

Nationally registered clubs represented by this LMSC are:  
Pacific Northwest Aquatics  
Husky Masters

The meeting was called to order by President Bobby Gallegos. Six people in attendance were: Forest Brooks, Karen Jost, Walt Reid, Bobby Gallegos, Hugh Moore, and Jane Moore. Five teams represented were: Federal Way, Highline, Fort Steilacoom, South Kitsap, and Tigers. There were not enough voting members present to represent a quorum, so any proposed policy was presented and discussed but tabled until the next meeting.

1. **Minutes** - The minutes of the last meeting were approved as amended as follows: Committee Reports - B. Meets (last line) "The board was polled on..." and K. By-laws "quorum is 25%..".

2. **Treasurer's Report** - Jane Moore reported a current balance of \$6026.17. Income totals \$2349.80 and expenses total \$1248.91. The Lynnwood and North Kitsap meet hosts still owe the PNA fees. The Enumclaw, Anacortes, and Team Seattle meet hosts have paid the PNA fees.

### 3. **Committee Reports**

A. **Membership** - Hugh Moore reported that there are currently 457 members as compared to 480 members at the same time last year. The board discussed the following policy for NSF checks. Upon receipt of a notification of a NSF check, a letter is to be sent to the check writer. They have 30 days from the date of the letter to respond at which time they will be notified of being dropped from the Association. The vote was tabled until next meeting.

B. **Meets** - Team Seattle is to be congratulated on a well run meet, especially when you consider the last minute change of pool and a snow storm. Meet bid packets are being updated in preparation for sending out shortly.

C. **Records and Top Ten** - Work and home life has caused the current Chairman to resign. We are looking for one or more replacements.

D. **Newsletter** - A calendar of Long Distance events is being put together at the National level. We will submit several of our local non-sanctioned swims. It was reported that only two teams have paid the team registration fee. Remember the deadline for registering your team is March 15, 1990.

E. **Awards** - The newly designed PNA medals will be available at the South Kitsap meet.

F. **Social** - An informal banquet for the PNA Champs will be held at Shakey's Pizza Parlor Saturday night. PNA still needs a social chairman.

G. **Fitness** - There have been 92 responses to the "Swimming Questionnaire" (published in the January "Wet Set"). The entry fee for the "Swim the PNA" is \$5.00. The fee and entry is due April 8.

H. **HOST/Sunshine** - Mary McMahon passed away. Ann Gindroz's daughter passed away.

### 4. **Old Business**

A. **Goodwill Games** - They already have enough officials for the Goodwill Games and are currently building a waiting list.

B. **Long Course Nationals** - Federal Way Masters presented a proposal that a separate group of PNA Association members be formed to continue with the bid preparation and planning for running the 1992 Long Course Nationals. The proposal will be presented for a vote at the next meeting.

C. **Ransom J. Arthur Award** - Hugh Moore presented the name of Gail Dummer, former USMS Vice-president, as the PNA nominee. Her qualifications were discussed. Because the deadline for submitting the nomination is prior to the next board meeting, the board voted and approved this nomination..

D. **Non-profit Status** - with public benefit has been applied for.

5. New Business

A. Approval was given for the hosts of Short Course Regionals to give as door prizes the remaining PNA team wear.

B. Hugh Moore presented a proposal to change the name of Region XII to something more meaningful. Tabled until next meeting.

C. A request by Mike McKinley to distribute information about a North to South swim of Lake Washington with the proceeds going to ARC (Association for Retarded Citizens) was approved.

E. Next Board Meeting - will be Tuesday, March 20, 7:00 p.m., at the Tacoma Y. Please note that this is one week earlier than usual. We need all Team Reps!!!!!!

(Minutes are subject to approval by the board.)

Respectfully submitted,

Walt Reid

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The Importance of Warm-Down Swimming Following Strenuous Exercise

Most swimmers seem to take it for granted that warm-up prior to racing is an important part of meet preparation. I recently read a brief fitness note in a magazine that reminded me of the importance of a warm-down swim following race swims. Thinking back on the swim meets that I have attended, I know that not all participants take the time to warm-down after their races. Trying to tackle a topic such as this can get pretty technical, so I would like to briefly highlight for you the benefits of this practice.

The two primary metabolic processes that your body utilizes during exercise are known as aerobic and anaerobic metabolism. For simplicity, think of aerobic metabolism as the source of energy for a swim done at a somewhat relaxed pace. Your body is not being asked to generate a great deal of energy in a very short period of time during aerobic exercise (remember, this is a generalization!!). When you suddenly increase your level of exercise, such as you would do for a race, your body demands a faster form of energy supply, anaerobic metabolism. By and large, anaerobic exercise is the primary source for the development of lactic acid. Lactic acid is a by-product of anaerobic metabolism that has been proven to produce muscle soreness, often 1-2 days following anaerobic activity.

Levels of exercise are usually measured scientifically by measuring oxygen consumption, known as  $\dot{V}O_2$ . Your maximum level of oxygen consumption during exercise is your max  $\dot{V}O_2$ . Generally speaking, when you exercise at levels higher than 60% of your max  $\dot{V}O_2$ , your body is no longer able to supply you with energy from primarily aerobic sources. This means then, that anaerobic energy sources are utilized, and the build-up of lactic acid will occur.

If not removed, lactic acid will create muscle soreness and also decrease the efficiency of energy production and muscle contraction and relaxation processes. One way of removing lactic acid is the passage of time. However, when you perform moderate to strenuous levels of exercise, it takes a great deal of time for this to occur. Obviously, if you are swimming three races per day, at strenuous levels, your body does not have the opportunity to fully recover.

Recent studies have demonstrated that a fifteen-minute warm-down swim, done at approximately a 60% maximum level of exercise will significantly reduce lactic acid levels. Lactic acid levels were measured immediately following an all-out 200 yard swim, and 15-minute warm-down swims. This study was done on elite competitive swimmers, but the same principles hold true for all of us.

There are many other factors involved in the recovery process, including your level of training, the duration of the exercise performed, and your body's own efficiency. As I mentioned above, this is a very simplistic explanation of a very complicated process, but I feel the principles are important. Consider doing a warm-down swim following your races (or hard workout sets!!) whenever a warm-down area is available. I would certainly be interested in your individual results!

GOOD LUCK TO EVERYONE AT PNA CHAMPS, AND REGIONALS!!

Karen Jost, PT *Karen Jost, PT*