age.)*

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Signature

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Date