

Genesee Waterways Center

Safety Manual for Rowers & Scullers



Location and Contact Information

Genesee Valley Park Boathouse Address:

Address: 149 Elmwood Avenue, Rochester, New York 14611 Phone: (585) 328-3960

President:

Tom Kosanke

Email: President@GeneseeWaterways.org

Director of Rowing:

Jeffrey Swing

Email: Jeff@GeneseeWaterways.org

Director of Operations:

Shannon Grieve

Email: Shannon@GeneseeWaterways.org

Phone: (585)328-3960

Genesee Waterways Center is a member of US Rowing. US Rowing is the governing organization for the sport of rowing.

Genesee Waterways Center is a 501 (c)(3) organization. is located in Rochester, New York.
We promote fitness through rowing, sculling, kayaking and canoeing on the unique waterways of the Genesee Region.



Revised 7/16/16 – George Morgan, Steve Kittelberger

Basic Safety

All program participants and single scullers must familiarize themselves with this manual and any other safety notices GWC makes available.

General Safety Guidelines

- All GWC participants and members must conduct themselves safely and responsibly at all times.
- All GWC program participants and members are required to sign a Liability Waiver and fill out a medical form each year.
- Each year, all rowers and scullers must watch the **US Rowing Safety video** ([click here to view](#)).
- All GWC program participants and members must follow the instructions of GWC coaches and staff at all times.
- Running inside of the boathouse, in any area where boats are being transported or on the docks is strictly prohibited.
- Swimming off the docks or shore is prohibited at all times on GWC premises.
- Each rower and sculler is responsible for being aware of weather conditions and possible safety hazards.
- All firearms are prohibited on GWC premises.
- Access to the Elaine Wilson Boathouse is to be under the supervision of coaches or approved supervisors.
- Be alert to unsafe or suspicious conditions or conduct in the boat, on the waterways, on GWC premises and in Genesee Valley Park.
- Participants should be medically and physically able to participate at the exertion level required of their program, including carrying rowing shells to and from the boathouse.
- Water or a sports drink in a reusable bottle are recommended.
- The use of sunscreen is recommended.

Emergency Help

In any emergency situation your first step should be to call for help.

- Yell for help, do not assume people can see you or recognize that you are in an emergency situation.
- Wave hands, a shirt or even an oar in the air to signal distress.
- Call 9-1-1. Give the street address of your location if possible.
- Laminated cards with emergency extraction points are located in each safety launch.

Emergency Evacuation Procedures

- Severe weather/wind/thunderstorm: All participants and coaches should remain inside the enclosure of the GWC facilities.
- 911 should be called in case of an emergency. The address of the boathouse is Genesee Waterways Center, 149 Elmwood Avenue, Rochester, New York 14611
- In case of fire in the building, move out of the building away using the door furthest away from the fire. All participants and staff should proceed to the baseball field or the path leading to the footbridge (depending on which exit is used and the location of the fire).
- In case of fire in the vicinity of the building immediately move away from the fire and proceed to the baseball field or the path leading to the footbridge (depending on the location of the fire).
- When all participants and staff reach the designated rally point, the staff should take note and identify that all participants and staff are accounted for.
- Tornado warning: move to the bathrooms located inside of the building. Make sure the outside doors are closed.

Emergency Extraction Points

On the Genesee River

- Staybridge Suites (across from UR campus) - 1000 Genesee St, Rochester, 14611
- GRC Boathouse- 1 Hawthorne Dr, Rochester, 14620
- Dock on the south shore near the power lines 1644 East River Rd, 14623
- RIT Boathouse - 643 Fairwood Dr, Rochester, 14623

On the Erie Canal (East of the river)

- Concrete ramp near the entrance to Red Creek - 1 Hawthorne Dr, Rochester, NY 14620
- Dock at Meridian Centre Park - 2025 Winton Rd South, off of Meridian Centre Blvd. Rochester, 14618
- Small dock near Lock 33 - 1205 Edgewood Ave, Rochester, 14618

Basic Safety (continued)

Use of Personal Flotation Devices (PFDs)

- NYS law and GWC require that ALL boats unaccompanied by a safety launch carry Coast Guard approved PFDs.
- Coaching launches must carry PFDs for every member of the crews they are responsible for.
- Rowing shells are designed for flotation but your boat is not a PFD; it is an emergency flotation device. Oars will float for a short time but are not a reliable flotation device.

Swimming Requirements

- Completed **Swim Test Forms** (available from the Director of Operations, Director of Rowing and coaches) must be on file for all rowers, scullers, coxswains and coaches.
- All rowers must be able to swim 100 yards, tread water for 10 minutes and put a PFD on while in the water.
- A personal flotation device (PFD) must be worn by any participant who has not completed a swim test.
- Swim tests can be done on your own and forms signed by a certified lifeguard. GWC will periodically arrange for tests to be completed at one of the city recreation pools.

Medical and Fitness Requirements

- Rowing is an aerobic exercise. Consult a physician before starting any form of exercise program.
- Notify your coach if you have any medical conditions that could impair your ability to row or that could require special attention.
- Take precautionary medications in the boat with you while rowing (i.e. asthma inhalers, epi pens, etc.).

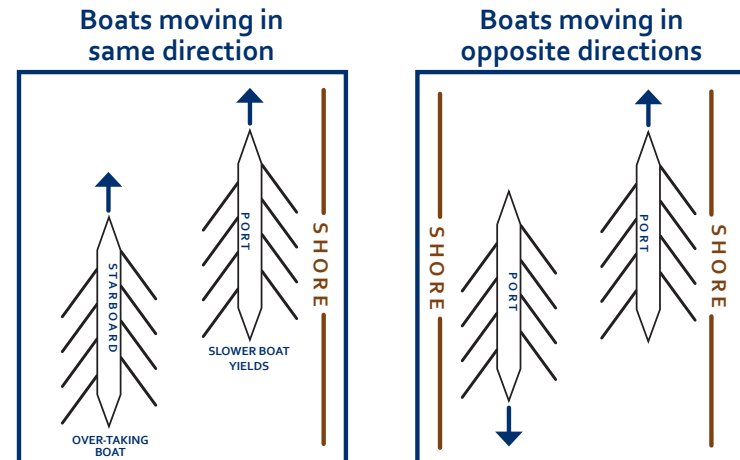
Rowing Terminology

Every rower must learn and understand the following terminology:

- Weigh enough!!
- Hold water!!
- Check it down
- Bow, stern
- Back it
- Port, starboard
- Spin
- Seat number, bow seat, stroke seat

Genesee River and Erie Canal Traffic Patterns

- All boats should launch and land facing upstream.
- Boats should avoid traveling on the canal west of the Genesee River due to high concrete walls, large swells from motor boats and no place to escape in case of capsizing.
- Stay to the starboard side of the river or canal at all times. For extra safety, keep boats and blades on the starboard third of the river as if it were a 3-lane highway. Stay to starboard on turns, and do not cut corners.
- Overtaking boats shall pass to the port side of boats being overtaken. Boats being overtaken shall yield to shore. It is the responsibility of the overtaking boat to avoid a collision. Overtaking boats must be prepared to slow down or stop to avoid contact.
- Boats approaching in opposite directions shall pass port to port.



Weather

Weather Conditions

GWC coaches, staff and members of the safety committee have final say on whether conditions are safe for practice on the water for all rowers including programs and private scullers.

- Check the forecast before going out on the water.
- Watch for gathering clouds.
- Watch for changes in wind speed and direction.
- Watch for temperature changes.

Wind

Rowers must be aware of wind speed and direction and the challenges it can create both on the water and on land.

- Be aware that winds from the opposite direction of the river current create more chop and difficult rowing conditions.
- Be especially careful carrying boats in windy conditions. Watch for sudden gusts. If possible, carry with more than the usual number of rowers. Single scullers should not attempt to carry a boat solo in heavy winds or gusts.
- If sudden winds come up, return to the boathouse if it's safe or row to the nearest shore and wait for it to calm down. Try to minimize equipment damage, but remember, you are more valuable than the boat.

Cold Air and/or Cold Water Temperatures

Cold air temperatures and/or cold water temperatures can be particularly hazardous to rowers by increasing the risk of hypothermia, frost-bite and death.

Singles, doubles and pairs are at risk because of the greater risk of capsize and should not go out without a safety launch unless the combined air/water temperature is greater than 90° F.

Fog

Do not row in fog unless your visibility is at least 100 yards. Be sure to know land reference points.

If fog sets in while you are on the water:

- Move slowly, and be prepared to stop quickly.
- Advise other boats of your location with a whistle or by shouting.
- Follow the shoreline back to the boathouse.

Lightening

Lightening is extremely dangerous. Never head out to row if you hear thunder or see lightening. Weather apps for smartphones often include lightening detection.

- If any rower hears thunder during coached programs, he or she should notify the coach immediately. The sound of thunder is usually masked by the noise of the engine.
- Head for the boathouse if it's nearby (leave your boat with the oars in it on the dock if lightening is close)
- If the storm is upon you, go under a bridge if one is close by.
- If you are far from the boathouse or a bridge, take your boat ashore and wait for the storm to pass.
- After the last clap of thunder, wait 20 minutes before heading out on the water.

Water Conditions

Waves and Wakes

Waves and choppy conditions are generated by wind, currents, or wakes from passing boats. Because shells are vulnerable to high waves, specific care is needed with approaching wakes.

- If an approaching wake is higher than the gunwale, the shell should be turned parallel to the wake to avoid having part of the shell unsupported by the water. It is possible to split a shell under these conditions. Rowers should stop rowing and lean away from the approaching wake, with oars on the wake side lifted slightly.
- If the wakes are lower than the gunwale and widely spaced, continue to row without a course adjustment. Deep and closely spaced wakes that are lower than the gunwale may be taken at a 90 degree angle with the bow directly pointed into them.
- When turning in choppy conditions, allow plenty of room between other boats, shore and obstacles.

Debris

In the spring, times of heavy rain or fast currents there may be excessive debris in the water. Use caution when deciding to go out. Debris can cause significant damage to equipment and could cause capsizing.

River Flow

Check the GWC homepage for current conditions, use this link for current data: [USGS at Ford St. Bridge on the Genesee River](#) or Google USGS Ford Street.

The following table gives guidelines for upper limits of river flow for operational concern. Numbers are in cubic feet per second as measured at the Ford Street Bridge by the US Geological Service.

RIVER FLOW/DISCHARGE (in cubic feet/second)

SKILL LEVEL	<6,000	6,000	8,000	10,000	>12,000
Novice	1 2 4 8	1 2 4 8	1 2 4 8	1 2 4 8	NO BOATING
Novice (Accompanied)	1 2 4 8	1 2 4 8	1 2 4 8	1 2 4 8	NO BOATING
Intermediate	1 2 4 8	1 2 4 8	1 2 4 8	1 2 4 8	NO BOATING
Intermediate (Accompanied)	1 2 4 8	1 2 4 8	1 2 4 8	1 2 4 8	NO BOATING
Advanced	1 2 4 8	1 2 4 8	1 2 4 8	1 2 4 8	NO BOATING
Advanced (Accompanied)	1 2 4 8	1 2 4 8	1 2 4 8	1 2 4 8	NO BOATING

Green	Normal care and operation
Yellow	Use with care and caution
Red	Highly discouraged
Black	No boating
1 - Single canoe (decked or open) 2 - Single Scull (1x), Sweep pair (2-) 4 - Double Scull (2x), Sweep (4+-), Tandem Kayak 8 - Quad Skull (4x) or Sweep (8+), Outrigger	

Additional Safety Guidelines for Coxed Boats

- All coxed boats require a safety/coaching launch unless prior approval from the Rowing Director has been given.
- Participants in coached programs should, unless specifically instructed otherwise, make an effort to remain in sight of the coach and if separated should stop in a safe spot and wait or even turn around and go back to find the coach.
- Rowers in multi-person shells should always be quiet and attentive to the coxswain and/or coach.
- The primary job of the coxswain is to safely guide the boat by steering and commanding the crew.
- A rower who sees a hazard on water or land that they believe the coxswain doesn't see should notify the coxswain immediately.
- Coxswains must following traffic patterns at all times.
- The coxswain is responsible for being aware of and avoiding other traffic – whether or not other boats are following proper traffic patterns.

Additional Safety Guidelines for Scullers

- New sculling members must complete an orientation with the Rowing Director, a designated GWC Board Member, the Director of Operations or a Safety Committee member.
- GWC reserves the right to require new, sculling members to enroll in an instructional sculling program prior to sculling independently.
- Do not give the boathouse lock code to anyone. People allowed access will be given the code by the Director of Operations or Rowing Director.
- Rowing with a buddy is recommended whenever possible, especially in cold or inclement weather.
- No rower under the age of 16 is permitted to row without an accompanying adult.
- New members or novice scullers must pass a written Captain's Test, demonstrate competent boat maneuvering and the ability to re-enter a capsized shell in order to row without a safety launch and/or coach.
- Be sure to log out and back in in the logbook located by the side door in the small boathouse.
- Scullers should carry a whistle and a cell phone in a waterproof case or pouch. Be sure to attach them to the boat so they don't sink in case of capsize.
- Private sculling instruction may only be conducted by approved GWC coaches.
- By NYS law all scullers are required to WEAR PFDs from November 1-April 31 and that they be carried in the boat at all other times. It is recommended that PFDs be carried even if accompanied by a coaching launch (the launch may or may not be nearby in case of emergency). GWC has PFDs that can be borrowed but it is recommended that you buy your own inflatable belt-style PFD.
- Know how to properly move a boat to and from the boathouse independently or with a partner. Do not attempt to move a boat solo unless you can do so competently and without bumping into anything (other boats/riggers, the floor, racks, etc).
- Do not try to carry a boat solo in windy conditions. GWC staff members can help during hours of operation.
- When approaching the ramp to the sculling dock, watch for cyclists, runners and pedestrians on the footpath.
- Do not leave boats unattended at the dock.
- Boats must be launched and docked facing upriver (south, towards the pedestrian bridge).
- Priority on the dock is given to boats docking, especially in adverse weather conditions.
- Be sure boathouse doors are closed and locked before launching and all lights are turned off.
- Unless the GWC rental office is open, restrooms should be closed and locked when not in use.

Equipment and Lights

Equipment

Each person is 100% responsible for the whole boat and 100% accountable for their own oar, rigging, foot stretchers, seat and slide. Check to make sure that all equipment is functioning properly before leaving the dock. If you aren't sure, ASK! Check the following:

- Nuts on the rigging are tight.
- Position of your foot stretchers are acceptable and tightened.
- Height of oarlock(s) properly positioned.
- Forward end of the seat tracks are blunt and will not gouge your calves (if unavoidable, calf bite sleeves can be purchased or cut the feet off a pair of long socks and slide the tops on your calves).
- Heel ties on the shoes in the boat are tied and in good condition.
- Make sure the bow ball is present and securely attached.
- Athletes are expected to report any damage to equipment and return to dock immediately if a shell loses a skeg or is otherwise

damaged in a way that makes rowing unsafe.

- Any breakage to GWC equipment must be reported on an **Equipment Damage Report Form** located near the log book in both the small and large boathouses. Any shell not in usable condition should be brightly marked with a sign saying "**BROKEN - DO NOT ROW**" to prevent anyone from taking the shell out before it is repaired.

Use of Boat Lights Before Sunrise and After Sunset

- All boats are required by NYS navigation laws to display a white stern light and a red/green (port/starboard) bow light from dusk to dawn.
- Scullers should wear a white headlamp if they do not have a white stern light.
- GWC provides lights for sweep programs. Scullers are expected to provide their own lights whether they are using GWC equipment or their own.

Clothing Recommendations

General Suggestions

- Avoid baggy shorts and shirts. They can get caught in the wheels on the seat and hands can get tangled in them while rowing.
- Bright-colored, high visibility clothing is strongly encouraged.
- High quality sunglasses are recommended.
- Wear secure footwear for safety on land. Flip flops are a tripping hazard, fall off easily and are highly discouraged.

Clothing for Hot Weather

- Wear light-colored clothing of a natural or synthetic fibers designed to aid in heat reduction.
- Wear a cap for sun protection and to reduce glare.

Clothing for Cold Weather

One of the biggest mistakes made when rowing in cold weather is dressing too warmly. Exercise generates heat and the evaporation of sweat, can cause heat loss from your body.

- Dress in layers that you can remove as soon as you start to sweat and then put back on as needed.
- First, put on a thin layer of synthetic, wicking material.
- Avoid cotton which stays wet and won't insulate.
- Next, add a layer of fleece or wool for insulation.
- Lastly, add a waterproof, breathable outer layer.

Person Overboard • Capsize • Swamped Boat • Collisions

Never Leave the Boat!

- Even if it is swamped or capsized, the boat will stay afloat.
- Abandoned, submerged or partially submerged boat are difficult for other crews and boats to see. Be sure to call out.

Person Overboard

- The most common reason to fall out of a rowing shell is as a result of an ejector crab (the oar gets stuck in the water and pushes the rower out of the boat).
- Immediately yell: "Weigh enough, hold water!"
- Keep in mind that the rower may be injured from the force of the oar and may require someone to provide immediate assistance.

Shell Capsized

- Capsizing is extremely common in small boats (single, double or pair) and much less likely in larger boats.
- Scullers should familiarize themselves and practice righting a boat and re-entering from the water.
- Larger boats (fours, eights) and small boats (if you are tired, cold or unclear how to re-enter a boat) should be swum to shore. Once you are in sufficiently shallow water to stand, right the boat and get in.
- When righted, rowing shells generally have sufficient flotation to be rowed. Many are designed so that much of the water will spill out immediately. Larger boats will need to be bailed out before being rowed.

Swamped Boat

If the shell fills with water to the gunwales, the boat will still float but may break apart if the rowers remain in the shell. Take the following steps if help is not at hand or on the way:

- Yell, "Weigh enough!"
- Untie shoes.
- Rowers should buddy-up in pairs. Coxswain should buddy with the stern pair.
- One at a time, the rowers should slip into the water, keeping hold of the boat for flotation.

- Remove the oars, or place them parallel to the hull. Loose oars will not only impede flipping the boat over, but they can pose a hazard. Don't let oars float away.
- Move to the ends of the boat so as to avoid falling riggers and oars when you roll the boat over.
- Roll the boat over so it is upside down.
- Once the boat is rolled, rowers may grasp hands across the boat.

Collisions

In case of collision stop and assess boat damage:

- Is anyone in either boat injured?
- Is the boat damaged? If so is it taking on water? If so, proceed immediately to shore or the nearest dock.

If a person is injured, consider the following:

- Is there a coaching launch nearby? Someone should immediately try and flag down or hail for assistance.
- Does the person require immediate first aid?
- Is anyone in the boat qualified to administer aid?
- If there isn't a launch nearby, and the injury requires quick attention, where is the closest help? Some of the possibilities for getting assistance include:
 - Cell phone. Know the extraction points on the river and canal so you can give an address to 9-1-1.
 - Passersby on the canal may be able to assist.
 - Flagging down a passing vehicle on East River Rd or Scottsville Rd. may be the fastest way to get help.
 - Strong Memorial Hospital is located just East of the boat-house on Elmwood Avenue.
- If the temperature is cold, lying across the boat, with as much of the body out of the water as possible is important. Loss of body heat occurs 25 times faster in the water.
- Swim the boat to shore if at all possible.

Warm Weather Rowing: Heat Related Illnesses

During intense exercise, muscle activity increases internal heat production 15 to 20 times more than at resting levels.

Factors that increase the risk of hyperthermia include:

- Air temperature
- Humidity
- Exercise intensity and duration
- Body size and shape
- Fitness level
- Amount of fluids consumed

The severity of heat illness progresses from the mild stages of heat cramps and heat fatigue through more serious heat exhaustion to heat stroke, which can be fatal.

Heat cramps

Heat cramps are painful, brief muscle cramps. Muscles may spasm or jerk involuntarily. Heat cramps can occur while rowing or begin a few hours later.

Heat cramps usually involve muscles that are fatigued by heavy work.

Treatment

- Heat cramps usually go away on their own.
- Rest in a cool place and drink a sports drink, which has electrolytes and salt, or drink cool water.
- Make your own salt solution by mixing 1/4 to 1/2 teaspoon table salt dissolved in a quart of water.
- Salt tablets by themselves should not be used. They can cause stomach upset and don't adequately replace fluid volume lost.

Heat Fatigue

You may feel heat fatigue during or after moderate to intense exercise.

Symptoms include:

- Weakness
- Dizziness
- Headache
- Rapid pulse and lowered blood pressure
- Sweating

Treatment:

- Stop rowing and get to a cool place
- Apply ice packs to your groin and armpits
- Replace fluids; preferably with a sports drink like Gatorade.

Heat exhaustion

Dehydration has impaired the ability to regulate heat, and body temperature rises to as high as 104° F. Hospitalization and/or intravenous fluids and aggressive cooling measures are required.

Symptoms Include:

- Worsening heat fatigue symptoms
- Mental confusion
- Dehydration
- Sweating continues but is accompanied by an elevation in body temperature.

Heat stroke

The body loses its ability to sweat due to profound dehydration. This is an extreme emergency and can cause death.

Symptoms Include:

- Body temperature continues to rise, above 104° F
- Disorientation
- Loss of coordination
- Hot dry skin
- Loss of consciousness

Treatment:

- Immediate cooling
- Immediate professional medical help

Prevention of Heat Related Illnesses

- When possible, row in the morning or evening when it's cooler.
- Drink plenty of fluids (especially sports drinks) before, during and after practice.
- Wear a cap and wet it when in high heat and/or humidity
- Avoid retaining heat by wearing light-colored clothing of a natural or synthetic fiber designed to aid in heat reduction.
- Acclimatize yourself slowly to exercising in the heat.
- Limit duration of high intensity work in high heat and humidity.

Cold Weather Rowing: Frostbite and Hypothermia

Hypothermia

Hypothermia can occur when a person is subjected to cold temperatures, cold water, ice or snow. Hypothermia can develop even when the temperature is above freezing.

It is a serious condition which can cause death, There is potential for hypothermia if people are submerged in water below 80° F. Water temperatures below 50° F. are extremely dangerous. Hypothermia can even occur with air temperatures in the 60's, particularly if rowers are wet, exhausted, and exposed for long periods of time.

Always obtain medical assistance as soon as possible.

Early Symptoms Include

- Skin cool/cold to the touch
- Numbness
- Drowsiness, confusion
- Lethargy

Actions To Be Taken

- Get out of the cold quickly
- Move to shelter quickly if possible.
- Remove wet clothing; put dry clothes on person if available.
- Use clothing, towels, blankets, etc. to help warm the person (use other warm bodies if necessary) cover head as well, but not face)
- If using heat packs, do not place in direct contact with the skin.
- If the person is alert, give warm fluids that do not contain caffeine or alcohol.

If in the water

- Get as much of your body out of the water as possible
- Lie on top of the boat
- Huddle with others to slow down the rate of heat loss

Extreme Hypothermia Symptoms

- Pale or bluish skin
- Shivering ceases
- Stiff and cold
- Unresponsive to stimuli
- May be unconscious
- Shallow or no breathing
- Little or no pulse

Actions to be taken (in addition to those above):

- Phone 9-1-1.
- Check for breathing and a pulse. Start CPR if necessary.
- Do not re-warm the extremities

Frostbite

Frostbite occurs most commonly on exposed skin, such as cheeks, nose and ears, but it can also occur on hands and feet.

Symptoms include:

- Numbness
- Loss of feeling
- Stinging or burning sensation

Treatment:

- Get out of the cold immediately
- Slowly warm the affected area
- If using heat packs, do not place in direct contact with skin
- Don't rub affected areas because it can damage your skin
- If numbness continues, seek medical care

Infractions of this Safety Manual

When the Director of Operations and/or the Safety Committee Chairperson becomes aware of a breach of this safety manual or of an otherwise unsafe practice, the person(s) and/or organization in question will be given: a reminder of the guideline or safety principle in question (in writing if necessary), and/or conduct a meeting in person or on phone which shall be documented.

If a person shows a blatant disregard for a Guideline (once reminded), OR an incident report form (IRF) is filed which raises serious safety concerns, then, the Director of Safety and/or the Director of Operations shall ask the person to meet with them to discuss the incident.

The meeting shall be structured as follows:

1. The facts will be reviewed (with reference to the *Incident Report Form*).
2. The relevant safety principles will be reviewed.
3. The meeting will discuss how to avoid future incidents.
4. The meeting shall be documented.

Following such a meeting, the Safety Committee Chairperson and the Director of Operations shall, if they see fit, consult with the Safety Committee and/or recommend further action to the Board of Directors or to the Executive Committee, including, but not limited to:

- Modification of GWC Guidelines
- Suspension or revocation of status (member, coach, coxswain).
- Withdrawal of use privileges to GWC equipment and/or facilities.
- In the case of high School and college programs, give notice of the matter to the program's board, athletic director or other appropriate persons.

The person(s) and/or organization concerned shall be given notice of any such recommendation prior to the Executive Committee or Board meeting at which it will be considered.