

# Whitewater Rafting Merit Badge Requirements

## *Requirements To Be Done Separate From WA Trip*

- \_\_\_1) Show that you know first aid for injuries or illnesses that could occur while working on the Whitewater merit badge, including hypothermia, heatstroke, heat exhaustion, dehydration, sunburn, insect stings, tick bites, blisters, and hyperventilation.
- \_\_\_2) Do the following:
- A) Identify conditions that must exist before performing CPR on a person. Explain how such conditions are recognized.
  - B) Demonstrate proper technique for performing CPR **using a training device approved by your counselor.**
- \_\_\_3) Before doing the other requirements earn the Canoeing merit badge, then do the following:
- A) Demonstrate basic canoe-handling skills by completing the Scout Gate Test within 120 seconds while paddling tandem with a buddy.
  - B) Review and compare BSA Safety Afloat and the American Whitewater Affiliation Safety Code and demonstrate your understanding of these principles by answering questions from your counselor.

## *Requirements To Be Discussed At The Put-In Beginning at 8:00. Breakfast finished at this point.*

### **\_\_\_Requirement #14- Participate in a 1-day whitewater trip, prepare a written plan.**

River flow, weather, access to evacuation routes, etc. See attached document.

### **\_\_\_Requirement #12- Boat Anatomy, Trip Packing and Rigging.**

- Basic raft anatomy
  - 7 chambers, Baffles, Self-bailing floor, Thwarts, D-rings, Outside and Inside Safety lines, Bowline, Pigtails, Foot Cones
- Inflating the raft
  - Proper inflation 2-3 lbs, Caps, Valves, Purge valve, hand pumps or electric pumps
- Rigging Frames
  - Paddle frame, Side to side, Thwart to thwart, rig to flip
- Loading Day gear
  - Use a Packing list... Cam straps, ice chest, water and lemonade, rocket boxes, tables and bail buckets.

### **\_\_\_Requirement #4- Safety Equipment.**

- 1<sup>st</sup> Aid Kit, Patch kit, (duct tape, fire starter), Wrap Kit, Pump, Spare Paddles, Spare Lifejacket, River Knife, Whistle, Day Bag with Rain gear and sweaters for hypothermia, Throw Bag
- Communications
  - Radio, Cell phone, Satellite phone

### **\_\_\_Requirement #8- Identify paddles designed for whitewater use.**

Explain their special characteristics. Plastic coated aluminum. T Grip, blade, shaft. Kayaks use double blade. Lightweight, wood, manmade. Breakdown or single piece. Canoe paddles can be bent shaft. Spoon or flat blades.

## **Requirement #11- Safety.**

- Safety Talk as a group
- Paddle Talk in crews

*Get on the River 9:30- Requirements 6 and 9 to be covered by guides on river. Stop at large eddy on right below 1<sup>st</sup> Railroad Bridge. Scouts then begin to practice skills on Class II whitewater prior to lunch.*

## **Requirement #11 continued... Signals, Group Travel, Buddy System.**

- Signals and Signaling
  - Whistle signals
    - One blast for attention, Three blasts for emergencies
  - Paddle signals
    - Paddle up means ... I'm OK, Let's go, or our boat is ready
    - Eddy out, Emergency Eddy out / stop, Pointing to the positive, Speed up, Tighten up, Back off, One minute
- Techniques for safe and efficient river travel with groups
  - Pod system
    - Lead and sweep boats
    - Buddy system within pod

*Stop at Railroad Bridge for talk.*

**Requirement #5- Rating River Rapids**-Explain the International Scale of River Difficulty and apply the scale to the stretch of river where you are practicing and demonstrating your whitewater skills. Identify the specific characteristics of the river that are factors in your classification according to the International Scale.

- Rating rapids
  - Class I – flatwater
  - Class II – small riffles and micro eddies
  - Class III – development of waves and holes, must have precise maneuvering, potential for injury with a swim
  - Class IV – bigger waves and holes, must have precise and sequential maneuvering, injury likely with a swim
  - Class V – large waves and holes, must have precise, sequential and aggressive maneuvering, death possible with a swim
  - Class VI – Considered unrunnable in rafts, extreme waves and holes, death likely with a swim

*Do Requirement #6 and #9 as scouts paddle to lunch*

**Requirement #6- Identifying River Features**, Demonstrate your ability to read the river where you are practicing and demonstrating your whitewater skills.

- River directions
  - Upstream, Downstream, River right, River left
- River characteristics and reading water
  - Tongues, Standing waves, Diagonal waves, Haystacks (wave train), Breaking waves and stoppers, Pillows, Pourovers and sleepers, Undercuts, Rooster tails, Boils, Lowhead dams, Eddies, Holes
  - Portage recognition

## **Requirement #9- Boat Control.**

- Guiding skills and strokes
  - Voice projection, Basic Commands
  - Guiding strokes
    - Turning strokes, forward stroke, back stroke, draw stroke, pry stroke
- Boat maneuvers
  - Front upstream ferry, Turns and pivots, Keep boat straight in holes and waves (K.I.S.S.), Tracking, Driving, Braking, Angles
  - Properly preps crew for landing
    - Directs bow man effectively,
    - Secures raft to shore

*Stop for Lunch. Discuss #13 and #7*

## **Requirement # 13 Risks of Tubing and Improper Craft.**

Hypothermia, Strainers, lack of control, rock injuries, lack of safety equipment

**Requirement # 7 Discuss Special Uses for Kayaks and Decked Canoes in running water.** Identify the different materials used in modern whitewater canoe construction and the advantages of each.

## **Review Knots used in Rafting.**

Figure 8, Bowline, Clove Hitch and with quick release, Truckers hitch, Double half hitch, Bowline coil.

*Stop above Zoom Flume in the big eddy at the curve. Set up flip and throwbag stations.*

## **Requirement #11, Continued... Rescue, Swimming, Flipping, Wrapping.**

- Rescue Practice
  - Swimming Self Rescue Practice
  - Throwbag Practice,
- Wrapped boat discussion,
- Shore based safety and Chase boat discussion
- Flipping practice
  - Head counts, Getting on top of raft, Re-flip

*Stop above Hemorrhoid in the big eddy on the left below Elvis Rock. Scout Hemorrhoid Rock*

## **Requirement #6 Continued.... Portage, Scouting.**

- Learn how to scout and read a river both while afloat and from ashore. Review river features.
- Discuss when to Portage.

*Review learned skills written test on bus ride. Correct answers to be rewarded with snack crackers and juice drink. 2 answers per scout required.*