



# LTAD Competition Review

## The Pursuit of Excellence and an Active Lifestyle

**Competition Review Working Group  
October 2013 Edition**



**From Playground....**



**To Podium**

The following document details systematic issues and strengths of the community, club, Provincial and National water polo system in Canada. The target audience is clubs, coaches, referees and PSOs. The Competition Review Working Group was established in the summer of 2011 and has been working on analyzing the current programming of water polo in Canada, establishing operational goals and proposing a new competition framework to elicit a cultural change from playground to podium and cradle to grave. The following document is a revision of the original March 2013 release.

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## Preface

The following review of the competition structure for water polo in Canada is based on the Water Polo Canada (WPC) Long-Term Athlete Development (LTAD) Overview document “The pursuit of excellence and an active lifestyle”. Water Polo Canada published the first version of its LTAD overview document in early 2010, which is available on the WPC web site at [www.waterpolo.ca/ltadresources.aspx](http://www.waterpolo.ca/ltadresources.aspx). As was the case in all Olympic sports, WPC received grant money from Sport Canada through Canadian Heritage to create its own sport specific LTAD overview document based on the Canadian Sport for Life LTAD discussion paper, which is available online at [www.canadiansportforlife.ca](http://www.canadiansportforlife.ca). To better understand the reasoning behind the competition review we first must understand what LTAD is.

LTAD was created by a group of sport scientists (Canadian Sport for Life) and was adopted by Sport Canada in 2005. LTAD, through the Canadian Sport for Life organization and funding from Sport Canada, has been able to influence the National and Provincial sport organizations, parks and recreational associations, multi-sport agencies and various government levels to effect change in the behaviour of Canadians to increase the efficiency of high performance sport and the level of physical activity among Canadians from cradle to grave and playground to podium. The ideas and principles are based both on sport science and the art of coaching. <sup>1</sup>The philosophies and ideologies are athlete centre, coach driven, and administration, sport science and sponsor supported. The LTAD examines athletes based on their <sup>2</sup>developmental age and not their chronological age. Based on these scientific methods, the LTAD identifies there are specific periods throughout a person’s life where it is best to train certain athletic abilities (physical, mental, motor, technical and tactical) and have created stages of development. Each stage of development is described in detail in the WPC LTAD overview document and Appendix D: Summary Framework Matrix. <sup>3</sup>Physical literacy is the cornerstone to the behaviour modification the LTAD is promoting of a healthier and more active society and in developing world-class athletes.

In order for the LTAD to take effect on water polo in Canada, partnerships and cooperation between aquatic facilities, clubs, PSOs and WPC will need to occur. System alignment and age appropriate training and competition for all streams and types of water polo athletes (community, provincial and national) will need to occur in order to create a sustainable National Team program and increased grassroots visibility domestically. Developing a common language among all <sup>4</sup>stakeholders and understanding of what changes are needed is vital to ensure the long-term sustainability of water polo in Canada. It is important to note that although water polo is a team sport, LTAD addresses the individual training of athletes within a team environment. No individual on any given team is the same, consequently, training and competition program plans need to be specific to each individual on the team.

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<sup>1</sup> Balyi I, Cardinal C, Higgs C, Norris S and Way R, Long-Term Athlete Development, Canadian Sport for Life, 2005, p.7.

<sup>2</sup> Developmental age refers to the physical, mental, cognitive and emotional maturity.

<sup>3</sup> See Glossary of Terms for a definition of Physical Literacy.

<sup>4</sup> In this context stakeholders are referred to as athletes, parents, clubs, coaches, referees, PSOs, WPC staff and aquatic centres.

Sport in Canada experienced a tipping point when Canada was awarded the Vancouver 2010 Olympic Games. The Government of Canada boosted funding for sport to record highs in the subsequent years. Furthermore, the Own the Podium (OTP) program was created to finance medal potential winning athletes and teams, and even more importantly, there was an increase in private sector dollars for the Canadian Olympic Committee (COC). The increased funding for Olympic sports has helped WPC achieve record results in 2008 and 2009. The men's National Team qualified for the 2008 Beijing Olympics on their own merit for the first time in Canadian water polo history, while the women's National Team won two silver medals in 2009 (World Aquatic Championships and World League). Historically, sustaining these results is difficult as the men are the only country in the top ten in the world not to have a professional circuit or a varsity collegiate league. Conversely, women's water polo only has eight teams at the Olympic Games and the difference between first and tenth places is 1-2 goals on any given day. The 2011 World Champions (Greece) and 2008 Olympic Champions (the Netherlands) did not qualify for the 2012 London Olympics.

This is why it is imperative for water polo in Canada to embrace the principles and philosophies of the LTAD. For water polo in Canada to grow and flourish the training and competition structure, coaching, officiating, system alignment, cooperation and succession planning must be highly effective and extremely efficient. Without consistent success at the World Championships and Olympic Games the funding will not continue. Consistency is correlated with a sustainable domestic infrastructure (grassroots and high performance) and the LTAD is the mechanism that will help drive change and move water polo in Canada into the 21<sup>st</sup> century and beyond.

The Competition Review Working Group was formed in the summer of 2011 and their primary objective was to conduct a detailed review of water polo in Canada and provide recommendations for change based on the WPC LTAD overview document.

- |   |   |
|---|---|
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## Glossary of Terms

**Athlete Assistance Program (AAP):** is the government financial assistance program for nationally identified athletes. This program targets all athletes in Canada and not just water polo. Athletes receive assistance directly from the government of Canada with regards to tuition, money and telecommunications support.

**Active for Life (A4L):** is a level of training and competition designated with the color **red** throughout the web site, and all LTAD related documentation, and defined by the experience level in water polo, athletic abilities, time commitment and types of competition outlined in Appendix D: Summary Framework Matrix. This stream of competition is also an entry point, and a stage of development, for athletes beginning water polo at the later stages of the Competitive Foundations stage of development (approximately 16 years old) and continuing throughout adulthood. This stream, and stage, is designated for athletes who are involved in the sport for physical activity and fun, and may also be participating in the sport in various capacities such as water polo as a coach, referee, volunteer or professional. It is a transitional stage/stream for athletes once they are done playing at a competitive or high-performance level.

**Competitive for Life (C4L):** is a level of training and competition designated with the color **orange** throughout the web site, and all LTAD related documentation, and defined by the experience level in water polo, athletic abilities, and time commitment and types of competition outlined in Appendix D: Summary Framework Matrix. This stream of competition is also an entry point, and a stage of development, for athletes beginning water polo early in the Competitive Foundations stage of development (approximately 13 years old) who may want to proceed to the Excellence stream. This stream, and stage of development, continues throughout adulthood for those athletes who would like to play competitive water polo but not at the demands necessary for high-performance sport. It is a transitional stage/stream for athletes once they are done playing at a high-performance level. An example of an athlete would be a club athlete training 4-5 times per week with an 8-10 month season.

**Excellence:** is a level of training and competition designated with the color **blue** throughout the web site, and all LTAD related documentation, and defined by the experience level in water polo, athletic abilities, and time commitment and types of competition outlined in the WPC LTAD Summary Framework Matrix. This stream begins later in the Competitive Foundations stage of development (approximately 15 years old) and continues through the Train to Compete, Train to Perform and the Living to Win stages of development. This high-performance stream narrows as you approach the top of the pyramid transitioning from club, to Youth National Team, to Junior National Team and finally the Senior National Team.

**Fédération Internationale de Natation (FINA):** is the international governing body for aquatics.

**I Love Water Polo (ILWP):** is an introductory, 4-level learn-to water polo program for boys and girls that promote fitness and fundamental aquatic skills in a fun environment. ILWP is targeted to aquatic centers and is being marketed as a supplementary program to the Red Cross swimming lesson program.

**Ligue Européenne de Natation (LEN):** is the governing body for aquatics in Europe.

**Long-Term Athlete Development (LTAD):** is a player and participant development model from playground to podium. It is a philosophy for modifying the sport culture in Canada. LTAD affects governance at all levels, coaching, officiating and competition. LTAD is an athlete-centered approach, coach driven and administratively supported.

**Major League Water Polo (MLWP):** is a league targeting athletes in the **C4L** stream aged 19 and older. The league was created in 2009 and as of 2012 only involves Ontario and Quebec teams.

**National Club Championships (NCC):** is the National event for each age group identified by WPC and organized by WPC and the host club – based on a rotating bid process. The current NCC for each age group is one weekend, however, the proposal herein are for an NCC over an entire program year with the National Final occurring over one weekend.

**National Coaching Certification Program (NCCP):** is the National training and certification program for coaches in Canada. Standards and support for the NCCP is provided by the Coaching Association of Canada (CAC). Each sport is expected to create its own specific NCCP programs. Coach education is based on the type of athlete and their LTAD needs.

**Official Training and Certification Program (OTCP):** is the National training and certification program for Canadian water polo referees. The program begins with the entry-level Regional Referee focusing on local competitions, moving towards the Provincial Referee for competitions at the Provincial and National level and finally the National Referee, which is the final step prior to moving into to UANA and FINA.

**Physical Literacy:** is the acquisition of fundamental movement skills such as running, jumping throwing, coordination, balance, etc. and fundamental sport skills like swimming, eggbeater, buoyancy, etc. before the age of 12 years old (Active Start, FUNdamentals and Technical Foundations). These are the golden years of skill acquisition and provide people the tools to move confidently and be *Active for Life* later in their adult years, in addition, to creating a base for world-class athletes. Physical Literacy is designated with the color **yellow** throughout.

**Provincial Sport Organization (PSO):** are the governing bodies for water polo in each Province. Each PSO is registered with WPC and is a partner in the delivery of water polo services and programs in Canada.

**Stage of development:** this term is used to define the developmental age and the needs of the athlete at this stage of development. Each stage of development has an approximate chronological age, however, the key is to understand what needs to be trained based on the physical, emotional, mental and cognitive maturation of the individual.

**Stream of competition:** this term is used to describe the type of training and competition, time commitment, type of competitions, etc. associated with each stage of development. There are four streams identified throughout – **Physical Literacy**, **A4L**, **C4L** and **Excellence**.

**SWOC Analysis:** SWOC is the acronym for Strengths, Weaknesses, Opportunities and Challenges. Strengths and weaknesses are internal to water polo in Canada while opportunities and challenges are external. The SWOC analysis is based on anecdotal evidence from the collective experience and expertise of the Competition Review Working Group and empirical evidence analyzed through the collection of data from the WPC Membership Registration System and National Club Championships participation.

**Training and Competition:** training is defined as the development of the athletic abilities in a practice environment or non-league environment: conditioning (physical and motor); technical (skills and individual tactics); tactical (non-league games, simulated games, exhibition games, half-court, etc.); and mental (cognitive and emotional). Competition is referred to as a major competition leading to the final outcome/peak within the program year.

**Union Aquatique de Natation (UANA):** is the governing body for aquatics within the Americas.

**Water Polo Canada (WPC):** is the governing body for water polo in Canada delivering leadership in coach and referee education and athlete development, organizing National level competitions and representing Canada on the international stage.



## Introduction

The competition review is part of the WPC LTAD implementation plan. This document provides a macro perspective of the competition structure for water polo in Canada and it does not address the implementation of the competition review recommendations – the Review focuses on the *what* and *why* not the *how* and *when*. The Competition Review Group will also be tasked with creating an implementation plan for the National Club Championship leagues being proposed. Since WPC only governs and executes National level competitions and programs, the primary focus of the Review Group was the <sup>5</sup>**Excellence** stream. The Review Group recognizes the importance of the **C4L** and **A4L** streams and the inherent regional differences from coast-to-coast, and therefore, has created recommendations for clubs and PSOs.

Athletes are being pulled in different directions – older age groups, National Team, Provincial Team – and the costs are placing a strain on the system. The proposed recommendations are made with the intent to streamline costs and reduce the overall monies spent on competitions. The intent is to move towards a system with 30 teams at the 14 and under age category in a <sup>6</sup>NCC league, 20 teams in the 16 and under in a NCC league, 15 teams in the 18 and under in a NCC league and a 6 team semi-pro circuit. These leagues will be used to identify and select athletes for National Team programs.

The Review Group recognizes that we do not have the number of athletes, coaches, officials and capacity within the clubs to deliver programming to all of these teams in addition to the **Physical Literacy**, **C4L** and **A4L** streams. The PSOs will be going through their own respective competition review process with the focus of building a competition structure for the **Physical Literacy**, **C4L** and **A4L** streams. The national implementation plan, which will be created by the Competition Review Group, will have a transitional period from the current competition system to the optimal competition system identified throughout this document. In the transition period, the proposal is for a two age group system at the National level – a 15 and under NCC league (targeting 13-15 year olds) and an 18 and under NCC league (targeting 16-18 year olds). There will also be a process created within the implementation plan to phase in the various competitive streams as clubs, PSOs and WPC build capacity.

The Competition Review Group was tasked with leading a scientific and experiential based analysis of the current training and competition system, from grassroots to high performance, and provide recommended changes regarding a streamlined high performance development model, competition calendars for each stage that promotes the development of the athletic abilities through <sup>7</sup>periodization, age appropriate rules and equipment guidelines, guiding principles for each LTAD stage and general principles to help guide each PSO through their own respective competition review process. All recommendations were based on the evidences and conclusions from the data analysis in addition to the philosophies and principles of the WPC LTAD overview document.

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<sup>5</sup> See Glossary of Terms for definition of **Excellence**, **C4L** and **A4L**.

<sup>6</sup> The NCC league refers to the **Excellence** stream.

<sup>7</sup> Periodization is the manipulation of all training variables to create an optimal training plan for athletes to achieve peak performance over a given time frame.

The ensuing pages contain the Key Performance Indicators, which identifies how the Competition Review Group will track the implementation of the competition modifications as they pertain to the Goals of the Competition Review. In addition, the identified Critical Success Factors outline potential systemic risk factors that may affect the rate of change. Prior to conducting a detailed examination of the stage-by-stage recommended competition calendars, rules, equipment guidelines and training and competition considerations it is important to first study the Key Issues Based on the Current Competition System and the Goals of the Competition Review. The key issues have been identified through the data analysis of surveys sent to the coaches, clubs and provinces across Canada in addition to participation numbers at the National Club Championships from 2008-2012 and membership registration data from 2009-2012. These issues form the basis for the reasoning behind the goals and the recommended changes. The goals were developed based on Jim Collins (From Good to Great) concept of Big Hairy Audacious Goals (BHAG). These BHAGs were created without prejudice for the current paradigm, however keeping in mind, the reality of the history of sport in Canada outside of the main stream sports of hockey and soccer. The timeline for achieving these goals is eight years from implementation.

One of the ten guiding principles of the Canadian Sport for Life LTAD is the *Kaizan* approach – continuous improvement. Therefore, updates to the WPC overview document were made throughout the review process. The specific changes surrounded the naming of some of the stages, re-defining the terms training and competition, providing more detailed time commitment based on weekly training plans and new optimal training to competition ratios for each stage. These changes are all highlighted in Appendix D: Summary Framework Matrix. WPC will be releasing an updated version of its overview document in the coming years.

The challenge for water polo stakeholders will be to increase the number of participants as this is the number one critical success factor. One of the Goals of the Competition Review is a pyramid outlining the number of athletes needed at each stage of development. The table Membership Growth Needs Based on the Excellence Stream in Appendix B: Tables and Figures, outlines the growth rates needed at each stage and stream in relative and absolute terms based on the 2012 membership data. The most important number is the need for 12,000 athletes in the **Physical Literacy** stream, which translate into an 1,100% increase of the current membership numbers for the 12 and under and 10 and under age groups (FUNdamentals and Technical Foundations). Furthermore, each age group requires at least a 123% increase in overall membership and a 154% increase in the **Excellence** stream to achieve the membership goals listed in the pyramid.

Changing a culture is shifting ones thinking and paradigm. This process will take time and may be impeded by factors outside our control as outlined in the Critical Success Factors. This is a water polo in Canada proposal for change, an opportunity for all stakeholders to make a difference and provide water polo training and competition opportunities for all Canadians regardless of age, playing abilities, demographics, sociocultural and economic factors.



## Key Issues Based on the Current Competition System

The following issues have been identified as key systematic shortcomings to the training and competition system for water polo in Canada. The Competition Review Working Group has identified these key issues from Appendix A: SWOC Analysis, Appendix B: Tables and Figures and Appendix C: 2011 Relative Age Charts.

- ✓ Lack of appropriate competitions for the Competitive Foundations stage of development and the **A4L** stream. Competition format and programs are not geared for the **C4L** and **A4L** categories at approximately 15 years and older. Adolescents have many other choices for extracurricular activities. Sport may not be the priority for these participants, however, programs and competitions need to be available to grow the sport.
- ✓ Unlike most other sports, swimming competency is a key factor to joining water polo. Without a partnership with the Red Cross and other learn-to swimming programs and nation-wide implementation of the ILWP program it is difficult for children to be exposed to water polo. Not enough resources are being exhausted to recruit participants and creating developmentally appropriate programming at the FUNdamentals and Technical Foundations stages of development. More participants are needed in the **Physical Literacy** stages of development in order to have a sustainable, viable and healthy club system.
- ✓ <sup>8</sup>Mixed gender competitions are being offered at all age groups. The majority of sports offer gender specific competition at all ages; consequently, there are many other physical activity and athletic opportunities for females at the grass roots level.
- ✓ The length of the season for athletes in the Competitive Foundations and Train to Compete stages of development is too short. Athletes begin training mid to late September and finish mid to late May, which does not permit a true preparatory training phase for athletes. The majority of athletes at the 16 and under and 18 and under categories train on average 4-5 times per week – not enough deliberate practice by the time they should be in the Train to Perform and Living to Win stages.
- ✓ Coaches believe in playing as many games as possible regardless of quality, and believe in natural talent over the premise of the <sup>9</sup>10,000 hour rule and the importance of deliberate practice.
- ✓ Travel costs for athletes are high due to lack of <sup>10</sup>club density. This is a geographical issue due to the size and population of Canada. Athletes as young as 12 and under are forced to leave their province for competitions. Parental funding for water polo ends at University and the cost for this age group is way too high considering the cost of tuition and other life goals.

<sup>8</sup> Research conducted by the Canadian Sport for Life expert group has identified that mixed gender training and competition is not beneficial past the age of 10 years old.

<sup>9</sup> There is extensive research that has been conducted over the last 60 years in the field of deliberate practice and the 10,000 hour rule. The theory that there is no such thing as natural talent and that experts in any field are developed from years of deliberate practice continues to be researched.

<sup>10</sup> In this context, club density is defined as 6 or more clubs for each stream of competition within a short driving distance of each other.

- ✓ There are not enough athletes to field proper teams at the 16 and under, 18 and under and 22 and under age groups. Clubs often have to choose between the various age groups. Athletes are forced to play in competitions that are not developmentally appropriate. Athletes are playing in 2-3 age categories/teams.
- ✓ Within clubs, coaches do not work harmoniously to develop athletes over the long-term. The majority of coaches work independently of each other and do not follow an LTAD influenced plan developed by the head coach/technical director.
- ✓ Participation in competitions is decided based on location, history of the competition, when pool space is available rather than the planning and periodization needs of the athlete.
- ✓ Lack of common standards for the number of games to be played in a day, over a weekend and throughout the season. Adult rules and equipment are superimposed on children and young teenagers.
- ✓ High Performance water polo needs to be played in all-deep water 25 meters (women) and 30 meters (men). Most facilities are not equipped to host these types of competitions. <sup>11</sup>Prime time pool hours are mainly reserved for competitive swimming and other recreational programs.
- ✓ Government funding to WPC is tied to high performance results (National Team). Lack of government funds targeted for domestic infrastructure, with the exception of seed funding for new development programs.

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<sup>11</sup> Prime time pool hours are after school Monday to Friday. This is normally considered 4:00-8:00pm.

## Goals of the Competition Review

The following goals have been established by the Competition review Working Group based on an analysis of the current framework for water polo in Canada as outlined by the Key Issues Based on the Current Competition System. These goals have a time frame of eight years from implementation.

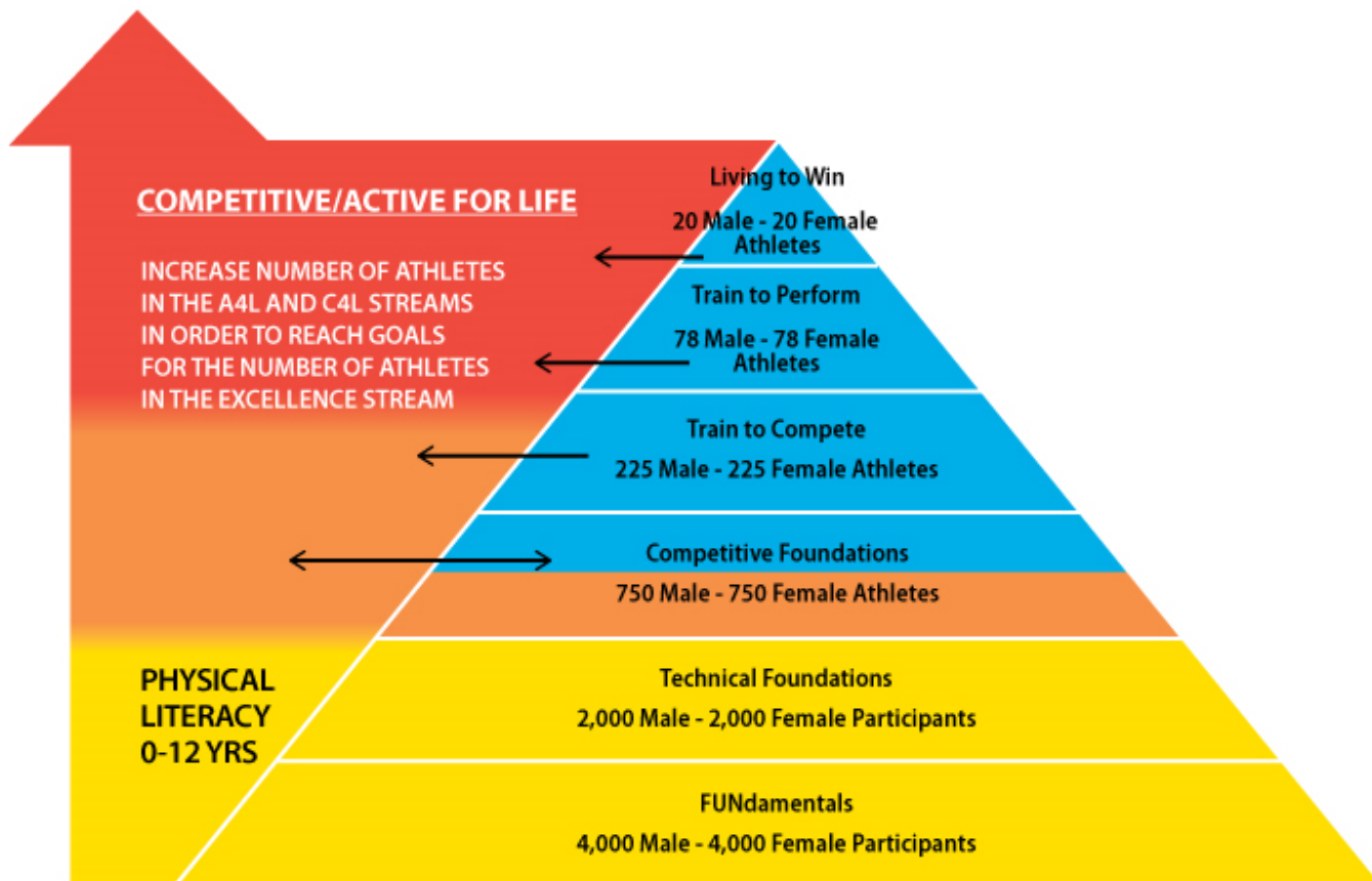
- ✓ Stage by stage competition system that aligns with the water polo LTAD training recommendations.
- ✓ Consistent top 6 finishes at the FINA World Aquatic Championships and Olympic Games – both men and women.
- ✓ <sup>12</sup>6 semi-pro male and 6 semi-pro female teams meeting the Train to Perform standards as outlined by the water polo LTAD. Each semi-pro team to have a full-time paid coach.
- ✓ 15 male and 15 female **Excellence** teams at the 18 and under age category meeting the Train to Compete standards as outlined by the water polo LTAD.
- ✓ 20 male and female **Excellence** teams at the 16 and under age category meeting the Competitive Foundations standards as outlined by the water polo LTAD.
- ✓ 30 male and 30 female **C4L** teams at the 14 and under age category meeting the Competitive Foundations standards as outlined by the water polo LTAD.
- ✓ Enough talent and depth to field a born in team for 15 year olds, 16 year olds, 17 year olds, 18 year olds, 19 year olds and 20 year olds – not having athletes play up unless they are <sup>13</sup>outliers.
- ✓ Become a Canada Summer Games or Canada Winter Games sport.
- ✓ Enough athletes at the Competitive Foundations and Train to Compete stages of development for clubs to be able to field teams – with the appropriate aged athletes – for 14 and under, 16 and under and 18 and under events.
- ✓ Have an inter-province University league.
- ✓ Develop and recruit enough coaches so there is 1 coach for every 15 athletes regardless of the stage of development or stream of competition.
- ✓ 100% of coaches are NCCP certified at the appropriate context.
- ✓ 1 certified referee at the appropriate level for each team attending the National Club Championships (i.e. if a club enters all age groups they would need to have 8 certified referees at various levels).
- ✓ 8 clubs with the <sup>14</sup>Club Excellence certification.

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<sup>12</sup> Semi-pro is defined as athletes not paying to play water polo at this level and the majority of athletes receiving funding from the Government of Canada's AAP.

<sup>13</sup> An outlier is defined as someone with extraordinary abilities and who is developmentally more mature than his/her peers. Both the athlete and the program will benefit from having him/her play on an older team.

<sup>14</sup> Club Excellence is a National certification program that is third-party-operated in which supports any and all sports in recognizing clubs and association that invest in building capacity to meet and exceed a basic set of operating principles <http://www.clubexcellence.com/en/home>.



The graphic above depicts the goal for the number of athletes needed in the **Excellence** stream beginning with the Living to Win stage down to the Competitive Foundations. The number of athletes at the top of the pyramid has been identified as the minimum requirement needed to achieve sustainable top six results at the FINA World Aquatic Championships and Olympic Games. The goal for the number of athletes at the **Physical Literacy** stages of development (FUNDamentals and Technical Foundation) form the base for the number of athletes needed at the other stages of development. In order to achieve the participation goals in the **Excellence** stream, water polo in Canada will need to increase the number of athletes in the **C4L** and **A4L** streams. A detailed statistical analysis is found in the table Membership Growth Needs Based on the Excellence Stream in Appendix B: Tables and Figures. Furthermore, it is important to understand that athletes in the Competitive Foundations stage of development can move within all three streams as they may enter the sport at the age of 13-15 years old and should still have the ability to move into the **Excellence** stream. Entry into the **Excellence** stream beginning at the Train to Compete stage of development will be difficult for athletes who have not yet progressed through the Competitive Foundations stage.

## Key Performance Indicators

Key Performance Indicators (KPIs) are defined as providing the most important performance information that enables organisations or their stakeholders to understand whether the organisation is on track or not. With regards to the Competition Review, the KPIs will help assess if the implementation of the recommendations and proposals made throughout this document are enabling water polo in Canada to meet the stated Goals of the Competition Review. The KPIs have been selected using the SMART acronym. This means the performance measures identified have a **S**pecific purpose; they are **M**easurable through the use of empirical evidence (sourced through the WPC database, membership surveys and participation at the National Club Championships); they are realistically **A**chievable; they are **R**elevant, having a clear linkage to the overall plan; and each KPI has a defined **T**ime period.

### 3-Year KPIs

1. 80% of clubs and coaches have a detailed understanding of the WPC LTAD model and are applying LTAD philosophies and principles in their day-to-day activities.
2. Athletes, coaches, officials and parents understand the water polo competition model, the player development model and the pathways to excellence.
3. Each PSO has a ratified competition review implementation plan that aligns with the WPC Competition Review.
4. Increase NCCP and OTCP workshops by 5% per annum.
5. Increase PSO capacity to deliver programming to the **Physical Literacy**, **C4L** and **A4L** streams.

### 5-Year KPIs

1. Maintain a membership growth rate of 12% per annum and a 75% athlete retention rate.
2. Increase number of clubs delivering<sup>15</sup> multiple gender-specific programming to 60.
3. Increase club capacity to deliver programming for all streams within a gender specific model.
4. Increase the number of certified NCCP coaches and OTCP officials by 10% per annum.
5. 10 and under and 12 and under<sup>16</sup> city leagues in at least 15 cities in Canada.

### 8-Year KPIs

1. Change the perception of Canadians that water polo is beneficial for developing aquatic life skills.
2. Maintain a membership growth rate of 18% per annum and an 80% athlete retention rate.
3. Increase number of clubs delivering multiple gender-specific programming to 75.
4. 10 and under and 12 and under city leagues in at least 20 cities in Canada.
5. Regular and continuous delivery of learn-to water polo programming (i.e. I Love Water Polo) in 100 aquatic facilities across the country.

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<sup>15</sup> Multiple gender-specific programming is referred to a club having more than 1 age group for each gender.

<sup>16</sup> A city league is defined as 4+ teams within a 45 minute drive of each other.

## Critical Success Factors

Critical success factors are those factors which must be in place in order for water polo in Canada to move towards achieving the Goals of the Competition Review. Without understanding each of these critical success factors, our ability to reach the goals can be undermined by challenges inherent in each area. These Critical Success Factors have been developed through the empirical research and anecdotal evidence outlined in Appendix A: SWOC Analysis, Appendix B: Tables and Figures and Appendix C: 2011 Relative Age Charts.

- ✓ **Membership Growth:** the visionary competition system for current and future generations of water polo members cannot be achieved without an increase in the number of clubs and the number of programs in each stream and stage of development. Of course, not each club can be a full-service club, but having various programming in all facilities in Canada will drive membership growth. Clubs recruit the members, and therefore, focusing on increasing the number of clubs – specifically within driving distance of each other – will consequently increase the number of members. In order to meet the goals for the number of **Excellence** athletes in the system, in addition to all other Goals of the Competition Review, we will need to collectively achieve the growth rates outlined in the Membership Growth Needs Based on the Excellence Stream table in Appendix B: Tables and Figures.
- ✓ **Adequate funding:** water polo in Canada operates within significant cost restraints. Without adequate funding it will be difficult for WPC, PSOs and clubs to deliver efficient low-cost programming for each stream within all stages of development. The high costs of playing high-performance and competitive level water polo is an entry-barrier for parents and is becoming “who can pay versus who can play”.
- ✓ **Human resources:** these are our people. Often it is stated that people are our most important resource; actually, the right people in the right place are water polo in Canada’s most important resource. Ensuring our human resources are adequately funded, so they can in turn provide exceptional service and program delivery, is a critical piece to achieving the Goals of the Competition Review.
  - Technical stream – coaches, officials and athletes
  - Administrative stream – volunteers and management
- ✓ **Succession plans:** must be in place for key people in the organization. Without succession plans within the technical stream (National Team coaches, head coaches of clubs, FINA officials and National Team athletes) it will be difficult to achieve the Goals of the Competition Review. Succession plans for the management at the WPC office and PSO offices and key volunteers and management at the club level is absolutely critical. Plans need time to develop and nurture and without the experience and knowledge being handed down to the next generation of volunteers, managers and coaches it will be difficult to move past the education stage of the Competition Review. Moreover, new people will come with new ideas and a new vision and may derail the process that has already been built if they are not mentored and provided with the right tools.



- ✓ **Access to pools throughout the country:** as outlined Appendix D: Summary Framework Matrix (time commitment) access to more pool time, specifically, <sup>17</sup>prime time pool hours is essential for clubs to offer more training and competition hours for the **Excellence** stream. Without these additional training and competitions hours clubs may be forced to choose between various programs, consequently, the **C4L** and **A4L** streams will suffer. On the other hand, clubs may choose to deliver all programs, however, not at the standard recommended by the WPC LTAD. In order to increase club density, water polo in Canada will need access to new facilities in order to increase the number of clubs within driving distance of each other.
- ✓ **Education of the WPC LTAD:** the Competition Review is based on the WPC LTAD philosophies; therefore, understanding its principles prior to implementing the recommendations from this document will be critical. Parents, athletes, volunteers, coaches, officials and managers must fully understand the cultural modifications the LTAD proposes for water polo in Canada.
- ✓ **Strong communications system:** in order to educate the water polo community, we must build a collective communication system. WPC cannot reach all of its members alone. The PSOs, clubs and coaches must play an integral role in the communication process. WPC must develop simple tools that PSOs, clubs and coaches can use to educate about LTAD and why the competition system in Canada is changing.
- ✓ **Commitment from PSOs and clubs:** the PSO and club are the key factors to implementing the recommendations in the Competition Review. The PSOs and clubs will play a key role in disseminating information as described above. In order to be the maven and salespeople for change, the PSOs and clubs will have to believe in the systematic proposed changes. The PSOs and clubs are the organizations who deal with the coaches, officials, parents, volunteers and players on a day-to-day basis.

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<sup>17</sup> Prime time pool hours are after school Monday to Friday. This is normally considered 4:00-8:00pm.

## General Principles for Delivery of Water Polo Programming in Canada

The Competition Review Working Group was tasked with analyzing the current competition system and structure for water polo in Canada and provide recommendations. The Goals of the Competition Review, Key Issues Based on the Current Competition System and Critical Success Factors were developed from a global perspective taking into account all aspects of the water polo in Canada system. The focus with regards to the recommended stage-by-stage competition structure is based on what WPC governs: National Club Championships; Olympic and National Team programs; NCCP; and OTCP.

The Competition Review Group recognizes in order for the **Excellence** stream to thrive and produce a sustainable stream of National Team athletes there needs to be strong programming at the **Physical Literacy** stages of development and the **C4L** and **A4L** streams. The PSOs and clubs are the leaders and delivery agents for these programs as they deal with the athletes and parents on a day-to-day basis. The clubs and PSOs are the ones who are out in the field recruiting new participants to the sport. Subsequently, each PSO will need to create its own competition review and implementation plan based on the recommendations set forth in this document in order to provide clubs with adequate programming tools to recruit and retain athletes. The following principles will help guide that process:

1. **Alignment with the WPC LTAD and Competition Review:** it is critical that all programming for water polo in Canada have the same language, principles, philosophies and goals as those outlined by the WPC LTAD and Competition Review. One the ten key factors of the Canadian Sport for Life LTAD is system alignment. This involves a coordinated calendar, cooperation and coordination between club-PSO-WPC, similar goals and objectives and application of the stage-by-stage recommended guiding principles, rules and equipment guidelines and training and competition considerations. Changing the competition system is a paradigm shift and it involves all stakeholders “driving the same bus in the same direction”. Furthermore, understanding the needs of the participants at each stage of development and within each stream will help guide an athlete-centred and coach driven approach to program development and delivery.
2. **Excellence:** values are important to the people in an organization because they guide our actions. Values endure beyond those who set them; they outlive an organization; and, they provide guidance to all members of the community. Excellence is one of the values from the WPC Strategic Plan ([www.waterpolo.ca/stratplan.aspx](http://www.waterpolo.ca/stratplan.aspx)). In this context Excellence is referred to delivering best in class programming and not a stream of competition. Water polo is competing with 66 other sports for a dwindling Canadian youth population, therefore, it is important that we deliver high quality programming that meets the needs of children, youth and adults.

3. **The Pursuit of Excellence and an Active Lifestyle:** not all water polo participants can become National Team athletes and coaches or FINA level referees. Moreover, not all participants want to invest in the numerous hours and finances it takes to achieve this status. The water polo in Canada system needs to allow water polo athletes multiple programming opportunities to seek their individual goals, whether it is a National Team career, competitive water polo or simply using water polo as a fun and healthy activity.
4. **Meaningful Competitions:** competitions are a main reason why people join sport. Competitions need to have a purpose and need to match the goals and objectives of the stage of development. Age appropriate rules and equipment and matching similar abilities and level of experience are important to keep athletes engaged and having fun.
5. **Accessibility:** competitions and programming should be available for all socio-demographic groups within Canada. Every Canadian should be able to enjoy water polo in a fun, safe and affordable environment. Removing the biases and stigma of “this is how it has always been” or “there are not enough females” will allow for new participants and growth in the sport.

## Stage by Stage Recommendations

### FUNdamentals (6-9 male; 6-8 female)

**Philosophy:** FUN

**Age Groups:** 8 and under mixed gender or gender specific

**Stream of Competition:** Physical Literacy

#### Guiding Principles:

- ✓ FUN
- ✓ Modified sport
- ✓ Equal playing time
- ✓ Unstructured games
- ✓ All positions
- ✓ All inclusive
- ✓ Setup and step back
- ✓ Seasonal programming

**Type of Coach:** The Community Club Coach (NCCP Community Sport – Initiation)

**Type of Referee:** N/A

#### Informal and Unstructured Game:

Game Format	Team Size	Game Duration	Ball Size	Pool Sizes		<sup>18</sup> Goal Sizes
				Length	Width	
3 on 3 + goalie	Min 5; Max 8	<sup>19</sup> 2 x 10 min	<sup>20</sup> Mikasa Size 1	10-12m	8-10m	L: 2m H: 0.9m from water
4 on 4 + goalie	Min 6; Max 10			13-15m	10-12m	

#### Modified Game Rules:

- ✓ Excluded players swim to the corner, touch the wall and return to play. Personal fouls are not counted.
- ✓ No shot clock.
- ✓ Technical timeout midway through each half with full-line substitutions.
- ✓ Athletes cannot play more than a half in goal.
- ✓ No corner throws. A missed shot is automatically a goal throw.

<sup>18</sup> Goals can be made up of any material. They can be floating in the water or on the side of the pool. Please see the NCCP Community Club Coach Toolbox for guidelines.

<sup>19</sup> Two halves of 10 minutes of running time.

<sup>20</sup> Mikasa is one of many equipment suppliers. An equivalent sized ball is permitted with another manufacturer.

## **Training and Competition Considerations:**

- ✓ Athletes at this stage of development should focus on FUN and unstructured play in shallow water.
- ✓ No official sanctioned competitions should be offered. Modified games should be played during each practice. Practices should last no longer than 60 minutes in length.
- ✓ Clubs should offer distinct seasons (fall, winter, spring and summer) allowing for participants to register for only those they would like to.
- ✓ Programs should have 2-3 practices per week allowing for participation in other physical activities.
- ✓ Athletes should be involved in sport and physical activities on a daily basis.
- ✓ Athletes should be encouraged to participate in other sports and activities – namely swimming, athletics, gymnastics and other team sports.
- ✓ Programs should offer outdoor training where possible.
- ✓ Further information regarding this stage of development is available through the WPC LTAD Overview document online at [www.waterpolo.ca/ltadresources.aspx](http://www.waterpolo.ca/ltadresources.aspx) and in Appendix D: Summary Framework Matrix.

## Technical Foundations (9-12~ male; 8-11~ female)

**Philosophy:** Lay the Foundations

**Age Groups:** 10 and under and 12 and under gender specific

**Stream of Competition:** Physical Literacy

### Guiding Principles:

- ✓ More fun
- ✓ Golden years of skill learning
- ✓ Modified sport
- ✓ Equal playing time
- ✓ Promote local competition
- ✓ Gender specific teams
- ✓ Setup and step back
- ✓ Skill competitions
- ✓ Train more than compete

**Type of Coach:** The Community Club Coach (NCCP Community Sport – Initiation)

**Type of Referee:** Regional Referee

### Game Structure:

Game Format	Team Size	Game Duration	Ball Size	Pool Sizes		<sup>21</sup> Goal Sizes
				Length	Width	
3 on 3 + goalie	Min 5; Max 8	<sup>22</sup> 4 x 6 min	<sup>23</sup> Mikasa Size 2	10-12m	8-10m	L: 2m H: 0.9m from water
4 on 4 + goalie	Min 6; Max 10			13-15m	10-12m	
5 on 5 + goalie	Min 7; Max 12			16-20m	13-15m	

### Modified Game Rules:

- ✓ Technical timeout midway through each quarter to allow for full-line substitutions. No timeouts permitted besides the technical timeout, which is called by the referee.
- ✓ Substitutions may only occur during the technical timeout and between quarters. No player can be in the water for more than one quarter consecutively. Exceptions are permitted for the following circumstances: 3 personal fouls; injuries; disqualification; and brutality.
- ✓ No player is allowed to play in goal for more than two quarters.
- ✓ Excluded players swim to the corner, touch the wall and return to play. Players are only permitted to commit 3 personal fouls.

<sup>21</sup> Goals can be made up of any material. They can be floating in the water or on the side of the pool. Please see the NCCP Community Club Coach Toolbox for guidelines.

<sup>22</sup> Four quarters of 6 minutes running time with a 1 minute break between quarters.

<sup>23</sup> Mikasa is one of many equipment suppliers. An equivalent sized ball is permitted with another manufacturer.



- ✓ Athletes must play in a press defense formation within 6m from their own goal. When the defensive player's check is outside the 8m range the defensive player is permitted to crash, however, must return to a press once their check returns within the 6m zone. The consequence for not pressing is exclusion and a personal foul against the defensive player committing the foul.
- ✓ No active coaching during play. Only communication from the coach to the athletes may occur on the bench, after goals, during technical timeouts and during interval time. First infraction is a yellow card against the head coach, subsequent infractions is a penalty shot against the team.
- ✓ No shot clock.
- ✓ First pass off a turnover (i.e. stolen ball, bad pass, turnover foul) cannot be passed to the goalie. The consequence for passing backwards towards the goalie is a turnover foul.
- ✓ Once the ball crosses the half-court line, the ball may not be passed backwards towards a teammate in the defensive zone (i.e. back court violation – basketball). The consequence is a turnover foul.
- ✓ No corner throws. A missed shot is automatically a goal throw.

## **Training and Competition Considerations:**

- ✓ Athletes at this stage of development should focus on FUN, skill development and the introduction of structured competition.
- ✓ Clubs should offer practices 3 times per week ranging from 60-90 minutes in length plus 30 minutes of dry land training each practice that promotes physical literacy.
- ✓ Athletes should be playing 2 games per day (maximum of 3) and a maximum of 5 games over a 48 hour period. There should be a minimum rest time of 30 minutes between games.
- ✓ Regular season games (within a league format) or round robin games (within a tournament format) should allow ties.
- ✓ If there is a tie at the end of regulation during qualification games (i.e. a winner must be determined) then the game should proceed with a <sup>24</sup>sudden death overtime format.
- ✓ The standings for a league or tournament may only allow a <sup>25</sup>maximum goal for-goal against differential of 6 goals for a specific game.
- ✓ Athletes should be encouraged to participate in other sports and activities – namely swimming, athletics, gymnastics and other team sports.
- ✓ Programs should offer outdoor training where possible.
- ✓ Further information regarding this stage of development is available through the WPC LTAD Overview document online at [www.waterpolo.ca/ltadresources.aspx](http://www.waterpolo.ca/ltadresources.aspx) and in Appendix D: Summary Framework Matrix.

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<sup>24</sup> Sudden death overtime refers to an extra quarter of play at the end of regulation in which the first team to score wins the game.

<sup>25</sup> The goal for-goal against is the difference in the score within a particular game. If a team wins by 10 goals they will only receive a plus-6 in the standings conversely the losing team will only receive a minus-6 in the standings. Goal for-goal against differential is the tie breaker in the standings and we do not want to encourage teams to run up the score for a higher placement in the standings.

## Competition Format and Calendar:

- ✓ Clubs should offer three distinct seasons (fall, winter and summer) allowing for participants to register for all three seasons, or only those they would like.
- ✓ Participants may only register with 1 club, no transfers permitted at the PSO level.
- ✓ Focus should be on community leagues – development of teams and clubs within <sup>26</sup>driving distance of each other.
- ✓ Summer festival in July at an outdoor venue to include 12 and under and 10 and under teams and Masters teams.

Months	September				October				November				December				January				February				March				April				May				June				July				August							
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Period	PREPARATION									COMPETITION				TRANSITION				PREPARATION									COMPETITION				TR				PREPARATION									COMPETITION				TRANSITION				
Phase	GENERAL				SPECIFIC				COMPETITION				TRANSITION				GENERAL				SPECIFIC				COMPETITION				TR				GENERAL				SPECIFIC				COMPETITION				TRANSITION							
Competitions	BLOCK LOADING BASED ON INDIVIDUAL NEEDS 3 PRACTICES PER WEEK									FALL SEASON COMMUNITY LEAGUES 2 PRACTICES FOR EVERY 1 GAME				HOLIDAY FESTIVAL				BLOCK LOADING BASED ON 3 PRACTICES PER WEEK									WINTER SEASON COMMUNITY LEAGUES 2 PRACTICES FOR EVERY 1 GAME				WINTERLUDE FESTIVAL				BLOCK LOADING BASED ON 3 PRACTICES PER WEEK									SUMMER SEASON COMMUNITY LEAGUES 2 PRACTICES FOR EVERY 1 GAME				SUMMER FESTIVAL				

COMPETITION LEGEND	
Final peak within phase	
Preparatory competitions for peak	
No peak	
Break/Transition	

<sup>27</sup>**Optimal Training to Competition Ratio:** 80% training – 20% competition

<sup>26</sup> This range will vary greatly across the country. In more densely populated areas with many swimming pools, the objective should be to lower the travel distance to play games.

<sup>27</sup> See Glossary of Terms for a definition of training and competition.

## Early Competitive Foundations (12-14~ male; 11-13~ female)

**Philosophy:** Build the competitive base

**Age Groups:** 14 and under gender specific

**Stream of Competition:** C4L

### Guiding Principles:

- ✓ Build the engine
- ✓ Evolve to specialization
- ✓ Early stages modified sport
- ✓ Promote local competitions
- ✓ Gender specific teams
- ✓ Match similar skills and abilities
- ✓ Allow for new participants
- ✓ Monitor growth (physical, mental, cognitive and emotional)
- ✓ Train more than compete
- ✓ Double periodization

**Type of Coach:** The Competitive Coach (NCCP Competition – Introduction)

**Type of Referee:** Provincial Referee

### Game Structure:

Gender	Game Format	<sup>29</sup> Team Size	Game Duration	<sup>30</sup> Ball Size	<sup>28</sup> Pool Sizes		Goal Sizes
					Length	Width	
Male	6 on 6 + goalie	Min 11 Max 14	<sup>31</sup> 4 x 7 min	Mikasa 6000 or 5500 series	23-25m	13-20m	FINA regulation (WP 2) L: 3m H: 0.9m from water
Female				Mikasa 6009 or 5509 series	23-25m	13-20m	

### Modified Game Rules:

- ✓ Technical timeout midway through each quarter to allow for full-line substitutions. No timeouts permitted besides the technical timeout, which is called by the referee.
- ✓ Substitutions may only occur during the technical timeout and between quarters. No player can be in the water for more than one quarter consecutively. Exceptions are permitted for the following circumstances: 3 personal fouls; injuries; disqualification; and brutality.

<sup>28</sup> Length is measured from goal line to goal line.

<sup>29</sup> It is recommended that teams carry two goaltenders – one of which is at the early stages of this pathway (~13 years old).

<sup>30</sup> Mikasa is one of many equipment suppliers. An equivalent sized ball is permitted with another manufacturer.

<sup>31</sup> Four quarters of 8 minutes stop time with a 2 minute interval break between the 1<sup>st</sup> and 2<sup>nd</sup> quarter, 3 minute half-time and a 2 minute interval break between the 3<sup>rd</sup> and 4<sup>th</sup> quarter.

- ✓ Athletes must play in a press defense formation within 7m from their own goal. When the defensive player's check is outside the 8m range the defensive player is permitted to crash, however, must return to a press once their check returns within the 7m zone. The consequence for not pressing is exclusion and a personal foul against the defensive player committing the foul.
- ✓ No active coaching during play. Only communication from the coach to the athletes may occur on the bench, after goals, during technical timeouts and during interval time. First infraction is a yellow card against the head coach, subsequent infractions is a penalty shot against the team.
- ✓ First pass off a turnover (i.e. stolen ball, bad pass, turnover foul) cannot be passed to the goalie. The consequence for passing backwards towards the goalie is a turnover foul.
- ✓ Once the ball crosses the half-court line, the ball may not be passed backwards towards a teammate in the defensive zone (i.e. back court violation – basketball). The consequence is a turnover foul.
- ✓ No corner throws. A missed shot is automatically a goal throw.

## **Training and Competition Considerations:**

- ✓ At this stage of development the focus of training should shift towards consolidating the basic skills and initiation/acquisition of the advanced and position specific water polo skills.
- ✓ Coaches must pay special attention to growth and development differences (especially in male athletes) and must be aware of the onset of the growth spurt and puberty in both male and females.
- ✓ It is recommended that athletes play 1 game per day, however, 2 games per day is permissible provided there is a minimum of 5 hours of recovery time between games.
- ✓ Regular season games (within a league format) or round robin games (within a tournament format) should allow ties.
- ✓ If there is a tie at the end of regulation during qualification games (i.e. a winner must be determined) then the game should proceed with a <sup>32</sup>sudden death overtime format.
- ✓ Programs should offer outdoor training where possible.
- ✓ Further information regarding this stage of development is available through the WPC LTAD Overview document online at [www.waterpolo.ca/ltadresources.aspx](http://www.waterpolo.ca/ltadresources.aspx) and in Appendix D: Summary Framework Matrix.

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<sup>32</sup> Sudden death overtime refers to an extra quarter of play at the end of regulation in which the first team to score wins the game.

## Competition Calendar:

Months	September				October					November					December				January				February				March				April				May				June				July				August					
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Period	PREPARATION										COMPETITION				BREAK		PREPARATION				COMPETITION										TRANSITION				PREPARATION																	
Phase	GENERAL				SPECIFIC						COMPETITION				BREAK		SPECIFIC				COMPETITION										TRANSITION				GENERAL																	
Competitions	BLOCK LOADING BASED ON INDIVIDUAL NEEDS 5 PRACTICES/WEEK										PROVINCIAL LEAGUES 2 TRAINING DAYS, 1 DAY OFF, 1 TRAINING DAY, 2 COMPETITON DAYS, 1 DAY OFF				WINTER PROVINCIALS		BLOCK LOADING BASED ON INDIVIDUAL NEEDS 5 PRACTICES/WEEK				PROVINCIAL LEAGUES 2 TRAINING DAYS, 1 DAY OFF, 1 TRAINING DAY, 2 COMPETITON DAYS, 1 DAY OFF										EAST WEST NATIONALS		CROSS TRAINING OPPORTUNITIES OR SUMMER PROGRAMMING																			

COMPETITION LEGEND	
Final peak within phase	
Preparatory competitions for peak	
No peak	
Break/Transition	

<sup>33</sup> **Optimal Training to Competition Ratio:** 80% training – 20% competition

Preparatory Phase	Competition Phase
3 days on; 1 day off; 2 days on; 1 day off: 5 water (90-120 min) + 2-3 dry land (30-45 min)	2 days on; 1 day off; 1 day on; <b>2 days of games</b> ; 1 day off: 3 water training (90-120 min) + 2 game-day water training (45-60 min) + 1-2 dry land (30-45 min)

<sup>33</sup> See Glossary of Terms for a definition of training and competition.

## Late Competitive Foundations (14-16~ male; 13-15~ female)

**Philosophy:** Build the competitive base

**Age Groups:** 16 and under gender specific

**Stream of Competition:** Excellence

### Guiding Principles:

- ✓ Build the engine
- ✓ Evolve to specialization
- ✓ Early stages modified sport
- ✓ Promote local competitions
- ✓ Gender specific teams
- ✓ Match similar skills and abilities
- ✓ Allow for new participants
- ✓ Monitor growth (physical, mental, cognitive and emotional)
- ✓ Train more than compete
- ✓ Double periodization

**Type of Coach:** The Advanced Competitive Coach (NCCP Competition – Introduction)

**Type of Referee:** Provincial Referee

### Game Structure:

Gender	Game Format	Team Size	Game Duration	<sup>35</sup> Ball Size	<sup>34</sup> Pool Sizes		Goal Sizes
					Length	Width	
Male	6 on 6 + goalie	Min 11 Max 14	<sup>36</sup> 4 x 8 min	Mikasa 6000 or 5500 series	25-30m	13-20m	FINA regulation (WP 2) L: 3m H: 0.9m from water
Female				Mikasa 6009 or 5509 series	23-25m	13-20m	

### Modified Game Rules:

- ✓ Technical timeout midway through each quarter to allow for full-line substitutions. No timeouts permitted besides the technical timeout, which is called by the referee.
- ✓ Substitutions may only occur during the technical timeout and between quarters. No player can be in the water for more than one quarter consecutively. Exceptions are permitted for the following circumstances: 3 personal fouls; injuries; disqualification; and brutality.

<sup>34</sup> Length is measured from goal line to goal line.

<sup>35</sup> Mikasa is one of many equipment suppliers. An equivalent sized ball is permitted with another manufacturer.

<sup>36</sup> Four quarters of 8 minutes stop time with a 2 minute interval break between the 1<sup>st</sup> and 2<sup>nd</sup> quarter, 3 minute half-time and a 2 minute interval break between the 3<sup>rd</sup> and 4<sup>th</sup> quarter.



- ✓ Athletes must play in a press defense formation within 8m from their own goal. When the defensive player's check is outside the 8m range the defensive player is permitted to crash, however, must return to a press once their check returns within the 8m zone. The consequence for not pressing is exclusion and a personal foul against the defensive player committing the foul.
- ✓ No active coaching during play. Only communication from the coach to the athletes may occur on the bench, after goals, during technical timeouts and during interval time. First infraction is a yellow card against the head coach, subsequent infractions is a penalty shot against the team.
- ✓ First pass off a turnover (i.e. stolen ball, bad pass, turnover foul) cannot be passed to the goalie. The consequence for passing backwards towards the goalie is a turnover foul.
- ✓ Once the ball crosses the half-court line, the ball may not be passed backwards towards a teammate in the defensive zone (i.e. back court violation – basketball). The consequence is a turnover foul.
- ✓ No corner throws. A missed shot is automatically a goal throw.

## **Training and Competition Considerations:**

- ✓ At this stage of development training should focus on consolidating the basic and advanced skills developed at the previous stages, acquisition and development of new advanced and position specific skills, fitness training (core strength and speed) and linking training to competition.
- ✓ Coaches must pay special attention to growth and development differences (especially in male athletes) and must be aware of the onset of the growth spurt and puberty in both male and females.
- ✓ It is recommended that athletes play 1 game per day and a maximum of 5 games over a 4 day period.
- ✓ Regular season games (within a league format) or round robin games (within a tournament format) should allow ties.
- ✓ If there is a tie at the end of regulation during qualification games (i.e. a winner must be determined) then the game should proceed with a <sup>37</sup>sudden death overtime format.
- ✓ Programs should offer outdoor training where possible.
- ✓ Further information regarding this stage of development is available through the WPC LTAD Overview document online at [www.waterpolo.ca/ltadresources.aspx](http://www.waterpolo.ca/ltadresources.aspx) and in Appendix D: Summary Framework Matrix.

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<sup>37</sup> Sudden death overtime refers to an extra quarter of play at the end of regulation in which the first team to score wins the game.

## Competition Calendar:

Months	September				October					November				December				January					February				March				April					May				June				July				August												
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52								
Period	PREPARATION										COMPETITION				BREAK		COMPETITION																														BR		PREP		CO		PREPARATION				COMP		TR	
Phase	GENERAL					SPECIFIC					COMPETITION				BREAK		COMPETITION																														BR		SP		CO		SPECIFIC				COMP		TR	
Competitions	BLOCK LOADING BASED ON INDIVIDUAL NEEDS 6-8 PRACTICES/WEEK (6 TRAINING DAYS AND 1 DAY OFF)										NATIONAL LEAGUE 4 TRAINING DAYS, 2 COMPETITON DAYS, 1 DAY OFF						NATIONAL LEAGUE 4 TRAINING DAYS, 2 COMPETITON DAYS, 1 DAY OFF																					CONFERENCE CHAMPS	BLOCK LOADING	NATIONAL CHAMPS		TRAINING WITH PROVINCIAL TEAM		YOUTH CUP	TRAINING WITH NATIONAL TEAM				INTERNATQAL COMPETITION											

COMPETITION LEGEND	
Final peak within phase	
Preparatory competitions for peak	
No peak	
Break/Transition	

<sup>38</sup>**Optimal Training to Competition Ratio:** 80% training – 20% competition

Preparatory Phase	Competition Phase
6 days on; 1 day off: 6-8 water (90-120 min) + 2-3 dry land (30-45 min)	4 days on; <b>2 days of games</b> ; 1 day off: 4-5 water training (90-120 min) + 2 game-day water training (45-60 min) + 1-2 dry land (30-45 min)

<sup>38</sup> See Glossary of Terms for a definition of training and competition.

## Train to Compete (16-19~ male; 15-18~ female)

**Philosophy:** Competition

**Age Groups:** 18 and under gender specific

**Stream of Competition:** Excellence

### Guiding Principles:

- ✓ Optimize the engine and position specific skills
- ✓ Learn to compete under any circumstances
- ✓ Gender specific teams
- ✓ Monitor growth – late maturers
- ✓ Promote Canadian competitions
- ✓ Promotion of the student athlete in Canada
- ✓ Train more than compete
- ✓ Match similar skills and abilities
- ✓ Double periodization

**Type of Coach:** The Professional Coach (NCCP Competition – Development)

**Type of Referee:** National Referee

### Game Structure:

Gender	Game Format	<sup>40</sup> Team Size	Game Duration	<sup>41</sup> Ball Size	<sup>39</sup> Pool Sizes		Goal Sizes
					Length	Width	
Male	6 on 6 + goalie	Min 11 Max 14	<sup>42</sup> 4 x 9 min	Mikasa 6000 or 5500 series	30m	20m	FINA regulation (WP 2) L: 3m H: 0.9m from water
Female				Mikasa 6009 or 5509 series	25m	20m	

### Modified Game Rules:

- ✓ No active coaching during play. Only communication from the coach to the athletes may occur on the bench, after goals, during technical timeouts and during interval time. First infraction is a yellow card against the head coach, subsequent infractions is a penalty shot against the team.

<sup>39</sup> Length is measured from goal line to goal line.

<sup>40</sup> It is recommended that teams carry two goaltenders.

<sup>41</sup> Mikasa is one of many equipment suppliers. An equivalent sized ball is permitted with another manufacturer.

<sup>42</sup> Four quarters of 9 minutes stop time with a 2 minute interval break between the 1<sup>st</sup> and 2<sup>nd</sup> quarter, 3 minute half-time and a 2 minute interval break between the 3<sup>rd</sup> and 4<sup>th</sup> quarter.

## **Training and Competition Considerations:**

- ✓ Athletes at this stage of development should focus on consolidating and refining advanced and position specific water polo skills, water polo and position specific physical conditioning and training for specific competitions.
- ✓ It is recommended that athletes play 1 game per day with a minimum of 10 hours of rest between games. Teams should provide game-day training at least 6 hours prior to game.
- ✓ Regular season games (within a league format) or round robin games (within a tournament format) should allow ties.
- ✓ If there is a tie at the end of regulation during qualification games (i.e. a winner must be determined) then FINA extra time procedure should be applied.
- ✓ Programs should offer outdoor training where possible.
- ✓ Further information regarding this stage of development is available through the WPC LTAD Overview document online at [www.waterpolo.ca/ltadresources.aspx](http://www.waterpolo.ca/ltadresources.aspx) and in Appendix D: Summary Framework Matrix.

### Competition Calendar:

Months	September				October					November				December				January				February				March				April				May				June				July				August						
Microcycles	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Period	PREPARATION										COMPETITION				BREAK		COMPETITION																								BR		PREP		CO		PREPARATION		COMP		TR	
Phase	GENERAL					SPECIFIC					COMPETITION				BREAK		COMPETITION																								BR		SP		CO		SPECIFIC		COMP		TR	
Competitions	BLOCK LOADING BASED ON INDIVIDUAL NEEDS 8-9 PRACTICES/WEEK (6 TRAINING DAYS AND 1 DAY OFF)										NATIONAL LEAGUE 4 TRAINING DAYS, 2 COMPETITON DAYS, 1 DAY OFF					NATIONAL LEAGUE 4 TRAINING DAYS, 2 COMPETITON DAYS, 1 DAY OFF																								CONFERENCE CHAMPS	BLOCK LOADING	NATIONAL CHAMPS		TRAINING WITH PROVINCIAL TEAM		YOUTH CUP	TRAINING WITH NATIONAL TEAM		INTERNATIONAL COMPETITION			

COMPETITION LEGEND	
	Final peak within phase
	Preparatory competitions for peak
	No peak
	Break/Transition

<sup>43</sup>**Optimal Training to Competition Ratio:** 80% training – 20% competition

Preparatory Phase	Competition Phase
6 days on; 1 day off: 8-9 water training (90-120 min) + 3-4 dry land (30-45 min)	4 days on; <b>2 days of games</b> ; 1 day off: 6 water training (90-120 min) + 2 game-day water training (45-60 min) + 2-3 dry land (30-45 min)

<sup>43</sup> See Glossary of Terms for a definition of training and competition.

## Train to Perform (19-25~ male; 18-23~ female)

**Philosophy:** Road to Excellence

**Age Groups:** Semi-professional league (targeting 18 and older)

**Stream of Competition:** Excellence

### Guiding Principles:

- ✓ Maximize the engine and position specific skills
- ✓ Promotion of the student athlete in Canada
- ✓ Team results supersede individual development
- ✓ Athletes benefit by training/playing more skilled athletes
- ✓ Train more than compete
- ✓ Double periodization

**Type of Coach:** NCCP Competition – Development Advanced Gradation and National Coaching Institute Diplomas

**Type of Referee:** National Referee and International Referee (UANA and FINA)

### Game Structure:

Gender	Game Format	Team Size	Game Duration	Ball Size	<sup>44</sup> Pool Sizes		Goal Sizes
					Length	Width	
Male	6 on 6 + goalie	Max 13	<sup>45</sup> 4 x 8 min	Mikasa 6000 series	30m	20m	FINA regulation (WP 2) L: 3m H: 0.9m from water
Female				Mikasa 6009 series	25m	20m	

### Training and Competition Considerations:

- ✓ Athletes at this stage of development should focus on refining and perfecting all water polo technical and tactical skills, water polo and position specific physical conditioning and the focus moves from the individual to team performance.
- ✓ Athletes play 1 game per day with a minimum of 12 hours of rest between games. Teams should provide game-day training at least 6 hours prior to game.
- ✓ Further information regarding this stage of development is available through the WPC LTAD Overview document online at [www.waterpolo.ca/ltadresources.aspx](http://www.waterpolo.ca/ltadresources.aspx) and in Appendix D: Summary Framework Matrix.

<sup>44</sup> Length is measured from goal line to goal line.

<sup>45</sup> Four quarters of 8 minutes stop time with a 2 minute interval break between the 1<sup>st</sup> and 2<sup>nd</sup> quarter, 5 minute half-time and a 2 minute interval break between the 3<sup>rd</sup> and 4<sup>th</sup> quarter.



## Competition Structure and Calendar:

Based on the interpretation of the results from Appendix A: SWOC Analysis, the Number of Unique Athletes Attending the National Club Championships and the Average Age of Correct Age Athletes in Appendix B: Tables and Figures, the Competition Review Working Group has determined there is currently not enough athletes and appropriate training environments and capacity at the club level to have a semi-pro league that will adequately prepare athletes for the Living to Win stage of development – those who are ready to “Own the Podium”. However, we recognize the importance of creating a top-tier league where young athletes can have role models and see top-level water polo played on a regular basis. The plan is to develop a 6-team semi-pro club league; however, the details of this league are yet to be determined.

Months	September					October				November				December				January					February				March				April					May				June				July					August																				
Microcycles	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52																	
Period	PREPARATION						COMPETITION																													BREAK					INTERNATIONAL CALENDAR SENIOR AND JUNIOR NATIONAL TEAMS CENTRALIZE																												
Phase	GENERAL		SPECIFIC				COMPETITION																													BREAK																																	
Competitions	BLOCK LOADING BASED ON INDIVIDUAL NEEDS <u>Train to Perform:</u> 5-6 PRACTICES/WEEK <u>Living to Win:</u> 8-9 PRACTICE/WEEK						<u>SEMI-PROFESSIONAL LEAGUE</u> 4 TRAINING DAYS, 2 COMPETITON DAYS, 1 DAY OFF																													NATIONAL CHAMPS																																	

COMPETITION LEGEND	
Final peak within phase	
Preparatory competitions for peak	
No peak	
Break/Transition	

## Competitive for Life (~13 and older)

**Philosophy:** Training and competing

**Age Groups:** Age groups may vary from province to province – 14 and under; 16 and under; 18 and under; Senior; University; Masters

**Stream of Competition:** C4L

### Guiding Principles:

- ✓ Accommodating range of abilities
- ✓ Match similar skills and abilities
- ✓ Gender specific teams
- ✓ Modified sport
- ✓ Adapt training to competition ratio to fit needs
- ✓ Seasonal programming

**Type of Coach:** The Competitive Coach (NCCP Competition – Introduction)

**Type of Referee:** Provincial Referee

### Game Structure:

Gender	Game Format	Team Size	Game Duration	<sup>47</sup> Ball Size	<sup>46</sup> Pool Sizes		Goal Sizes
					Length	Width	
Male	6 on 6 + goalie	Min 11 Max 15	<sup>48</sup> 4 x 7 min	Mikasa 6000 or 5500 series	23-25m	13-20m	FINA regulation (WP 2) L: 3m H: 0.9m from water
Female				Mikasa 6009 or 5509 series			

- ✓ Team size and the number of athletes in the water are dependent upon the size of the field of play. The smaller (length x width) the field, the smaller the number of players in the water and on the bench. The maximum, regardless of field size, should be 6-on-6.

### Modified Game Rules:

- ✓ For the younger ages in this stream the modified rules outlined in the Early Competitive Foundations (12-14~ male; 11-13~ female) stage of development should be used.
- ✓ For all other ages the rules of the game should be similar to FINA, however, modified based on regional demands for development of water polo.

### Training and Competition Considerations:

- ✓ Clubs and PSOs should create seasonal programs as water polo may not be the priority for the athletes in this stream. However, programs should align with the **Excellence** stream as closely as possible as new athletes should be able to enter the sport and be provided with adequate training and competition opportunities to make the transition into the **Excellence** stream.
- ✓ It is recommended that these athletes play a maximum of 2 games per day with a minimum of 4 hours of rest between games and a maximum of 5 games over a 72 hour period.

<sup>46</sup> Any and all pools that is available. Maximum size of the field of play should be 25m x 20m. The minimum depth should be all deep water.

<sup>47</sup> Mikasa is one of many equipment suppliers. An equivalent sized ball is permitted with another manufacturer.

<sup>48</sup> Four quarters of 7 minutes stop time with a 2 minute interval break between each quarter.

## Competition Structure and Calendar:

- ✓ It is the responsibility of the PSOs to set the competition calendars for each age group within this stream. Just as the National domestic calendar aligns with the National Team and FINA calendars, it is important that each Provincial calendar align with the National calendar. This is imperative to achieving system alignment.
- ✓ It is recommended that the Senior (19+) and Masters competition calendars are aligned with the following calendar. The Summer Festival should include 10 and under and 12 and under (Technical Foundations) and Masters (gender specific and mixed gender).

Months	September					October					November					December					January					February					March					April					May					June					July					August				
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52								
Period	PREPARATION					COMPETITION					PREP		BR		PREP		COMPETITION										BREAK			PREPARATION					COMPETITION					TRANSITION																				
Phase	GENERAL		SPECIFIC			COMPETITION					SPEC		BR		SPEC		COMPETITION										BREAK			SPECIFIC					COMPETITION					TRANSITION																				
Competitions	BLOCK LOADING BASED ON INDIVIDUAL & TEAM NEEDS					UNIVERSITY AND CITY LEAGUES					VARIOUS LEAGUE CHAMPS		BLOCK LOADING				BLOCK LOADING		REGIONAL LEAGUES										NATIONAL CHAMPS				BLOCK LOADING BASED ON INDIVIDUAL & TEAM NEEDS					SUMMER CITY LEAGUES					SUMMER FESTIVAL																	

COMPETITION LEGEND	
	Final peak within phase
	Preparatory competitions for peak
	No peak
	Break/Transition

<sup>49</sup> **Optimal Training to Competition Ratio:** Adapt training to competition ratio to fit needs

	Preparatory Phase	Competition Phase
Younger ages	3 days on; 1 day off; 2 days on; 1 day off: 5 water training (90-120 min) + 2-3 dry land (30-45 min)	2 days on; 1 day off; 1 day on; <b>2 days of games</b> ; 1 day off: 3 water training (90-120 min) + 2 game-day water training (45-60 min) + 1-2 dry land (30-45 min)
Older ages	2-4 days per week (60-120 min)	2-4 days per week (60-120 min)

<sup>49</sup> See Glossary of Terms for a definition of training and competition.

## Active for Life (~16 and older)

**Philosophy:** Water polo for life

**Age Groups:** Age groups may vary from province to province – 16 and under; 18 and under; Middle and High School; Masters

**Stream of Competition:** A4L

### Guiding Principles:

- ✓ Enjoyment of sport through competition, training and social
- ✓ Accommodating range of abilities
- ✓ Match similar skills and abilities
- ✓ Allow for new participants
- ✓ Modified sport
- ✓ Seasonal programming

**Type of Coach:** NCCP Community Sport – Ongoing Participation

**Type of Referee:** Regional Referee

### Game Structure:

Game Format	Team Size	Game Duration	<sup>51</sup> Ball Size	<sup>50</sup> Pool Sizes		Goal Sizes
				Length	Width	
3 on 3 + goalie	Min 4; Max 8	4 x 6 min stop time with a 2 min break between quarters	Male: Mikasa 6000 or 5500 series Female: Mikasa 6009 or 5509 series	10-12m	8-10m	FINA regulation (WP 2) L: 3m H: 0.9m from water
4 on 4 + goalie	Min 5; Max 10			13-15m	10-12m	
5 on 5 + goalie	Min 6; Max 12			16-20m	13-15m	
6 on 6 + goalie	Min 7; Max 15			18-25m	13-20m	

- ✓ The field of play should be adapted to match skills and abilities (i.e. new entrants to the sport could play ½ shallow, ½ deep water).
- ✓ The field of play, the number of athletes in the water and the length of the game should be modified to encourage new teams and equal opportunity sport (i.e. increase the number of female athletes and minority groups).

### Modified Game Rules:

- ✓ Each PSO and club will need to develop modified rules for this stream of competition to encourage lifelong participation and new entrants to the sport at any age.
- ✓ Modify the rules to encourage less physical contact and more use of skill.
- ✓ Thirty-five (35) second shot clock is recommended.

### Training and Competition Considerations:

- ✓ Clubs and PSOs should create seasonal programs as water polo is not the priority in this stream. The focus needs to be on fun, social and meaningful training (i.e. exercise) and competition (i.e. match similar skills and abilities).

<sup>50</sup> Any and all pools that is available. Maximum size of the field of play should be 25m x 20m.

<sup>51</sup> Mikasa is one of many equipment suppliers. An equivalent sized ball is permitted with another manufacturer.

# APPENDICES

## Appendix A: SWOC Analysis

The following SWOC analysis is based upon both on anecdotal and empirical evidence. The anecdotes are derived from the extensive experiences of the members from the Competition Review Working Group. WPC disseminated targeted surveys for PSOs, clubs and coaches in July and August of 2011 through its email distribution system and PSO communication network. The survey results were gathered online by Survey Monkey. Further research of the state of water polo in Canada was done through analysis of data compiled from the membership registration system over a 3-year period (2009-2010, 2010-2011 and 2011-2012) in addition to athlete participation at the National Club Championships over a 4-year period (2009, 2010, 2011 and 2012).

The surveys and observations took a look at 1) the competition and training system for water polo in Canada; 2) understanding and education of LTAD; 3) internal and external communication at all levels; and 4) organizational efficiencies of clubs. All of the evidence and observations have been placed into 4 categories: Strengths, Weaknesses, Opportunities and Challenges.

Strengths and weaknesses are referred to as any observation or data that is controlled to some degree by WPC, or conversely its stakeholders. Opportunities and Challenges are anything that is external to the water polo in Canada network.

### Strengths

- ✓ The open National Club Championship format provides a competitive goal for all athletes in Canada. It allows athletes in remote communities to partake in a prestigious competition.
- ✓ The membership curve follows a normal distribution for sport in Canada where the proportion of members in the 12 and under, <sup>52</sup>Senior and Masters categories has grown from 52% in 2010 to 56% in 2012. Water polo in Canada is growing participants at the grassroots level and is retaining members in the **A4L** and **C4L** streams at 19 and older.
- ✓ The 14U, 16U and Masters categories have consistently grown over the time period of 2009-2010, 2010-2011 and 2011-2012.
- ✓ Due to the lack of numbers there is no apparent <sup>53</sup>relative age effect in water polo. No athlete is left behind. Over 70% of clubs select their team based on who registers. As of 2011, on the Senior Women's National Team 44% of athletes were born in the 3<sup>rd</sup> quarter of the year (July-September), while 78% of athletes were born in an even year. These athletes all grew up in an odd-year National Team system. As of 2011, 6% of the Senior Men's National Team athletes were born in the 1<sup>st</sup> quarter (January-March) of the year while 23.6% were born in the last quarter (October-December). The majority of athletes (59%) were born in the 2<sup>nd</sup> quarter (April-June) of the year. The Youth Men's program (62 athletes) had a 45/55 split between odd year

<sup>52</sup> The Senior and Masters categories include athletes, coaches, volunteers and officials.

<sup>53</sup> The relative age effect is a theory that states that those born in the first quarter of the year (January-March) – assuming a December 31<sup>st</sup> cut-off date for age group segmentation – has a developmental advantage over those who are born in the last quarter of the year (October-December). At peak growth ages, 12 months makes a large difference, consequently the theory states that those who mature early because of when they are born are identified for select teams based on their growth and development advantage and not their skill level.

and even year athletes, and a 55/45 split between athletes born in the 1<sup>st</sup> half of the year vs. the 2<sup>nd</sup> half of the year. Although 64% of the Youth Women's athletes were born in the 1<sup>st</sup> half of the year, 56% of the 37 athletes were born in an even year during an odd-year program (born in 1993 and younger).

- ✓ MLWP has allowed the 19 and older age group to continue playing water polo in a cost-efficient manner. 57% (4-year average) of athletes only play MLWP and do not attend the Senior Men's Nationals and 63% (<sup>54</sup>3-year average) of athletes only play MLWP and do not attend the Senior Women's Nationals.
- ✓ 60% of PSOs standardize modified rules for children and young teenagers.
- ✓ 30% of coaches note they segment their groups based on developmental age. Some noted that although they create age groups based on chronological age, those who are developmentally mature play up an age category.
- ✓ 30% of coaches (8 out of 23 respondents) have already begun implementing some of the LTAD philosophies into their day-to-day operations and planning.
- ✓ 65% of coaches believe that athletes should be engaging in developmentally appropriate training and competition. 56% of coaches believe that the process of how to win is more important than the end result. No coaches believe that water polo should be the only sport for participants 12 and under.
- ✓ 22 out 27 responding clubs stated they have a recruitment plan/feeder system. The other 5 stated they are the feeder system for another club.

## Weaknesses

- ✓ Lack of a professional league in Canada, or availability of exposure of professional water polo abroad, provides nothing for young water polo athletes to aspire to make water polo a career. No idols to look up to.
- ✓ There is no consistency in the number of weeks per season for each age group. 75% of PSOs responded that the 10 and under age group season is 27-40 weeks; however, 60% of clubs noted the season is 13-26 weeks long. 100% of PSOs claim their 14U to Senior age group seasons are 27-40 weeks, conversely, 40-60% (depends on the age group) of clubs stated their seasons are 27-40 weeks. Overall, the majority of programs last 27-40 weeks.

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<sup>54</sup> The reason the women's figures are based on a 3-year average rather than the 4-year average for the men is because the Senior Women's National Club Championships were cancelled in 2012, which would have skewed the proportion of unique female MLWP athletes.

- ✓ The length of the season for athletes in the Competitive Foundations and Train to Compete stages of development is too short. Athletes begin training mid to late September and finish mid to late May – which means there is a 7-8 month season and a 4-5 month off-season. A 7-8 month season does not permit enough time for an adequate preparatory training phase and a properly structured competition phase. Athletes who take part in Provincial or National Team programming usually have 4-6 weeks of rest (May-June) prior to centralization or summer training. Furthermore, athletes are not able to get enough training and competition time – not enough deliberate practice by the time they should be in the Train to Perform and Living to Win stages.
- ✓ The NCCs are only 1 weekend long whereas in other countries it is spread over several months.
- ✓ The 22 and under and Senior Women's National Club Championships were cancelled in 2008 because the National Team athletes were not released to their clubs for domestic play due to the Olympic Qualification Tournament. The same occurred in 2012 for the 22 and under Men's and the Senior Women's National Club Championships.
- ✓ The distribution of women's training centre athletes is heavily skewed towards 2 clubs making it difficult to integrate these athletes into the club system.
- ✓ Water polo in Canada is becoming who can pay vs. who can play. 12 and under and 14 and under athletes are forced to leave their province to play water polo. The maximum number of times a club responded they leave the province at this age group is 3 and 6 times respectively and the maximum travel cost at this age group is \$2,000 and \$5,000 (in addition to other water polo related fees). At the 16 and under and 18 and under the maximum number of times a team leaves the province to play water polo is 6 times, which yields a maximum cost of \$6,000 and \$6,500 on travel alone.
- ✓ High Performance athletes are paying between \$10,000-20,000/year to play water polo in Canada (club fees, invitational tournament fees, National Club Championship fees, training camp fees, National Development Center fees, Provincial Team fees, National Team fees)
- ✓ Current financial model for hosting the National Club Championships puts a lot of financial risk and strain on the host club. Pool rental fees vary greatly from province to province as does city tourism hosting grants.
- ✓ The average number of <sup>55</sup>correct age athletes per team over the past 4 years for 16 and under Boys is 78%; 18 and under Men is 67%; 22 and under Men is 62%; 16 and under Girls is 70%; 18 and under Women is 57%; 22 and under Women is 49%.
- ✓ <sup>56</sup>Only 1 NCC event in the past 4 years (23 events in total) had an average of 10 athletes per team who were of the correct age.

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<sup>55</sup> Correct age athlete is defined as someone playing at the correct level based on their chronological age. Therefore the 16U and under category comprises of 15 and 16 year old athletes and the 18U category with 17 and 18 year old athletes.

<sup>56</sup> The 2010 16 and under Boy' National Club Championships in Regina had an average of 10 athletes per team who were 15 and 16 years old.



- ✓ With an open NCC format the number of teams and athletes are dependent upon location. More teams and athletes participate when the events are in Quebec. Furthermore, more athletes and teams participate when the events are held in the large city centres (Vancouver, Calgary, Ottawa and Montreal). With an open format it makes it difficult to budget posing financial risk on WPC and the host club.
- ✓ The open National Club Championship format allows under aged athletes to play up even if they are not developmentally ready; in addition, the open format has athletes who do not train the same amount of hours competing against each other providing for large discrepancies in scores.
- ✓ Current membership is below the 22-year average of annual membership and has fluctuated dramatically over that time period. <sup>57</sup>14 of the 22 years had membership contraction.
- ✓ Annual attrition and retention rates and growth rates fluctuate from year-to-year and age group to age group. This inconsistency makes it difficult for clubs, PSOs and WPC to plan 12-18 months in advance. This provides a large financial risk for each level of governance.
- ✓ Role of the coach in game situations is unclear for coaches and parents. Too much coaching does not develop decision making for the participants. With 2 coaches yelling and all the noise in the pool, it does not make for a positive environment for the participants.
- ✓ Lack of programming in primary schools, secondary schools and post-secondary schools. Only 20 high schools across the country are registered with a PSO. Only 7 post-secondary schools across the country are registered with a PSO.
- ✓ Lack of appropriate competitions for the Competitive Foundations stage of development and the **A4L** stream. Competition format and programs are not geared for the **C4L** and **A4L** categories at 15 years and older. Adolescents have many other choices for extracurricular activities. Sport may not be the priority for these participants, however, programs and competitions need to be available to grow the sport.
- ✓ There is no consistency in defining and delivering programming for **Physical Literacy**, **A4L**, **C4L** and Excellence streams. PSO and club coaches alike differ greatly in their response to the number of weekly training hours for these streams of competition.
- ✓ Communication and understanding regarding LTAD is low among clubs. Majority of clubs and PSOs have not run any information sessions regarding LTAD and what are the implications. The majority of PSOs state that their entire Board of Directors has a copy of the WPC LTAD document while there are still some PSOs who stated that less than 25% of their Board of Directors has a copy. The majority of PSOs stated that all of their club presidents have a copy of the WPC LTAD. The majority of clubs responded that none of their Board of Directors has a copy of the WPC LTAD, or at best, less than 25% have a copy.
- ✓ There is no consistent messaging and tools from WPC to help PSOs and clubs educate their membership on LTAD and the implications it has on the day-to-day operations of the club.

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<sup>57</sup> Total membership data has been tracked from 1990-2012 inclusive.

- ✓ The people in the field (club Board of Directors, volunteers, coaches, etc.) do not have an understanding of LTAD and the implications it has on the day-to-day operations of their club. 60% of coaches have not begun implementing LTAD principles into their day-to-day operations and planning.
- ✓ Only 1 PSO has a document player development model.
- ✓ 80% of PSOs do not standardize the number of games per team per season, the practice to competition ratio, total number of games to be played by a team within a tournament, when tournaments/leagues can be scheduled, start and end dates of the season and mixed gender recommendations. 60% do not standardize modified equipment guidelines for children and young teenagers.
- ✓ 60% of coaches state they play 2 games per day while 13% play 3+ games per day during peak growth years, however, top athletes (who are in peak physical condition) play once every 2 days (invitational events once per day). Only 2 PSOs at the 10 and under age group, 1 at the 12 and under and 1 at the 14U category offer a league format with 1 game played per team in a day. 100% of PSOs offer tournament format with multiple games played in 1 day – this includes the recreational and the competitive/excellence stream at 16 and under and older. 60% of PSOs do not standardize the maximum number of games allowed to be played by a team within 1 day. 100% of PSOs do not standardize minimum rest and recovery time between games.
- ✓ 75% of coaches state they play 4 x 7min for the 10U category and 67% state the same for the 12 and under level. 30% of coaches state they play 4 x 8min for the 16 and under and 20% state the same for the 18 and under level.
- ✓ According to the survey results games are consistently being played from September through May, not permitting a true preparatory training phase for athletes.
- ✓ 80% of coaches stated they choose competitions based on where the competitions are being held, conversely, only 50% choose competitions based on the specific time of the year.
- ✓ 55% of clubs stated that the reason they offer tournaments at selected times in the year is because this is the way it has always been done. No tournaments are setup based on the planning and periodization needs of the athletes.
- ✓ 100% of PSOs offer <sup>58</sup>mixed gender competition at the 14 and under age group, 60% at 16U and 80% at 18 and under. Majority of sports offer gender specific competition at all ages; consequently, there are many other athletic opportunities for females at the grass roots level.
- ✓ 30% of coaches believe in playing as many games as possible regardless of quality. 34% of coaches believe that athletes are naturally talented and this needs to be exploited when they are young vs. only 8% believe in the <sup>59</sup>10,000 hour rule and the importance of deliberate practice.
- ✓ 56% of coaches segment their age groups based on chronological age.

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<sup>58</sup> Research conducted by the Canadian Sport for Life expert group has identified that mixed gender training and competition is not beneficial past the age of 10 years old.

<sup>59</sup> There is extensive research that has been conducted over the last 60 years in the field of deliberate practice and the 10,000 hour rule. The theory that there is no such thing as natural talent and that experts in any field are developed from years of deliberate practice continues to be researched.

- ✓ Within clubs, coaches do not work harmoniously to develop athletes over the long-term. 30% of coaches stated they work independently of each other and create their own goals and objectives. 39% develop their own plan. Only 30% of coaches responded that the head coach/technical director determines the training plan for each group and that the plan follows the WPC LTAD guide. Club respondents believe there is more cohesion among coaches within their club than what the coaches have stated. 34% of clubs believe their coaches work together in developing training plans for the long-term benefit of the individual athlete vs. 26% of coaches who believe this. Only 15% of club respondents believe their coaches work independently of each other vs. 30% of coaches.
- ✓ 26% of clubs and 25% of coaches stated there is a succession plan for the head coach/technical director. 56% of clubs have a succession plan for the President and other key board members, however, 26% of coaches identify with this statement. 28% of clubs state they have no succession planning, however, 39% of coaches say their club has no succession planning.
- ✓ The majority of coaches at the 16U and 18U categories stated they train on average 4-5 times per week.
- ✓ <sup>60</sup>Periodization principles among coaches are very low. 91% of coaches surveyed do not vary the frequency of practices depending on the training phase. 1 coach identified they offer more practices during the competition phase and only 1 coach provides more training during the preparatory phase.
- ✓ Although 81% of club respondents stated they have a recruitment plan/feeder program they rely heavily on word of mouth, posters and introductory trial days. There are no targeted programs where entry is simple for children 6-12 years old.
- ✓ 30% of coaches responded they have never attended an NCCP workshop. Another 8% have attended an NCCP workshop once in the last 5 years and 8% once in the last 10 years. Only 34% of coaches attend NCCP workshops on an annual basis. 80% of PSOs do not have minimum NCCP standards for the 10 and under, 12 and under and 14 and under categories. 60% do not have standards for the 16 and under and 18 and under categories. These figures make it difficult for WPC to use NCCP as an LTAD educational tool.

### Opportunities

- ✓ Because of the Vancouver 2010 Olympic Games – and the success of the athletes at these Games – the Government of Canada has invested heavily into Olympic sports targeting those who are medal potentials at the Olympic Games and World Championships. Women's water polo has been a targeted sport through Own the Podium (OTCP) since inception of the program.
- ✓ Tourism departments will provide funding for large events that generate 100s of thousands of dollars in tax revenues, accommodations, retail and food.
- ✓ Many educational institutions have pools that are being underused.

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<sup>60</sup> Periodization is a scientific planning process whereby frequency, volume and intensity is manipulated in order to achieve peak performance at a specific time of the year.

- ✓ 60% of clubs responded that their role is to provide a service to the community and 70% identified with the statement creating an environment for children and young teenagers to enjoy sport and develop life skills. Only 30% responded to develop National Team athletes and 15% stated their goal is to win the NCCs.
- ✓ The Ontario University Association (OUA) has had an established men's league since 1909 and women since 1988. OUAs are not registered with Ontario Water Polo and WPC.
- ✓ Water polo is one of the best team sports in Canada with only 5,500 registered members in 2012. Besides women's soccer, women's water polo was the only female summer team sport to win a medal at the World Championships or Olympic Games in the last quadrennial (2009-2012). Men's water polo is the only male summer team sport to finish in the top 8 in the last quadrennial.
- ✓ After the 2000 and 2008 Olympic Games there was a 5% and 4.4% increase in total membership.
- ✓ I Love Water Polo (ILWP) is a nation-wide learn to program specifically for the community centres targeting children 6-12 years old who have limited swimming competency levels. ILWP program is flexible in its delivery and can be implemented by schools or communities. ILWP is only in its 3<sup>rd</sup> year of National delivery.

## Challenges

- ✓ The OTP funding model is based on the number of total medals a sport can win at the Olympic Games and World Championships. Team sports can only win a maximum of 1 medal as men and women are considered different disciplines and evaluated as different sports.
- ✓ Men's water polo, in addition to some other summer team sports, only began receiving funding from OTP in 2010.
- ✓ 90% of revenues to water polo in Canada are performance based and tied to high performance (National Team and Provincial Team).
- ✓ No government funds are targeted at domestic infrastructure besides seed funding for new development programs (i.e. ILWP).
- ✓ Private sector sponsorship in Canada is very difficult to procure, especially outside the mass participation sports like hockey, basketball, soccer, volleyball and baseball.
- ✓ Clubs rely on invitational tournaments to generate revenues.
- ✓ Travel costs for high performance athletes are high due to lack of <sup>61</sup>club density. This is a geographical issue due to the size and population of Canada.
- ✓ Tourism departments will only fund large events that generate 100s of thousands of dollars in tax revenues, accommodations, retail and food.
- ✓ Not knowing the <sup>62</sup>international calendar until September, October or November of the current program year does not allow domestic programs to easily integrate with Junior and Senior National Team athletes.

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<sup>61</sup> In this context, club density is defined as 6 or more clubs for each stream of competition within a short driving distance of each other.

<sup>62</sup> The international calendar considers FINA, LEN and UANA sanctioned events as well as common training with other countries.

- ✓ Pool space needs to be reserved anywhere from 6-18 months in advance depending on the community. This does not allow for much flexibility in planning.
- ✓ <sup>63</sup>Prime time pool hours are mainly reserved for competitive swimming and other recreational programs.
- ✓ Parental funding for water polo ends at University and cost for this age group is way too high considering the cost of tuition and other life goals.
- ✓ The Canadian population as a whole is unaware of water polo and of the benefits the sport provides. Marketing and promotional campaigns are very resource intensive – both financial and human.
- ✓ Unlike most other sports, swimming competency is a key factor to joining water polo. Without a partnership with the Red Cross and other learn-to swimming programs it is difficult for children to be exposed to water polo.
- ✓ High Performance water polo needs to be played in all-deep water 25 meters (women) and 30 meters (men). Most facilities are not equipped to host these types of competitions.
- ✓ Clubs, PSOs and the Competition Review Working Group members have all identified that there is a serious lack of resources (financial, pool space, volunteerism, coaching, etc.); however, the majority of clubs and PSOs stated that clubs operate as full-service providers.
- ✓ 38% of clubs identified that the time of the year in which they host competitions is based on when they can get pool time from the aquatic facility.
- ✓ <sup>64</sup>In order to achieve the membership goals outlined, water polo in Canada participation at the 12 and under category (club and ILWP) will need to grow by 1,123%.
- ✓ Participation at the Competitive Foundations category will need to increase by 168%; however, an increase of 345% in the **Excellence** stream is needed. If the number of **Excellence** stream athletes grows at the same rate as total participants at this stage of development (168%) then 15% of participants at this age group will need to move from the **A4L** stream into the **Excellence** stream.
- ✓ Participation at the Train to Compete stage of development will need to increase by 123% with the number of **Excellence** stream athletes growing at a rate of 154%. If the number of **Excellence** stream athletes grows at the same rate as total participants at this stage of development (123%) then 5% of participants at this age group will need to move from the A4L stream into the **Excellence** stream.

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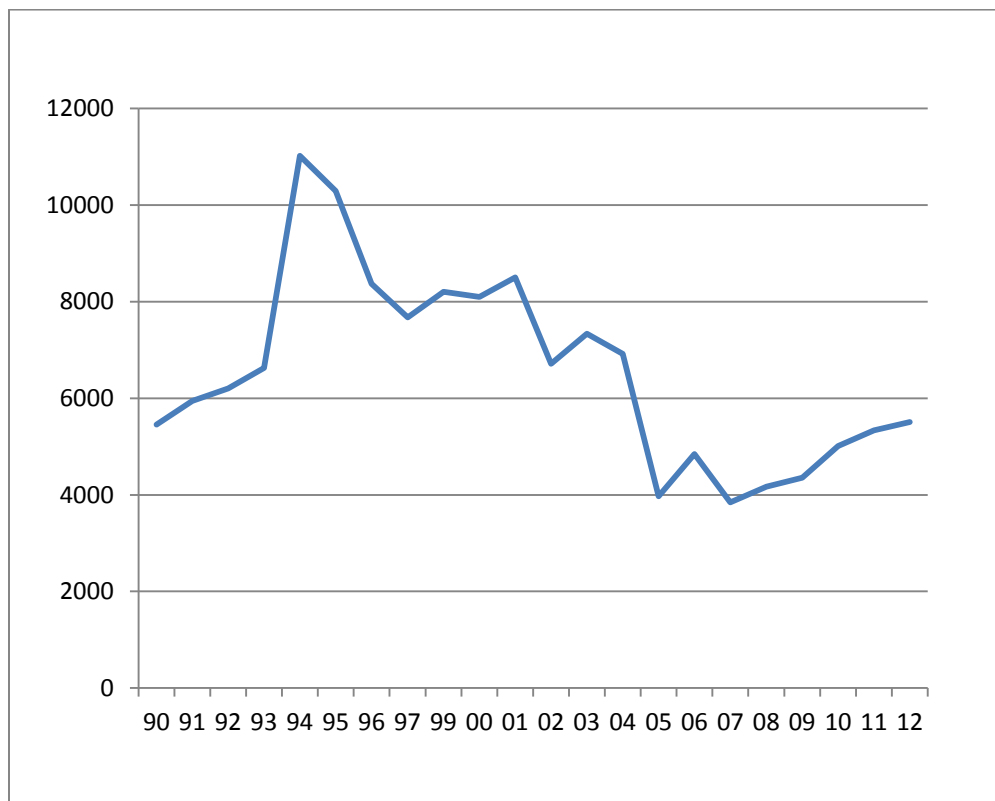
<sup>63</sup> Prime time pool hours are after school Monday to Friday. This is normally considered 4:00-8:00pm.

<sup>64</sup> Growth rate numbers compiled are based on 2011-2012 database figures and compared to the membership goals set by the Competition Review Working Group.

## Appendix B: Tables and Figures

### Total membership data from 1990-2012

Year	Individuals	% Change	Year	Individuals	% Change
1990	5,455	N/A	2003	7,340	9.3%
1991	5,945	9.0%	2004	6,918	-5.7%
1992	6,205	4.4%	2005	3,969	-42.6%
1993	6,629	6.8%	2006	4,846	22.1%
1994	11,021	66.3%	2007	3,843	-20.7%
1995	10,295	-6.6%	2008	4,172	8.6%
1996	8,370	-18.7%	2009	4,356	4.4%
1997	7,678	-8.3%	2010	5,009	15.0%
1999	8,204	6.9%	2011	5,338	6.6%
2000	8,100	-1.3%	2012	5,506	3.1%
2001	8,503	5.0%	<b>Average</b>	<b>6,564</b>	<b>2.02%</b>
2002	6,714	-21.0%			



## Membership Growth Needs Based on the Excellence Stream

	12 and under			14 and under			16 and under			18 and under		
	2010	2011	2012	2010	2011	2012	2010	2011	2012	2010	2011	2012
<sup>65</sup> Current Membership	783	974	981	614	711	733	580	672	695	399	524	496
<sup>66</sup> Annual Growth Rate	N/A	24.4%	0.7%	N/A	15.8%	3.1%	N/A	15.9%	3.4%	N/A	31.3%	-5.3%
<sup>67</sup> Attrition/Retention	N/A			N/A			N/A			N/A		
<sup>68</sup> Male NCC	N/A			26	43	49	138	168	140	120	98	109
<sup>69</sup> Female NCC				65	57	31	98	101	117	98	68	68
<sup>70</sup> NCC Athletes				91	100	80	236	269	257	218	166	177
<sup>71</sup> % of NCC Athletes				14.8%	14.1%	10.9%	40.7%	40.0%	37.0%	54.6%	31.7%	35.7%
<sup>72</sup> 3-Year Average				13.3%			39.2%			40.7%		
<sup>73</sup> Participation Goals	12,000						1,500			450		
<sup>74</sup> Total # of Athletes	12,000						3,823			1,107		
<sup>75</sup> Growth Rate Needed	<b>1,123%</b>						<b>167%</b>			<b>123%</b>		
<sup>76</sup> % Change in Excellence	<b>N/A</b>									<b>154%</b>		

<sup>65</sup> Current Membership: This data was taken from the Water Polo Canada membership registration system as at August 31<sup>st</sup> of each year.

<sup>66</sup> Annual Growth Rate: This rate has been determined with the following formulae  $[(2011 \text{ data} / 2010 \text{ data}) - 1] \times 100$  and  $[(2012 \text{ data} / 2011 \text{ data}) - 1] \times 100$

<sup>67</sup> Attrition/Retention Rate: This rate has been determined using the 2012 14U figures and comparing to the 2010 12U figures  $[(2012 \text{ 14U data} / 2010 \text{ 12U data}) - 1] \times 100$  and the 2012 18U figures in comparison to the 2010 16U figures  $[(2012 \text{ 18U data} / 2010 \text{ 16U data}) - 1] \times 100$ .

<sup>68</sup> Male NCC: Number of unique male athletes who attended the National Club Championships in the respective year. Unique meaning they are only counted once based on their year of birth. For example, if a 15 year old attended the 16U and 18U NCC they were only counted in the 16U category.

<sup>69</sup> Female NCC: Number of unique male athletes who attended the National Club Championships in the respective year. Unique meaning they are only counted once based on their year of birth. For example, if a 15 year old attended the 16U and 18U NCC they were only counted in the 16U category.

<sup>70</sup> NCC Athletes: Male NCC + Female NCC

<sup>71</sup> % of NCC Athletes: Number of unique NCC Athletes in each respective year divided by the Current Membership in each respective year.

<sup>72</sup> 3-Year Average: The mean average of the % of NCC Athletes for each respective age category – Competitive Foundations (14 and under and 16 and under) and Train to Compete (18 and under).

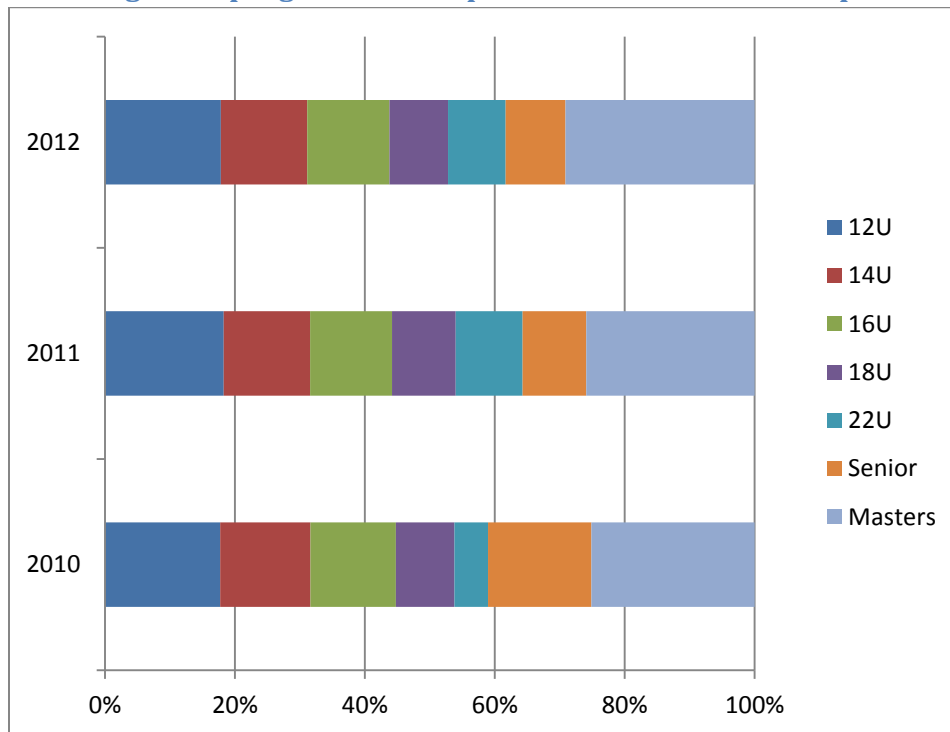
<sup>73</sup> Participation Goals: These are membership goals set by the Competition Review Working Group in relation to the **Excellence** stream of athletes.

<sup>74</sup> Total # of Athletes: These numbers are calculated by taking the Participation Goals and dividing by the 3-Year Average; Competitive Foundations (1,500 / 39.2%) and Train to Compete (450 / 40.7%). This represents the total membership numbers (regardless of competition stream) needed to achieve the Participation Goals.

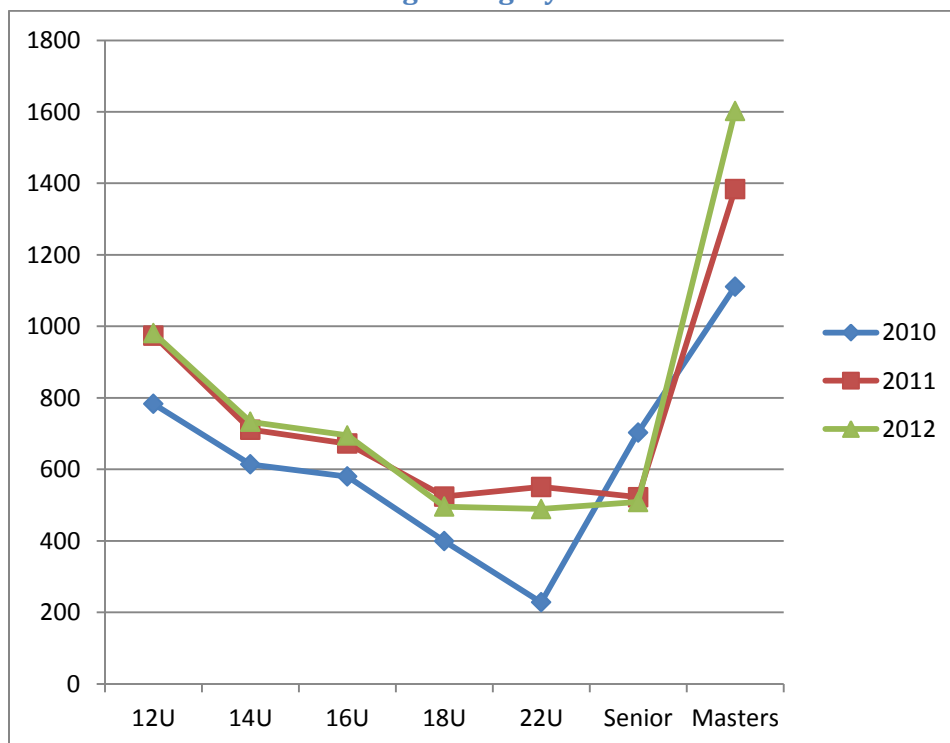
<sup>75</sup> % Change in Total: This rate has been determined with the following formulae  $[(\text{Participation Goals} / 2012 \text{ data}) - 1] \times 100$ . So for the 12U category it would be  $12,000 / 981$ ; Competitive Foundation  $3,823 / 695$ ; and Train to Compete  $1,107 / 496$ . The rate represents the growth in total membership (regardless of competition stream) needed to achieve Participation Goals.

<sup>76</sup> % Change in **Excellence**: This rate has been determined with the following formulae for each stage – Competitive Foundations  $[(\text{Participations Goals} / (2012 \text{ 14 and under NCC Athletes} + 2012 \text{ 16 and under NCC Athletes})) - 1] \times 100$  and Train to Compete  $[(\text{Participation Goals} / 2012 \text{ 18 and under NCC Athletes}) - 1] \times 100$ . This rate represents the growth needed in the **Excellence** stream for each stage in order to achieve Participation Goals.

<sup>77</sup>2012 Age Group Figures as a Proportion of Total Membership



Annual Trend Line for Each Age Category



<sup>77</sup> 12U = 12 and under; 14U = 14 and under; 16U = 16 and under; 18U = 18 and under; 22U = 22 and under; Senior = 23 and older; Masters = 30 and older.



## Number of Unique Athletes Attending the National Club Championships

Male	2009	2010	2011	2012	<sup>78</sup> Inc/Dec
91-92	129 (18U), Winnipeg				
92-93	120 (18U), Halifax				
93-94	193 (16U), Montreal	98 (18U), Calgary			-49.2%
94-95	138 (16U), Regina			109 (18U), Ste-Foy	-21.0%
95-96	74 (14U), Montreal	168 (16U), Surrey			127.0%
96-97	26 (14U), Regina			140 (16U), Victoria	438.5%
97-98	43 (14U), Surrey				
98-99				49 (14U), Victoria	

Female	2009	2010	2011	2012	<sup>79</sup> Inc/Dec
91-92	100 (18U), Winnipeg				
92-93	98 (18U), Montreal				
93-94	144 (16U), DDO	68 (18U), Calgary			-52.8%
94-95	98 (16U), Surrey			68 (18U), Kamloops	-30.6%
95-96	42 (14U), DDO	101 (16U), Langley			140.5%
96-97	65 (14U), Surrey			117 (16U), Winnipeg	44.4%
97-98	57 (14U), Langley				
98-99				31 (14U), Winnipeg	

## Average Number of Correct Age Athletes (Location of the NCC)

Men	16 and under	18 and under	22 and under
2009	8.8 (Montreal), 72%	8.1 (Winnipeg), 68%	6.2 (Ottawa), 60%
2010	10.6 (Regina), 84%	8.6 (Halifax), 73%	9.8 (Langley), 76%
2011	9.9 (Surrey), 80%	7.0 (Calgary), 58%	6.1 (Gatineau), 51%
2012	9.3 (Victoria), 74%	8.4 (Ste-Foy), 70%	Cancelled
Average	9.65, 77.5%	8.03, 67.25%	7.4, 62.3%

Women	16 and under	18 and under	22 and under
2009	9.0 (DDO), 77%	7.7 (Winnipeg), 60%	4.2 (Ottawa), 40%
2010	7.0 (Surrey), 60%	7.5 (Montreal), 62%	4.1 (Langley), 39%
2011	7.2 (Langley), 64%	6.8 (Calgary), 55%	9.0 (Gatineau), 64%
2012	10.6 (Winnipeg), 79%	6.2 (Kamloops), 52%	5.8 (Saskatoon), 53%
Average	8.45, 70.0%	7.05, 57.3%	5.78, 49.0%

The above numbers were derived from taking the total number of unique athletes for each respective year and category (Number of Unique Athletes Attending the National Club Championships) and dividing by the number of participating teams. The percentage figures are based on an assumption there are 13 athletes on a team, so if the average 16 and under Boys' team has 9.65 athletes who are 15 and 16 years old, and it is assumed there are 13 athletes on a team, then the 15 and 16 year olds represent 77.5% of the team composition.

<sup>78</sup> Inc/Dec: This figure represents the change in the number of unique athletes based on birth year from 14U to 16U and from 16U to 18U. For example, there was a 49% decrease in the number of born in 1993-1994 athletes who attended the 2009 16U NCC in Montreal in comparison to the 2011 18U NCC in Calgary.

<sup>79</sup> Inc/Dec: This figure represents the change in the number of unique athletes based on birth year from 14U to 16U and from 16U to 18U. For example, there was a 30% decrease in the number of born in 1994-1995 athletes who attended the 2010 16U NCC in Surrey in comparison to the 2012 18U NCC in Kamloops.

## Major League Water Polo Unique Players

	Men	Women
<b>2009</b>	103; 6 teams; 79% unique; NCC in Surrey	90, 6 teams, 80% unique; NCC in Longueuil
<b>2010</b>	164; 10 teams; 37% unique; NCC Montreal	94, 6 teams, 48% unique; NCC Montreal
<b>2011</b>	146; 8 teams; 60% unique; NCC Langley	141, 8 teams, 60% unique; NCC Winnipeg
<b>2012</b>	148; 8 teams; 55% unique; NCC Montreal	124, 8 teams, 100% unique; NCC cancelled

The above table describes the number of athletes who participated in the MLWP and did not attend the Senior National Club Championships; the number of MLWP teams for that season; the percentage of MLWP players who did not attend the Senior National Club Championships; and the location of the Senior National Club Championships for each respective year.

## Appendix C: 2011 Relative Age Charts

### Senior Women's National Team

	January-March	April-June	July-September	October-December	Total
<b>Odd Year</b>	0	1	3	0	<b>4 (22.2%)</b>
<b>Even Year</b>	4	3	5	2	<b>14 (77.8%)</b>
<b>Total</b>	<b>4 (22.2%)</b>	<b>4 (22.2%)</b>	<b>8 (44.4%)</b>	<b>2 (11.1%)</b>	<b>18 (100%)</b>

1<sup>st</sup> half: 44.4%

2<sup>nd</sup> half: 55.5%

### Senior Men's National Team

	January-March	April-June	July-September	October-December	Total
<b>Odd Year</b>	1	6	2	4	<b>13 (76.5%)</b>
<b>Even Year</b>	0	4	0	0	<b>4 (23.5%)</b>
<b>Total</b>	<b>1 (5.9%)</b>	<b>10 (58.8%)</b>	<b>2 (11.8%)</b>	<b>4 (23.6%)</b>	<b>17 (100%)</b>

1<sup>st</sup> half: 64.7%

2<sup>nd</sup> half: 35.3%

## Junior Women's National Team (1991 and younger)

	January-March	April-June	July-September	October-December	Total
<b>Odd Year</b>	4	4	2	0	<b>10 (43.5%)</b>
<b>Even Year</b>	3	5	3	2	<b>13 (56.5%)</b>
<b>Total</b>	<b>7 (30.4%)</b>	<b>9 (39.1%)</b>	<b>5 (21.2%)</b>	<b>2 (8.7%)</b>	<b>23 (100%)</b>

1<sup>st</sup> half: 69.5%

2<sup>nd</sup> half: 30.5%

## Junior Men's National Team (1992 and younger)

	January-March	April-June	July-September	October-December	Total
<b>Odd Year</b>	5	5	5	3	<b>18 (94.7%)</b>
<b>Even Year</b>	0	1	0	0	<b>1 (5.3%)</b>
<b>Total</b>	<b>5 (26.3%)</b>	<b>6 (31.6%)</b>	<b>5 (26.3%)</b>	<b>3 (15.8%)</b>	<b>19 (100%)</b>

1<sup>st</sup> half: 57.9%

2<sup>nd</sup> half: 42.1%

## Youth Women's National Team Program (1993 and younger)

	January-March	April-June	July-September	October-December	Total
<b>Odd Year</b>	2	6	7	1	<b>16 (43.2%)</b>
<b>Even Year</b>	11	5	3	2	<b>21 (56.8%)</b>
<b>Total</b>	<b>13 (35.1%)</b>	<b>11 (29.7%)</b>	<b>10 (27.1%)</b>	<b>3 (8.1%)</b>	<b>37 (100%)</b>

1<sup>st</sup> half: 64.8%

2<sup>nd</sup> half: 35.2%

## Youth Men's NT Program (1994 and younger)

	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Total
<b>Odd Year</b>	10	6	5	7	<b>28 (45.2%)</b>
<b>Even Year</b>	12	6	10	6	<b>34 (54.8%)</b>
<b>Total</b>	<b>22 (35.4%)</b>	<b>12 (19.4%)</b>	<b>15 (24.2%)</b>	<b>13 (21.0%)</b>	<b>62 (100%)</b>

1<sup>st</sup> half: 54.8%

2<sup>nd</sup> half: 45.2%

### Appendix D: Summary Framework Matrix

PATHWAY	ACTIVE START	FUNDAMENTALS	TECHNICAL FOUNDATIONS	COMPETITIVE FOUNDATIONS	TRAIN TO COMPETE	TRAIN TO PERFORM	LIVING TO WIN	COMPETITIVE FOR LIFE	ACTIVE FOR LIFE
Male	0-6 years old	6-9 years old	9-12 years old	12-16 years old	16-19~ years old	19-25~ years old	25+ (20+) years old	~13 years and older	~15 years and older
Female	0-6 years old	6-8 years old	8-11 years old	11-15 years old	15-18~ years old	18-23~ years old	23+ (18+) years old		
Stage of Maturation	Early Childhood								
		Late Childhood							
				Early Puberty					Early Puberty
					Late Puberty				Late Puberty
						Early Adulthood			Early Adulthood
			Adulthood						
Competitive for Life (Enter at any age, approximately ~13+): Life-long participation in sport									
Active for Life (Enter at any age, approximately age ~15+): Life-long participation in sport									
Philosophy	Getting Wet	Fun	Lay the Foundations	Build the Competitive Base	Competition	RTE (Road to Excellence)	Excellence	Training and competing	Water polo for Life
Primary Objective	Learn fundamental movements and link them together into play	Learn all fundamental movement skills and build overall motor skills	Learn overall sports skills	Build an aerobic base, develop speed and strength, and further develop and consolidate sport specific skills. Build mental capacities	Optimize the engine and learn to compete	Own the Podium	Gold Medal Performances	To create competitive water polo opportunities for all ages	A smooth transition from an athlete's competitive career to lifelong physical activity and participation in water polo
Guiding Principles	Create a love for water activities	Fun, safety, and active participation are of primary importance	Athletes must be actively engaged in the activity; motor and cognitive wise	Intensity must be gradually raised to reach competition requirements	Training intensity must always be high to optimal. Sub-maximal intensity will alter the motor coordination of the athlete	Modeling all possible aspects of training and performance	Modeling all possible aspects of training and performance	Allow athletes adequate training and competition to move into the excellence stream	New athletes, physical activity and retention of knowledge as a coach, referee, volunteer, administrator
Time Commitment (Practices and Games) Preparatory Phase	I Love Water Polo (ILWP) and swimming lessons	ILWP and other aquatic activities OR Club-based water polo 2-3 days per week - allow for participation in other sports	3 days per week: 3 x 1.5 hr water + 30 min dry land	Early: 3 days on, 1 day off, 2 days on, 1 day off: 5 full water + 2-3 dry land Late: 6 days on, 1 day off: 6-8 full water + 2-3 dry land	6 days on, 1 day off: 8-9 full water + 3-4 dry land	3 days on, 1 day off, 2 days on, 1 day off: 5-6 full water + 3-4 dry land	6 days on, 1 day off: 8-9 full water + 3-4 dry land	2-4 days per week for early adulthood and adulthood	1-2 hrs/week
Time Commitment (Practices and Games) Competition Phase	I Love Water Polo (ILWP) and swimming lessons	ILWP and other aquatic activities OR Club-based water polo 2-3 days per week - allow for participation in other sports	3 days per week: 3 x 1.5 hr water + 30 min dry land	Early: 2 days on, 1 day off, 1 day on, 2 days of games, 1 day off: 3 full water + 2 half water + 1-2 dry land Late: 4 days on, 2 days of games, 1 day off: 4-5 full water + 2 half water + 1-2 dry land	4 days on, 2 days of games, 1 day off: 6 full water + 2 half water + 2-3 dry land	4 days on, 2 days of games, 1 day off: 4 full water + 2 half water + 2-3 dry land	4 days on, 2 days of games, 1 day off: 6 full water + 2 half water + 2-3 dry land	2-4 days per week for early adulthood and adulthood	1-2 hrs/week

Types of Competition	N/A	No structured or formal competition	Seasonal-based regional competitions and festivals Gender specific recommended	Regional/Provincial club water polo gender specific National Club Championships; National/Provincial Team Programs	National Club Championships; Youth National Team Program Programs	Semi-Pro Canadian League; European Professional Leagues; Designated NCAA Institutions; Youth/Junior National Team	Senior National Team; World Championships & Olympic Games	Gender specific age group club (14U, 16U, 18U), Senior, University and Masters	Mixed or gender specific age group club (16U and 18U), middle/high school and Masters
Optimal Practice to Game Ratio	N/A	100:0	80:20	80:20	80:20	70:30	70:30	Adapt training to competition ratio to fit needs	N/A
<i>Training = physical, motor, mental, technical and tactical training and non-league games; Competition = Major competition leading to the final outcome/peak</i>									
Planning & Periodization	No periodization	No periodization	No periodization	Double periodization	Double periodization	Double or triple periodization, quadrennial planning	Quadrennial planning	No periodization	No periodization
Conditioning Objectives	Active play in a safe and challenging environment should always be fun, and part of the child's daily life	Daily participation in sport and physical activities. Fundamental movement skills; athletics, gymnastics, swimming	Fundamental motor skills: ABCs, RJT, KGBs, & PCKs	General physical fitness (balance)	General and specific physical fitness related to the demands of water polo.	Specific physical fitness related to position	Specific physical fitness related to position	General physical fitness (balance)	General physical fitness; be active on land and in the water
Growth & Development Considerations- PHV	Lay the foundation for future success in skills development, by helping children enjoy being active, learning to move efficiently, and improving coordination and balance  Build strong bones and muscles, improve flexibility, develop good posture, improve fitness, promote a healthy body weight, reduce stress, and improve sleep	Emphasis on development of generic sport skills  1st sensitive period: agility & quickness: girls 6-8 yrs old; boys 7-9 yrs old  Sensitive period for suppleness/flexibility: 6-10 yrs old	Emphasis on skill development  Peak motor coordination (PMCV): girls 11 yrs old; boys 12 yrs old  Sensitive period for suppleness/flexibility: 6-10 yrs old  2nd sensitive period for speed training (alactic): girls 11-13 yrs old  Special attention to suppleness during PHV. Aerobic capacity training is recommended before athletes reach PHV. Aerobic power should be introduced progressively after growth rate declines.	Emphasis on stamina (endurance) at the onset of PHV Onset of PHV: girls 12-13 yrs old; boys 14-15 yrs old  2nd sensitive period for speed training (alactic): girls 11-13 yrs old; boys 13-16 yrs old  Sensitive periods for strength training: girls immediately after PHV or at the onset of the menarche- roughly 13-17 yrs old	Emphasis on peak strength development  Make use of ancillary capacities  Sensitive periods for strength training: boys 12-18 months after PHV- roughly 15-19 yrs old	Further development of stamina, speed, strength, skill, and suppleness  Make use of ancillary capacities	Further development of stamina, speed, strength, skill, and suppleness  Make use of ancillary capacities	At younger ages pay attention to the onset of puberty and PHV - see Competitive Foundations for more details	No specific growth and development considerations  Understand where athlete lies on the player pathway  Make use of ancillary capacities

Mental and Cognitive Development	Create neural connections across multiple pathways in the brain particularly when rhythmic activities are involved	Use imagination to develop visualization skills	Introduce and reinforce positive visualization	Reinforce positive visualization	Attention and emotional control (consolidate)	Self identification- what kind of player am I and what is my role within the team	Self identification- what kind of player am I and what is my role within the team	Positive, fun, and stress free environment	Positive, fun, and stress free environment
		Introduction to team development	Elements of team cohesion	Introduction to goal setting: individual and team; shared leadership	Stress management and coping strategies (consolidate)	Attention and emotional control and stress management (consolidate)	Attention and emotional control and stress management (consolidate)	Team building activities	Team building activities
	Enhance development of brain function, coordination, social skills, gross motor skills, emotional development, leadership, and imagination	Make use of elementary language to guide decision making	Make use of elementary language to guide decision making	Mental rehearsal: game situations- individual and team; greater independence	Pre-game, game, and post-game routines (refinement)	Pre-game, game, and post-game routines (refine and consolidate)	Pre-game, game, and post-game routines (refine and consolidate)	Self-esteem and confidence building	Self-esteem and confidence building
		Team building activities	Team building activities	Develop decision making abilities: game situation and out of pool responsibilities	Visualization and decision making (refinement)	Visualization, goal setting, and decision making (refine)	Visualization, goal setting, and decision making (refine)	Communication- working with others	Communication- working with others
	Help children to build confidence and develop self-esteem	Communication- working with others	Develop communication skills and understanding	Team building activities	Leadership, team dynamics, and independence (consolidate)	Communication skills with media, sponsors, and VIPs	Communication skills with media, sponsors, and VIPs		
Purpose of Competition	N/A	Participation	Concentration on skill development	Concentration on skill development	Development of tactical game play	Individual and team targets relevant to long-term goals	Individual and team targets relevant to long-term goals	At younger ages (teenagers) provide adequate competition that aligns with the Excellence stream so that athletes may transition into the Excellence stream  <	



Tactical and Game Strategies Skills	N/A	N/A	Basic water polo decision making skills  Learn and play all positions	Introduction and development of base tactical skills  1 on 1 tactics  Understanding of all positions (general ability to play anywhere in the pool)  Applied decision making (creativity)  Introduction and development of special teams and transition	Introduction and development of advanced tactical skills  Solutions to a wide variety of defences  Introduction to individual and team performance analysis  Continue to emphasize creativity  Development and refinement of special teams and transition	Refinement and perfection of advanced tactical skills  Increase sophistication of performance analysis  Scouting to exploit your team strengths and opponents weaknesses  Perfection of special teams and transition	Refinement and perfection of advanced tactical skills  Increase sophistication of performance analysis  Scouting to exploit your team strengths and opponents weaknesses  Perfection of special teams and transition	Assess the stage of development of the athlete's knowledge and understanding of the principles of the various phases of the game	Basic water polo decision making skills  Introduction and development of base tactical skills  Understanding of all positions (general ability to play anywhere in the pool)  Introduction and development of special teams
Supplementary Knowledge	N/A	Development of social skills: cooperation; working within a team; following directions; self-control; group interaction; and listening skills  Introduction to simple safety guidelines  Introduction to fair play philosophy  Introduction to simple safety guidelines	Enhancement of social skills  Understanding and adherence to fair play  Simple work ethic and commitment expectations  Introduction to ancillary capacities  Injury prevention and management	Development of ancillary capacities  Adherence of fair play  Understanding of the benefits of sport specific training  Injury prevention and management	Understanding the added-value of the ancillary capacities  Development of weightlifting techniques  Knowledge of competition structures and programs  Development of performance analysis	Understanding the added-value of the ancillary capacities  Refine mental training skills  Consolidate recovery and regeneration skills  Communication skills with media, sponsors, and VIPs	Understanding the added-value of the ancillary capacities  Refine mental training skills  Consolidate recovery and regeneration skills  Communication skills with media, sponsors, and VIPs	Development and understanding of ancillary capacities  Adherence of fair play  Injury prevention and management  Education on healthy eating habits  Education on coaching, official, and administrative/ volunteering opportunities	Development and understanding of ancillary capacities  Adherence of fair play  Injury prevention and management  Education on healthy eating habits  Education on coaching, official, and administrative/ volunteering opportunities
Coach Certification (NCCP)	N/A	Aquatic facility: CSp - Initiation "ILWP Instructor"  Club: CSp - Initiation "Community Club Coach"	Aquatic facility: CSp - Initiation "ILWP Instructor"  Club: CSp - Initiation "Community Club Coach"	Competition - Introduction "The Competitive Coach"  Competition - Introduction "The Advanced Competitive Coach"	Competition - Development "The Professional Coach"	Competition - Development Advanced Gradation & NCI Diplomas	Competition - High-Performance & NCI Diplomas	Competition - Introduction "The Competitive Coach"	Community Sport- Ongoing Participation
Referee Certification (OTCP)	N/A	N/A	Regional	Regional Provincial	National & UANA	National, UANA & FINA	FINA	Provincial	Regional