

# 1-Day Trip

## Whitewater Rafting Merit Badge Syllabus & Itinerary

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

**Requirement 1) \_A.)** Review with your counselor the first aid for injuries or illnesses that could occur while working on the Whitewater merit badge, including hypothermia, heat reactions, dehydration, insect stings, blisters, bruises, cuts, and shoulder dislocation.

\_\_\_**B.)** Identify conditions that must exist before performing CPR on a person.

Explain how such conditions are recognized.

\_\_\_**C.)** Demonstrate proper technique for performing CPR using a training device approved by your counselor.

**Requirement 2) \_\_\_A.)** Review and compare BSA Safety Afloat and the American Whitewater safety guidelines and demonstrate your understanding of these principles by answering questions from your counselor.

\_\_\_**Requirement #3 and #4-**Not offered since we are using rafts.

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

### \_\_\_**Requirement #2B-Safety Equipment**

Identify and explain the use and importance of safety equipment on moving water. Include in your explanation a discussion about throw ropes, whistles, and how to choose and properly fit PFDs (personal flotation devices) and helmets.

- 1<sup>st</sup> Aid Kit, Patch kit, 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 #9- Group Equipment**

- Discuss the personal and group equipment necessary for a safe whitewater outing and how and why it is used. Explain how to pack and protect these items.

### \_\_\_**Requirement #13- Participate in a 1-day whitewater trip, help to prepare a written plan.**

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

### \_\_\_**Requirement #12- Discuss the use of Inflatable Boats.**

- 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 #8- Identify types of boats and paddles designed for whitewater use.**

- Explain the differences between flatwater and whitewater canoes- (keel and rocker)
- Identify the advantages of kayaks and decked canoes in running whitewater. (Spray skirt, maneuverability)
- Discuss the construction, safety, and functional features of paddles used in whitewater activities. (raft paddles and kayak paddles- plastic, wood, lightweight fiber, aluminum, t-grips, breakdown)

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

- Safety Talk as a group
- Paddle Talk in crews

*Get on the River 9:30- Following Requirements to be covered on water by guides at beginning of trip.*

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

- Portaging when and how to do it.
- Techniques for safe and efficient river travel with groups
  - Pod system
    - Lead and sweep boats
    - Buddy system within pod

## **Requirement #5b, c, d- River Features**

- Explain how to read a river while ashore and while afloat, and discuss the importance of hazard recognition.
- Demonstrate your ability to read the river where you are practicing and demonstrating your whitewater skills.
- Explain the terms downstream V, riffle, strainer, eddy, eddy line, pillow, ledge, bend, shallows, falls, low-head dam, current, rock, drop, horizon line, wave, standing wave, hydraulic, and sleeper.

## **Requirement #7 Signals.**

- 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
    - Dividing the River into 5 segments and using paddle to indicate direction to run
    - Eddy out, Emergency Eddy out / stop, Pointing to the positive, Speed up, Tighten up, Back off, One minute

## **Boat Control. #10**

- 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 and discuss the following requirements*

**Requirement #6- 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

**Requirement # 7 . Communication** Explain the importance of communication during every whitewater outing. Explain and then demonstrate using the following river signals: "Run right," "Run left," "Run down the center," "Stop," "Are you OK?" and "Help!"

*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 #5c.... Scouting.**

- Explain how to scout and the importance of scouting before committing to running a rapid, and discuss good judgment when evaluating a stretch of river or a particular rapid.

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